The Role of Pakistan’s Military in the Control System over Nuclear Programmes

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The Role of Pakistan’s Military in the Control System over Nuclear Programmes

**Declaration of Originality**

This dissertation is the result of my own work and includes nothing which is the outcome of work done in collaboration except where specifically indicated in the text.

**Statement of Length**

This dissertation does not exceed 80,000 words in length, including charts, but not including references, footnotes and bibliography, as required by the Centre of International Studies Faculty Degree Committee.
The Role of Pakistan’s Military in the Control System over Nuclear Programmes

Dedicated to the memory of my beloved grandmother, Tzipora (Feiga) Scherba (1918 - 2011), and my grandparents: Dvora (Vera) Reichental (1925-2012), Mordechai (Mishi) Reichental (1910 - 1991), and Abraham Scherba (1910 - 1979).

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In addition, this project is devoted to the memory of Yitzhak Rabin (1922 - 1995), Israel’s assassinated Prime Minister, and Daniel Pearl (1963 - 2002) who was brutally murdered in Pakistan while conducting his mission as a journalist.
Abstract

The prime objective of this thesis is to offer a conceptual explanation for Pakistan’s providing aid to other countries with their nuclear programmes. It focuses on an analysis Pakistan’s structure of control over its nuclear organisations from three perspectives: a) the influence of the organisational culture of Pakistan’s state apparatus on its control system; b) the strategic environment of the national security policies; and c) the links between the different entities in the control system and the state apparatus.

The aim of the thesis is to provide a broader context for the understanding of Pakistani sponsored nuclear proliferation by an analysis of the institutional structure that has thought to control Pakistan’s nuclear agencies. This will demonstrate the likelihood that Pakistan’s proliferation activity has been a by product of organisational culture and the nature of its control system. The methodology will be based on five approaches:

1) An examination of the evolution of the Pakistani control system and its historical procedures (as it stands until 2004).
2) Scrutinising the operation of the system as part of Pakistan’s defence establishment.
3) Comparing the connections of the control system with AQ Khan’s proliferation network and the connections of the defence establishment with militant organisations.
4) Defining Pakistan’s control system and appraising it on a comparative basis.
5) Evaluating similarities between Pakistan’s and China’s control systems as two nuclear weapons countries with influential militaries.

The hypothesis of this thesis is the argument that much of the nuclear aid offered by Pakistan to other countries was probably approved of and perhaps, at times, suggested by elements within the Pakistani Army. Thus, Pakistan’s military will be the main state organisation under analysis in this thesis. Underscoring the role of the military in the control system is likely to improve the understanding of the character of nuclear proliferation from Pakistan as a state initiative.
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Glossary of Abbreviations

(The list of Abbreviations is also attached and folded at the back of the dissertation)

ACEP - Advisory Committee on Export Policy
AECA - Arms Export Control Act
AFI - Air Force Intelligence Directorate
AG - Adjutant General Branch (of Pakistan)
   - Australian Group
AHQ - Air Force Headquarters
AL (German) - Export List
AQ Khan - Abdul Qadeer Khan
ASFC - Army Strategic Forces Command
AVIC - Aviation Industries Corporation of China
AWG (German) - Foreign Trade and Payment Act
AWP - Arms Working Party
AWV (German) - Foreign Trade Statutory Order
BAFA (German) - Federal Office for Economics and Export Control
BBC - British Broadcasting Corporation
BIS - Bureau of Industry and Security (of the United States)
   - Department of Business, innovation, and Skills (of the United Kingdom)
BMWi (German) - Ministry of Economics and Technology
BSA Tahir - Bukhary Sayed Abu Tahir
BSR (German) - Federal Security Council
BWC - Biological Weapons Convention
C-in-C - Commander in Chief
CAEA - China Atomic Energy Authority
CAS - Chief of Air Force Staff
CASC - China Aerospace Science and Technology Corporation
CASIC - China Aerospace Science and Industry Corporation
CATIC - China National Aero-Technology Import Export Corporation
CBEC - Central Board of Excise and Customs
CBP - Customs and Border Protection
CCC - Corps Commanders’ Conference
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CCL - Commerce Control List
CCP - Communist Party of China
CDD - Combat Development Directorate
CEIEC - China Electronics Import Export Corporation
CENTCOM - United States Central Command
CGS - Chief of General Staff
CIA - Central Intelligence Agency
CJ - Commodity Jurisdiction
CJCS - Chairman of Joint Chiefs of Staff (of the United States)
CJCSC - Chairman of the Joint Chiefs of Staff Committee
CLS - Chief of Logistic Staff
CMC - Central Military Commission
CMLA - Chief Martial Law Administrator
CNEC - China Nuclear Engineering Construction Corporation
CNIEC - China Nuclear Import Export Corporation
CNNC - China National Nuclear Corporation
CNS - Chief of Navy Staff
COAS - Chief of Army Staff
COS - Chief of Staff
COSTIND - Commission for Science, Technology, and Industry for National Defence
CPMIEC - China Precision Machinery Import Export Corporation
CRS - Congressional Research Service
CSSC - China State Shipbuilding Corporation
CSTC - China Shipbuilding Trading Corporation
CTJWG - Counter-Terrorism Joint Working Group
CWC - Chemical Weapons Convention
CWCIO - Chemical Weapons Convention Implementation Office
CZEC - China Zhongyuan Export Corporation
D&ISA - Disarmament and International Security Affairs Division
DACDA - Department of Arms Control and Disarmament Affairs
DAE - Department of Atomic Energy
DCC - Cabinet Committee for Defence
   - Development Control Committee
DDG (A) - Deputy Director General, Analysis and Foreign Relations Wing
DDG (B) - Deputy Director General, 'B' Wing
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DDG (C) - Deputy Director General, Counter-Intelligence/Internal Wing
DDG (S) - Deputy Director General, Security/External Wing
DDTC - Directorate of Defence Trade Control
DFID - Department for International Development
DG - Director General
DG (CT) - Director General, Counter-Terrorism Wing
DG (T) - Director General, Technical Wing
DG ISI - Director General, Inter-Services Intelligence
DG KRL - Director General, Abdul Qadeer Khan’s Research Laboratories
DG MI - Director General, Military Intelligence
DG SPD - Director General, Strategic Plans Division
DGFT - Director General of Foreign Trade
DGMO - Director General of Military Operations
DHS - Department of Homeland Security
DMS - Directorate of Medical Services
DPD - Defence Production Division
DOC - Department of Commerce
DOD - Department of Defence
DODP - Department of Defence Production
DOE - Department of Energy
DOPC - Cabinet Defence and Overseas Policy Committee
DOS - Department of State (of the United States)
   - Department of Space (of India)
DOT - Department of Treasury
DPSU - Defence Public Sector Undertakings
DRDO - Defence Research and Development Organisation
DSDA - Department for Security and Disarmament Affairs
DSO - Defence Export Service Organisation
DSRFA - Department of State Regulations of Foreign Affairs
DTSA - Defence Technology Security Administration
DUEC - Dual-Use and Related Goods (Export Control) Regulations
EAA - Export Administration Act
EAR - Export Administration Regulations
EARB - Export Administration Review Board
EC - European Commission
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ECC - Employment Control Committee (of Pakistan)
   - Federal Export Control Committee (of Russia)
ECO - Export Control Organisation
EGCO - Export of Goods (Control) Order, 1994
ELT - Export Licensing Team
EPA - Export Policy and Assurance
ERL - Engineering Research Laboratories
EU - European Union
EXIM - Export-Import Policy Regulations
FAS - Federation of American Scientists
FATA - Federal Administrative Tribal Areas
FBIS - Federal Broadcast Information Service
FCNA - Force Command Northern Area
FCO - Foreign and Commonwealth Office
FCS - Federal Customs Service
FIA - Federal Investigation Agency
FMC - Foreign Military Cooperation Directorate
FMCT - Fissile Material Cut-off Treaty
FPD - Foreign Procurement Division
FSB (Russian) - Federal Security Service
FSETNS - Federal Service for Ecological Technological and Nuclear Supervision
FSMTC - Federal Service for Military-Technology Cooperation
FSTEC - Federal Service for Technical and Export Control
FTDR - Foreign Trade Development and Regulation Act, 1992
FTG - Foreign Trade Group
GAD - General Armament Department
GAC - General Administration of Customs
GAO - General Accounting Office
GHQ - General Headquarters
GLD - General Logistics Department
GOC - General Officer in Command
GPD - General Political Department
GS - General Staff Branch
GSD - General Staff Department/Headquarters
GTI - Gulf Technical Industries
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HEI - Hezb-e-Islami
HLC - High Level Committee
HM - Hizbul Mujahideen
HMRC - Her Majesty’s Revenue and Customs
HQ - Headquarters
HUM - Harkat-ul-Mujahideen
IAEA - International Atomic Energy Agency
IB - Intelligence Bureau
ICP - Internal Compliance Programme
IDEAS 2000 - International Defence Exhibition and Seminar of the year 2000
IGA - Inspector General Armament
IGC&IT - Inspector General Communications and Information Technology Branch
IGT&E - Inspector General Training and Evaluation Branch
IISS - International Institute for Strategic Studies
IJI - Islami Jamhoori Ittehad
IMWG - Inter-Ministry Working Group
INFCIRC - Information Circular
IS Wing - Inter-Services Wing
ISI - Directorate of Inter-Services Intelligence
ISIS - Institute for Science and International Security
ISPR - Inter-Services Public Relations
ISSB - Inter-Services Selection Board
ITAR - International Traffic and Arms Regulations
ITC (HS) - India’s Tariff Classification (Harmonised System)
JAG - Judge Advocate General Branch
JCSC - Joint Chiefs of Staff Committee
JEM - Jaish-e-Mohammed
JI - Jamaat-e-Islami
JI&IO - Joint Intelligence and Information Operations Directorate
JIM - Joint Intelligence Miscellaneous
JIN - Joint Intelligence North
JSHQ - Joint Staff Headquarters
JUI - Jamiat Ulema-e-Islam
JW&TRG - Joint Warfare and Training Directorate
KANUPP - Karachi Nuclear Power Plant
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KRL - Abdul Qadeer Khan’s Research Laboratories
KWKG (German) - Weapons of War Control Act
LET - Lashkar-e-Taiba
MCTL - Military Critical Technologies List
MEA - Ministry of External Affairs
MEDT - Ministry of Economy Development and Trade
MES - Military Engineering Service
MFA - Ministry of Foreign Affairs
MI - Military Intelligence Directorate
MIC - Military Industrial Committee
MII - Ministry of Industry and Information
MIT - Ministry of Industry and Trade
MLA - Martial Law Administrator
MND - Ministry of National Defence
MO - Military Operations Directorate
MOC - Ministry of Commerce
MOCI - Ministry of Commerce and Industry
MOD - Ministry of Defence
MODP - Ministry of Defence Production
MOF - Ministry of Finance
MOFA - Ministry of Foreign Affairs (of Pakistan)
MOFCOM - Ministry of Commerce (of China)
MOFTECH - Ministry of Trade and Economic Cooperation
MOI - Ministry of the Interior/Ministry of Interior (of Pakistan)
MPS - Ministry of Public Security
MS - Military Secretary
MTC - Ministerial Committee for Military-Technical Cooperation with Foreign Countries
MTCR - Missile Technology Control Regime
MTEC - Missile Technology Export Control Group
NASA - National Aeronautics and Space Administration
NATO - North Atlantic Treaty Organisation
NCA - National Command Authority
NDAA - National Defence Authorisation Act
NDU - National Defence University
NESCO - National Engineering and Scientific Commission
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NGO - Non-Government Organisation
NHQ - Navy Headquarters
NI - Navy Intelligence
NIS - New Independent State
NNCA - National Nuclear Security Administration
NNCC - National Nuclear Command Committee
NOC - Non-Objection Certificate
NORINCO - China North Industries Corporation
NPT - Nuclear Non-Proliferation Treaty
NRC - Nuclear Regulatory Commission
NSC - National Security Council
NSG - Nuclear Suppliers Group
NWFP - North-West Frontier Province
OC - Operating Committee
OFAC - Office of Foreign Assets Control
OGEL - Open General Export Licence
OIEL - Open Individual Export Licence
OP&PL - Operations and Plans Directorate
PAEC - Pakistan Atomic Energy Commission
PAF - Pakistan Air Force
PAP - People’s Armed Police
PILDAT - Pakistan Institute of Legislative Development and Transparency
PINSTECH - Pakistan Institute of Nuclear Science and Technology
PLA - People’s Liberation Army
PLAAF - People’s Liberation Army Air Force
PLAN - People's Liberation Army Navy
PM - Prime Ministry
PMA - Bureau of Political-Military Affairs
PML - Pakistan Muslim League
PML (N) - Pakistan Muslim League (of Nawaz Sharif)
PN - Pakistan Navy
PNRA - Pakistan Nuclear Regulatory Authority
PPP - Pakistan People’s Party
PRC - People’s Republic of China
PRIF - Peace Research Institute Frankfurt
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PSO - Principal Staff Officer
PSRU - Pakistan Security Research Unit
QMG - Quarter Master General
R&D - Research and Development
RAS - Russia Academy of Sciences
REU - Restricted Enforcement Unit
RMIPC - Release of Military Information Policy Committee
ROSATOM (Russian) - State Atomic Energy Corporation
ROSCOSMOS (Russian) - Federal Space Agency
RUSI - Royal United Services Institute
‘S’ Wing - Security/External Wing
SAAG - South Asia Analysis Group
SACMPT - State Authority Committee for Military Product Trade
SARS - Severe Acute Respiratory Syndrome
SASSI - South Asia Strategic Stability Institute
SASTIND - State Administration of Science, Technology and Industry
SBMPT - State Bureau of Military Product Trade
SCOMET - Special Chemicals, Organisms, Materials, Equipment and Technologies List
SD - Staff Duties Directorate
SECDIV - Strategic Export Control Division
SFC - Strategic Forces Command
SIEL - Standard Individual Export License
SIPRI - Stockholm International Peace Research Institute
SNEC - Subgroup for Nuclear Export Control
SOE - State-Owned Enterprise
SPD - Strategic Plans Division
SRO - Statutory Regulatory Order
STAFFDEL - Congressional Staff Delegation
SUPARCO - State Upper Atmosphere Research Commission
SVR (Russian) - Foreign Intelligence Service
SWO - Special Works Organisation
SXWP - Strategic Exports Working Party
UAE - United Arab Emirates
UF6 - Uranium Hexafluoride
UK - United Kingdom of Great Britain and Northern Ireland
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UKTI - United Kingdom Trade and Investment Organisation
UN - United Nations
UNSC - United Nations Security Council
UNSCR 1540 - United Nations Security Council Resolution 1540
US - United States of America
USG - United States Government
USML - United States Munitions List
USSR - United of Soviet Socialist Republics
VCOAS - Vice Chief of Army Staff
WA - Wassenaar Arrangement
WMD - Weapons of Mass Destruction
ZKA (German) - Criminal Investigation Service
Introduction

1. Background: The Issue of Nuclear Proliferation from Pakistan

The prime objective of this thesis is to offer structural and conceptual explanations for Pakistan’s aid to other countries’ nuclear programmes. It focuses on analysing Pakistan’s control system from three perspectives: the influence of the organisational culture of the Pakistani state apparatus on this system, the strategic environment surrounding national security policies, and interlinks between the different entities in the control system and state apparatus.

The justification for focussing on Pakistan out of the group of nuclear weapons states is fundamental. The nuclear weapons element is most critical when Pakistan is concerned and it casts a shadow over Pakistan’s other spheres of significance. Pakistan’s role as a source of nuclear proliferation is a constant reminder of the possibility of wide-scale nuclear assistance from Pakistan to foreign countries and terror organisations. Its nuclear rivalry with India constitutes an active conflict between two nuclear countries that could turn into a full scale war.

Furthermore, Pakistan received international attention as a result of its being an important variable in the efforts to preserve global security. Since the terror attacks of September 11th 2001 (known as the ‘9/11 Terror Attacks’), Pakistan has become a key player in the final outcome of US efforts, along with its NATO allies, to dismantle Al Qaeda infrastructure in Afghanistan and to bring stability to that region. Pakistan is a hub of terror networks which are the source of terror threats against Western countries. Moreover, this terror infrastructure plays a factor in the instability of Afghanistan, in the Indian controlled part of Kashmir, and in Pakistan itself. In turn, the Pakistani combination of terrorism and Islamic extremism together with nuclear proliferation raises the possibility of a terror organisation’s access to Pakistan’s nuclear assets. According to an extreme scenario, Pakistan’s regime is being changed into a radical Islamic one which threatens to use nuclear capabilities as an ‘Islamic Bomb’ - in the service of the Muslim Ummah against its alleged enemies.

Between 1987 and 2003 Pakistan was a source of significant nuclear assistance to Iran, Libya, and North Korea, delivered through ‘Abdul Qadeer Khan’s (AQ Khan) nuclear proliferation network’. Furthermore, AQ Khan, who was a senior official in Pakistan’s nuclear programmes, negotiated with several other countries (such as Saudi-Arabia, Iraq, and Syria)
regarding the initiation of military nuclear projects. Nowadays, Pakistan could still be considered as one of the main potential sources of nuclear proliferation, second only to North Korea which has a brazen policy of proliferation (and as part of it developed a clandestine nuclear programme in Syria).

In order to examine Pakistan’s ability to control its nuclear assets, the most critical aspect of nuclear proliferation from Pakistan is the extent of the government’s complicity in this activity. If Pakistan’s nuclear proliferation is an outcome of government policy to assist other countries with their nuclear weapons programmes, it projects negatively on Pakistan as a responsible nuclear weapons state and could label Pakistan as a threat to international security and to global nuclear disarmament and non-proliferation efforts. On the other hand, if nuclear proliferation was the action of private individuals who exploited the weaknesses of Pakistan’s export control system, it might reflect badly on Pakistan’s ability to prevent unauthorised nuclear exports. Pakistan’s failure to counter private nuclear assistance could also raise questions about its ability to block the external influence of radical Islamic organisations on the agencies which are responsible for the development of nuclear programmes. Pakistan’s poor performance of non-proliferation might also raise questions regarding its control over its operational nuclear weapons during a military conflict with India.

2. The Academic Debate on Nuclear Proliferation from Pakistan

The official line of the Pakistani government, which receives support mostly from Pakistani scholars, argues that the nuclear export was initiated by a group of dissident scientists headed by AQ Khan, and the assistance was conducted by a global network which included non-Pakistani individuals around the world (mainly in Europe and in Asia). On the other hand, most scholars outside Pakistan argue that in light of the magnitude and extended proliferation activity, it could not have occurred without some sort of involvement of the Pakistani authorities - from complicity to full knowledge and approval. Both schools of thought on this issue are in agreement about the turbulent nature of Pakistan as a dysfunctional state, which may have negatively affected its control system over its nuclear organisations.

The most comprehensive academic analysis on Pakistan’s nuclear proliferation was conducted by the International Institute for Strategic Studies (IISS) which published a ‘dossier’ on AQ
Khan’s network and the implications of its activities\(^1\). Another prominent analysis of Pakistan’s nuclear proliferation and its ramifications can be found in ‘Pakistan’s Nuclear Future’ by Henry D. Sokolski (ed.)\(^2\). Other academic publications which deal with the consequences of the nuclear network proliferation also surfaced following the public exposure of the network (in January 2004). Furthermore, public curiosity about the image of AQ Khan as a ‘nuclear smuggler’ and his global operation encouraged widespread coverage of the network in leading newspapers both in the US and Europe. The extensive media coverage of the network’s exposure led to several journalists researching this saga with particular emphasis on the policies and reactions of western governments and intelligence services vis-\(\text{a-vis}\) the threat of nuclear proliferation emanating from Pakistan. Three comprehensive investigations which include a full account of the deeds of AQ Khan and his associates with regard to the proliferation network can be found in ‘Deception’ by Adrian Levy and Catherine Scott-Clark, in ‘Shopping for Bombs’ by Gordon Corera, and in ‘The Man from Pakistan’ by Douglas France and Catherine Collins\(^3\).

Regarding the issue of the paradigm behind nuclear proliferation from Pakistan, the above publications include broad information on Pakistan’s involvement in the nuclear proliferation project and discuss the possibility of state complicity in this operation, but most of them avoid a clear-cut conclusion on the issue. ‘Deception’ faces the challenge and goes further by presenting a strong case that Pakistan’s proliferation was part of an official policy, mainly promoted by the Army high command and supports its case with wide-ranging evidence from diverse sources. Bruno Tertrais in his article ‘Khan’s Nuclear Exports: Was There a State Strategy?’ from his book ‘Pakistan’s Nuclear Future\(^4\)’ examines the Pakistani state rationale for nuclear assistance to different countries in different periods and tries to determine the extent of official involvement in proliferation. This thesis will provide a broader context for the understanding of Pakistani sponsored nuclear proliferation by an analysis of the institutional structure of control over Pakistan’s nuclear agencies.

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3. The Main Objective of this Research on Pakistan’s Nuclear Proliferation

This thesis will test the hypothesis that Pakistan’s support for nuclear proliferation might well involve a number of actors than merely the AQ Khan network. The thesis will provide a structural analysis demonstrating that in the Pakistani institutional context it is most unlikely that at least some Army officers were not involved in these initiatives.

The contribution of this thesis into the episode of nuclear proliferation from Pakistan aspires to offer a systematic explanation for the proliferation phenomenon from the institutional point of view. The actual methods, procedures and decision making which might explain the organisational culture of Pakistan’s control system over its nuclear programmes and the degree of efficiency of the control system are apparently absent in academic discourse about nuclear exports from Pakistan. This void is mainly a result of the intense secrecy that naturally shrouds Pakistan’s control over its nuclear programmes, so the resources are limited on this important aspect of Pakistan’s nuclear proliferation. Most of the direct information on the control system originates from Pakistan’s official and unofficial sources, occasionally through academic channels in the US and the UK. The information available is even more limited when it comes to the main issue of this thesis: the full extent of the military involvement in the nuclear exports.

An institutional and organisational explanation of nuclear proliferation from Pakistan’s should surface from examining Pakistan’s administrative arrangements and the perceptions of those involved in it. Through analysing Pakistan’s relevant bureaucracy the thesis will suggest that Pakistan’s proliferation activity is a by product of its organisational culture and the nature of the control system. For the purposes of this thesis a ‘control system’ is ‘the system put in place to control Pakistan’s agencies involved in the development and production of nuclear weapons’. The hypothesis to be tested is that such was the nature and extent of this control system that it is highly unlikely that elements in the Army, that came to dominate this system were not complicit in proliferation activities from Pakistan; and that such was the influence of key military officers in it, the system was powerless to prevent proliferation activity that took place.

As a consequence, Pakistan’s military will be the main state organisation under analysis in this thesis. The military (and particularly the Pakistan Army) is the most dominant player in decision making on Pakistan’s national security issues and in the control mechanisms over
nuclear organisations. The main objective of evaluating the military’s role is to offer a comprehensive understanding of Pakistan’s ‘militarised’ control system, which is unique among nuclear weapons countries and specifically alien to the civilian nature of export control systems in western countries. Underscoring the role of the military in the control system is expected to reveal a better understanding of the character of nuclear proliferation from Pakistan and to what extent it was a state initiative.

4. The Analytical Framework

This thesis into Pakistan’s nuclear proliferation will make an attempt to deal with the following central research question:

_How have the institutional arrangements and the perceptions inherent in Pakistan’s Control System influenced its ability to prevent proliferation of nuclear weapons?_

The most plausible answer to the above question which should be established at the end of the analytical process is as follows:

_The militarised nature of Pakistan’s control system deprived it from crucial elements which are necessary for its efficiency in curbing proliferation. Contrary to its main purpose, the control system was unable to prevent part of the nuclear development and production apparatus from providing assistance to the nuclear programmes of foreign countries._

The proposed explanations for the response to the research question will be based upon several working assumptions that are methodologically essential to this thesis. These assumptions will be discussed and reaffirmed in the analytical process and are as follows:

1) Pakistan’s military is the main operator in internationally unique militarised control mechanisms over nuclear programmes. The dominant position of the Army in Pakistan’s national security decision making and policy formulating elevate it to the status of arbitrator in all matters concerned with the issue of non-proliferation.

2) The existence of a similarity between military procedures and decision making in the control system and military involvement in other fields of its responsibility. This assumption is mainly based on the fact that the same military headquarters (HQ) deal with subjects pertaining to Pakistan’s national security, including the non-proliferation issue.
3) The character of the military’s administrative and staff work is distinctive from civilian bureaucracy. The military bureaucracy is more attentive to the desires of its masters for centralisation and for a quick transformation of policy from formulation to implementation. On the other hand, when national security issues are involved, civilian agencies must normally adhere to inter-agency processes which in turn encourage a balanced policy that incorporates the input of all concerned.

4) There is a similarity between Pakistan’s export control mechanism and the experience in the export control mechanism of other countries.

As detailed, the performance of Pakistan’s control system, which lies at the heart of this thesis, is closely connected to the nature of Pakistan’s military and its organisational culture and thinking. This thesis will try to establish the following arguments based on reliable evidence in order to propose explanations for the performance of the control system:

1) The main deficiencies in Pakistan’s control over its nuclear programmes are those connected to Pakistan’s military procedures and to the decision-making processes inside and between relevant military directorates and HQs, and between the Army and civilian agencies. These problems are connected to the overall approach and organisational culture of the Army.

2) Pakistan’s control mechanisms over its nuclear programmes are significantly more centralised than in other countries because of their military character. As a consequence (and in addition to the administrative problems in the control mechanism), nuclear proliferation from Pakistan was the outcome of incompetence or a lack of inclination to prevent it on the part of high-ranking officers in Pakistan’s military. A significant part of the proliferation activities could not have taken place without some sort of awareness of Pakistan’s defence establishment.

3) Following the nuclear tests of May 1998 and the official ending of Pakistan’s policy of nuclear ambiguity, the defence establishment’s attempt to consolidate the stance of the country as a responsible nuclear weapons state was through high profile reforms of Pakistan’s control mechanisms. A major part of these reforms attributed a significant role to civilian agencies and cabinet ministries in decision making on issues related to nuclear programmes. However, these reforms did not significantly influence the military role and responsibilities in the non-proliferation field; the reforms only strengthened its position as an official arrangement.
5. The Analytical Process

This thesis will include five different analytical methods in order to characterise Pakistan’s control system and evaluate its political commitment and ability to prevent assistance to nuclear weapons programmes of foreign countries. The accumulative result of these methods should enable this analysis to confront the acute shortage of information on Pakistan’s control system: it should suggest explanations for the operating methods of the control system and clarify the reasoning behind the existence of AQ Khan’s network and its unprecedented record in the non-proliferation sphere.

Chapter One will try to establish that to a high degree of probability nuclear export from Pakistan was sanctioned by the state: the operation of the nuclear proliferation network, directed by AQ Khan and his associates in Khan’s Research Laboratories (KRL), was at least principally known to the authorities and particularly to the military agencies as part of the control system over the nuclear organisations. This assertion will be based on analysing the military’s dominant role in the control system since the inception of Pakistan’s military nuclear programmes in the 1970’s. As will be presented, Pakistan’s nuclear programmes, including their facilities, equipment and personnel were under the tight administrative and physical control of the military, and it seems almost impossible that a nuclear export project would have continued for fifteen years without the knowledge of the military. In addition, information about nuclear exports will also be analysed, and the role of the nuclear organisations and the main security agency, the ISI. The main objective in offering a clear explanation for Pakistan’s nuclear exports and in ascertaining the military involvement is to establish the conceptual foundation and the immediate relevance of the conclusions of this analysis into the military role and influence on the control system.

After establishing the indispensible role of the military in the control system over the nuclear organisations Chapter Two will examine Pakistan’s control system as part of the defence establishment. This chapter will include an attempt to illustrate the organisational nature of Pakistan’s defence establishment and in turn identify the main elements in its character that might determine the ability of the control system to prevent proliferation from Pakistan. In this regard, the chapter explores the civil-military relations both with the civilian national leadership and the different civilian agencies, the strong centralisation tendency within the armed forces, and the influence of the security and intelligence agencies on national security policies.
**Chapter Three** deals with the strategic thinking of the military, and it places nuclear assistance in this conceptual framework. At the focus of the analysis is the discussion about the military tendency to use proxies in order to promote what the military perceive as national security objectives. This chapter will examine the possible role of AQ Khan’s nuclear proliferation network as a proxy aimed to promote Pakistan’s national objectives by comparing the operational framework of the proliferation network and the military organisational arrangements for using terror organisations operating against India and in Afghanistan.

**Chapter Four** is a comprehensive examination of Pakistan’s export control mechanisms compared with those of export controls of other countries. Export controls are a central function of a national control system over the nuclear organisations (and other WMD programmes), and are the main indicators for the efficiency of the control system in preventing proliferation. This chapter uses the ‘structural approach’ as a method for analysing control systems over nuclear programmes according to organisational and structural parameters. Pakistan’s export controls will be compared to equivalent national export control mechanisms in western countries (the US, Britain, and Germany), and non-western countries (Russia and India). Like Pakistan, all of these countries installed export control mechanisms designated to prevent nuclear proliferation.

The final chapter, **Chapter Five**, will focus on the test case of China’s control system and its proximity to Pakistan’s control system. This chapter will exemplify the reforms China has conducted since the late 1990’s in its control system which changed its character from a military dominated system, similar to the Pakistani system, to one directed by several state agencies, mainly civilian. The comparison between these two national export control systems is expected to emphasise that the extent of military involvement in the control over nuclear agencies is a major factor governing the possibility of nuclear assistance to foreign countries due to the relatively minor consideration the military attributes to international considerations.

In the **Conclusion**, the main insights into Pakistan’s control system and Pakistan’s nuclear proliferation phenomenon will be summarised. The consequences of all the five methods are presented together in order to analyse the causes of Pakistan’s nuclear proliferation and why the control system has been incompetent in performing one of its central official tasks - preventing proliferation from Pakistan.
6. Pakistan’s Nuclear Proliferation and its Potential for Academic Knowledge

This thesis will try to explain several crucial aspects of Pakistan’s nature that could contribute to the understanding of its policies and actions which influence contemporary issues vital to international security: nuclear proliferation and the acquisition of nuclear weapons by terror organisations; and the future course of radical Muslim terrorism.

Pakistan’s control system over its nuclear organisations was mainly directed by Pakistani officials who were invited to participate in academic events. They presented their country’s export control arrangements as part of their interest to portray Pakistan as a responsible nuclear weapons country. The Pakistani officials mainly emphasised the adaptation of their country’s export control practices and tools in accordance with international standards, but for obvious reasons did not provide substantial details on its operating methods. This thesis will endeavour to present an original contribution to the understanding of Pakistan’s control system that has never been thoroughly considered from a bureaucratic perspective. A few scholars have tried to explain Pakistan’s control system over its nuclear organisations, but again from a limited perspective about its efficiency and its administrative procedures while ignoring the broader contexts which shape the functioning of the system: Pakistan’s thinking on national security and the nature of its defence establishment.

The structure of Pakistan’s defence establishment and its entities will be analysed in this thesis for the first time in a comprehensive way. Various academic publications have dealt with Pakistan’s military and its dominant position, but most of them concentrated on illustrating the historic development of the military and examined its part in several issues such as the regime’s stability, relations with the US, and the growth of radical Islam in Pakistan. Ayesha Siddiqa-Agha provided insightful but brief explanations on Pakistan’s defence establishment in her book on Pakistan’s arms procurement which largely focus on the aspects important for understanding Pakistan’s internal deliberations for acquiring weaponry and military technological systems. Siddiqa-Agha again briefly explained decision making in Pakistan’s defence establishment in ‘Military Inc.’, her groundbreaking research on the financial ventures of Pakistan’s military. Other brief explanations on the organisation of the military can be found in the ‘Armed Forces of Pakistan’ which reviews the history of

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Introduction

the military. An understanding of the institutional arrangements of the defence establishment is expected to contribute to the realisation of its decisive role in Pakistan’s historical development and to determine the country’s national security policies and strategic thinking. Furthermore, one can hardly underestimate the importance of the structure and responsibilities of Pakistan’s intelligence community, and most of all the Inter-services Intelligence (ISI), and its influence on decision making. The ISI and other intelligence agencies are deeply involved in formulating national security policies and are used as the operational arm for executing important parts of the above policies, particularly in connection with militant activity in India and Afghanistan. This critical role of the ISI is discussed for the first time in this thesis in a consistent way and adds to the knowledge about Pakistan’s intelligence which was extensively examined mainly in popular and non-academic literature.\(^8\)

Moreover, analysing Pakistan’s control over its nuclear programmes has the potential for a wider contribution to academic research and scholarly discourse about security studies. On the subject of non-proliferation, analysing Pakistan’s decision making on nuclear proliferation could also contribute to limited discourse about the factors behind the nuclear assistance of a nuclear weapons state to a non-nuclear weapons state. The phenomenon of assistance of a nuclear weapons state to foreign countries in order to develop a nuclear weapons programme is not exclusive to Pakistan. Critical nuclear assistance was delivered in the past in several instances (for example, between Russia and China and between France and Israel in the late 1950’s), and is a main factor behind the success of several countries to become nuclear powers (such as India). However, academic debate on nuclear non-proliferation sidelined the issue of nuclear assistance as one of the main explanations for the proliferation of nuclear weapons.\(^9\)

Evaluating Pakistan’s export control system in comparison with the experience of various countries contributes to academic research into these critical administrative arrangements. Most academic discussion on export controls is focused on the level of efficiency of the export control system through evaluating the nominal bureaucratic measures that are in place to prevent the illicit export of WMD-related items. This thesis will discuss the institutional

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8 An updated analysis on the ISI which summarises most of the known information about this intelligence agency can be found in: Rana Banerji, Pakistan: Inter-Services Intelligence Directorate (ISI) An Analytical Overview, Journal of Defence Studies 5:4 (October 2011), pp. 1-27.

9 The main attempt to confront the issue of nuclear assistance was made by Mathew Kroening in his book: Exporting the Bomb: Technology Transfer and the Spread of Nuclear Weapons, (Ithaca, NY: Cornell University Press, 2010).
arrangements for decision-making processes and the division of responsibility between the different agencies of the export control apparatus. It should be noted that this thesis is the first to deal with Russia’s export control system and its modifications which have followed national political swings since the collapse of the Soviet Union.

Finally, through comparative analysis between different national export controls there will be a suggestion for a framework for the organisational structure and working connections in any viable export control apparatus. This original paradigm aims to contribute to the comprehension of the organisational dimension of control mechanisms over non-conventional assets. One of the main subjects of the analysis will be to evaluate the repercussions of military involvement in the control apparatus over nuclear programmes which might be relevant to other countries.

It should be emphasised that this thesis draws a distinction between two different mechanisms and will deal with the former and not the latter: controlling R&D programmes for the development of non-conventional capabilities and command and control over operational WMD. Although there is an overlap between these two mechanisms, particularly in the agencies that are part of them, these control systems have different functions for different purposes. Although the conclusions of this thesis could also be relevant to understanding command and control of operational capabilities, this thesis will analyse the control system solely from the aspect of non-proliferation.

In addition, assessing Pakistan’s military involvement in export control would make some contribution to the understanding of the operation of military headquarters during times of peace and their organisational culture. Very few research articles were published about staff work in HQs and how military institutions conduct their routine assignments, and not just during wartime or emergency situations. The subject of military involvement and influence through its bureaucracy on decision making on broader national security issues still needs to be explored.
Chapter One: Pakistan’s Military Involvement in the Evolution of the National Control System and in the Nuclear Proliferation of AQ Khan’s Network

1. Introduction

Between the 1980’s and 2003 Pakistan was a source of assistance for the development of nuclear weapons programmes for at least three countries: Iran, Libya, and North Korea. Pakistan also cooperated with China in developing the nuclear weapons programmes of both countries, and in addition there is substantial evidence of offers of nuclear assistance to other countries: Iraq (during Saddam’s regime), Saudi-Arabia, United Arab Emirates, Syria and Egypt. Most of the nuclear assistance was orchestrated by a proliferation network of businessmen and middlemen and headed by Abdul Qadeer Khan (AQ Khan), one of the most senior officials in Pakistan’s nuclear programmes. On what seemed a separate incident, only a few weeks prior to the 9/11 terror attacks, retired Pakistani nuclear scientists offered their services to Al-Qaeda in developing a non-conventional capability.

The above extensive proliferation activity occurred parallel to the power consolidation of Pakistan’s military. As will be discussed in Chapter Two, the military, and especially the Army, was always the dominant force in national security issues and superseded any other domestic institution, particularly during periods under martial regime. Under civilian regimes the Army usually secured its autonomy on national security issues. Hence, the entire decision-making process and the control system over the nuclear programmes were directed by the military.

The main goal of this chapter is to support the argument that Pakistan’s nuclear export phenomenon occurred at least with the knowledge of the military and most probably with its consent. Explaining why Pakistan’s nuclear export could only succeed with military involvement is necessary in order to support the analytical process and explain the focus of this thesis on Pakistan’s military role in the control system. However, similar to other national control systems over nuclear organisations, Pakistan’s system is also opaque in its nature and thus there is a lack of solid information which supports the argument about military involvement in nuclear proliferation from Pakistan. As for nuclear proliferation from

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Pakistan, there are contradictory versions of the parties and individuals allegedly connected to the operation and an intent to disseminate misinformation.

In order to confront the shortage of hard evidence on Pakistan’s military involvement in nuclear proliferation this chapter includes an examination of Pakistan’s control system from a historical perspective: the central function of the military in the supervision over the nuclear organisations will be demonstrated in every period since the beginning of Pakistan’s nuclear weapons programme, even in periods when the programme was under direct civilian control. The discussion will include a less observed aspect of the control system: the role of Pakistan’s main security agency, the Directorate of Inter-Services Intelligence (ISI), and its strong connection to the nuclear organisations. The next part of the chapter will analyse the extent of military involvement in nuclear exports, and will try to evaluate the most reliable information pointing to one of three plausible options: AQ Khan’s nuclear proliferation network was a private initiative; the military was aware of the nuclear exports; and the nuclear proliferation was a result of military initiative.

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2. Pakistan’s Military Involvement in the Control System over the Nuclear Organisations

2.1. The Civilian Control System over the Nuclear Programmes between 1972 and 1977, and the Military Involvement

It appears that until the 1970’s Pakistan refrained from any serious effort to develop a nuclear capability. Pakistan’s civilian nuclear programme was initiated in the 1950’s when the US decided as part of its ‘Atom for Peace’ initiative to assist Pakistan (and other non-nuclear countries) in developing a nuclear infrastructure for civilian purposes. As a consequence, in 1957 Pakistan established its first nuclear agency, Pakistan Atomic Energy Commission (PAEC), and it was designated to be responsible for the nuclear programme. In 1965, Canada too supplied Pakistan with a nuclear reactor (called KANUPP) for its growing energy needs.

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12 Karachi Nuclear Power Plant.
13 For more details about Pakistan’s nuclear programme until the official decision in 1972 to develop a military nuclear programme, see: Samina Ahemd, Pakistan’s Nuclear Weapons Programme: Turning Points and Nuclear Choices, International Security, 23:4 (Spring 1999), pp. 178-204.
Pakistan decided to develop military nuclear capabilities in the 1970’s soon after its defeat in the 1971 War. In this war Pakistan lost half of the country with the creation of Bangladesh, and the war is considered a national trauma. Before 1971, the military regime (which ruled between 1958 and 1971) was less interested in developing nuclear capabilities under the perception that the country lacked the scientific and industrial base for producing advanced technologies for military purposes. The military concentrated its efforts on the production of conventional weaponry.

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14 Former Head of Pakistan Atomic Energy Commission (PAEC), Munir Ahmed Khan, tried in 1965 to convince the President and former Army chief Ayub Khan about the necessity of developing a nuclear weapons programme, but his arguments were rejected by Ayub Khan who claimed that Pakistan was too poor to develop
The Role of Pakistan’s Military in the Control System over Nuclear Programmes

In the first period of Pakistan’s nuclear weapons programme, between 1972 (after the end of the 1971 War) and the coup d'état of 1977, it was under direct civilian authority, partly as a result of the crucial role of senior cabinet members in its establishment. The clandestine nuclear programme was controlled by the civilian government of President and later Prime Minister Zulfikar Ali Bhutto who also initiated the nuclear project. Since he became a cabinet minister in 1958 Bhutto had harboured a conviction that Pakistan had to become a nuclear weapons state. He was known for saying that “if India builds the bomb we will eat grass or leaves, even go hungry, but we will get one of our own”.

During this period in the 1970’s, decision making on the nuclear programmes was dominated by civilian officials and agencies. The decision making process was centralised in the Prime Minister’s Secretariat with the close involvement of Prime Minister Bhutto. Bhutto was personally the driving force who tried to convince PAEC and its scientific cadre about the vision of Pakistan as a nuclear weapons country. In January 1972 Bhutto convened a key meeting (known as ‘the Multan Conference’) which resulted in the decision to develop nuclear weapons, and many of the scientists present at the meeting played a vital role in the development of the nuclear programme.

Prime Minister Bhutto was also the main creator of the organisational structure of the nuclear programmes and some of his arrangements are still pertinent. In 1975 Bhutto decided to establish another designated nuclear agency for the nuclear weapons programme, called the Engineering Research Laboratories (ERL, later renamed AQ Khan Research Laboratories - KRL), and it received responsibility for developing uranium enrichment capabilities. AQ Khan was its first director general and the one who persuaded Bhutto about the necessity of nuclear weapons. Ayub Khan’s successor, General Yahya Khan, also rejected the idea. See: Mr. Munir Ahmad Khan’s Speech delivered on March 20, 1999, at PINSTECH Auditorium, Chaghi Medal Award Ceremony, <http://www.pakdef.info/nuclear&missile/speech_munirahmed.html> Accessed on January 22nd 2012. The meeting between Ayub Khan and Munir Ahmed Khan and its consequences was also mentioned in: Feroz Hassan Khan, Nuclear Proliferation Motivations: Lessons from Pakistan, Nonproliferation Review, 13:3 (November 2006), p. 514 (no. 25).


20 Deception, p. 34; The Man from Pakistan, p. 68-69. PAEC remained responsible for producing nuclear materials for uranium enrichment, namely uranium hexafluoride (UF₆).
another nuclear agency\textsuperscript{21}: Bhutto decided to create ERL as a result of severe political and technological complications in developing the nuclear plutonium programme\textsuperscript{22}. Both nuclear organisations - PAEC and ERL - were under the direct control of the Prime Minister\textsuperscript{23}.

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Bhutto also set the working relations between the competent authorities and the nuclear organisations, and particularly ERL/KRL at least until the reform of the control system at the end of the 1990’s: although Prime Minister Bhutto had a strong tendency towards centralisation, he gave AQ Khan a free hand in managing his organisation and deciding upon the best route for the technological success of the project. Khan enjoyed full authority in acquiring technologies and materials for the clandestine nuclear programme under his control\textsuperscript{24}. In the coming years, both under military and civilian regimes, the exceptional independent position of Khan would be consolidate and would enabled him to organise the nuclear export venture.

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As part of Bhutto’s efforts to keep the nuclear programme under his tight grip and with limited involvement of the military he established another organisational precedent which is still relevant: Bhutto created an informal senior civilian committee at ministerial level to advise him on nuclear issues\textsuperscript{25}. Two of the prominent members of the committee were the Defence Secretary (equivalent to the managerial level of a Director General), Ghulam Ishaq Khan (who later became the President), and the Minister for Foreign Affairs, Agha Shai\textsuperscript{26}. These two civilian ministers were deeply involved in the decision making on initiating a

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\textsuperscript{21} The Man from Pakistan, pp. 32, 67-68. AQ Khan’s main advantage in being in charge of the uranium enrichment programme was his knowledge and information regarding the assembly and operation of gas centrifuges. Khan gained access to this information during his work in the Netherlands for the European consortium, URENCO, which developed these nuclear technologies. Khan also brought with him vital information about supply companies in Europe which could deliver the components for the uranium enrichment programme.


\textsuperscript{23} Deception, p. 35; Ayesha Siddiqa-Agha, Pakistan’s Arms Procurement and Military Buildup 1979-1999: In Search for a Policy (Basingstoke: Palgrave, 2001), p. 186; Crossed Swords, p. 342.

\textsuperscript{24} Deception, pp. 34-35; Nuclear Black Markets, p. 65.


\textsuperscript{26} Prime Minister Bhutto also served as Defence Minister.
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nuclear weapons programme, and for example were behind the motion to grant ERL a position independent of PAEC\textsuperscript{27}.

In addition, at this early stage of Pakistan’s nuclear weapons programme civilian agencies played a considerable role in state supervision. The Ministry of Defence (MOD) was the administrative umbrella for ERL in its first period of operation in light of the limited bureaucratic resources of the Prime Minister’s Secretariat. Through MOD, ERL received its financial and logistical support, and MOD served as a bureaucratic liaison between ERL and external government agencies from which it needed various services\textsuperscript{28}. The Ministry of Foreign Affairs (MOFA) was also deeply involved in the nuclear programmes. Following India’s nuclear test in 1974 the Foreign Minister in Bhutto’s government Agha Shai was one of the keen advocates for developing nuclear weapons and later facilitated China’s extensive assistance to Pakistan’s nuclear programmes: China supplied Pakistan with critical materials and knowledge for developing nuclear weapons, and enabled Pakistan to develop its nuclear capabilities significantly earlier than expected\textsuperscript{29}.

As part of Prime Minister Bhutto’s efforts to keep the nuclear programmes under his tight control he was particularly anxious about the Army’s dominant position in the internal arena and tried to limit its influence by orchestrating a civilian control system over the nuclear development\textsuperscript{30}. As a result, no representative of the military was officially involved in the decision-making process at the Multan Conference in 1972, and Bhutto kept the generals out of the policy making on the nuclear issue\textsuperscript{31}. However, it seems that the shift of efforts from PAEC to KRL to acquire nuclear capability though uranium enrichment led Bhutto to realise that he needed the Army’s proficiency and capabilities in order to guarantee the success of the clandestine nuclear weapons project. The Army and the ISI were recruited for several missions:

1) Procurement campaign of materials and components for the nuclear programme. An Army Brigadier-General was appointed in 1976 as the head of the Special Works Organisation


\textsuperscript{28} Deception, p. 35.

\textsuperscript{29} Ibid, pp. 61-62.

\textsuperscript{30} For example, Bhutto created a civilian intelligence agency called the Intelligence Bureau (IB). IB was supposed to become the dominant intelligence organisation responsible for internal threats at the expense of the Inter-services Intelligence (ISI) and the Military Intelligence (MI), which were an integral part of the military establishment.

\textsuperscript{31} Deception, pp. 18-20, 52.
(SWO), a military unit created to supervise the construction of ERL nuclear complex and to procure equipment for the nuclear project. Another Army colonel was responsible for procurement abroad. In addition, the ISI guided AQ Khan in the formation of his procurement network (which later developed into a nuclear proliferation network)\textsuperscript{32}.

2) Organising the security apparatus around the clandestine nuclear facilities. An Army brigadier-general (one star) was appointed as head of security of ERL and made responsible for monitoring all activities in ERL\textsuperscript{33}.

3) Constructing the ERL nuclear complex. SWO was also responsible for supervising the construction of the facilities of ERL in Kahuta. Until the construction of the nuclear complex AQ Khan directed ERL from the Army HQ in Rawalpindi\textsuperscript{34}.

\textbf{2.2. Military Control over the Nuclear Organisations after the Coup of July 1977}

Pakistan’s control system over the nuclear organisations changed dramatically with the military coup of 1977, and the take-over of the government by the Chief of Army Staff (COAS) General Muhammad Zia-ul-Haq. The nuclear programmes were transferred from civilian supervision to the military, and they have remained under considerable degree of military control until today.

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Like Prime Minister Bhutto Zia too had a tendency for micromanagement: under his direct control he centralised the responsibility for most of the significant issues which could be considered as the affairs of the nation\textsuperscript{35}. Zia connected the nuclear organisation to the military and he laid significant future stumbling blocks for any change in the control mechanism. In this regard, Zia shaped the military character of the control apparatus over the nuclear programmes and made the military, and particularly the Army, the sole organisation in Pakistan that could be considered professional in managing nuclear programmes. Even


\textsuperscript{33} Crossed Swords, p. 341; Deception, pp. 35, 45, 52, 518 (no. 41); Nuclear Black Markets, p. 66; Pakistan’s Arms Procurement and Military Buildup, p. 67; Shopping for Bombs, pp. 96, 214.

\textsuperscript{34} Deception, pp. 4, 16, 32, 35, 40, 43; The Man from Pakistan, pp. 67, 69,72; Pakistan’s Nuclear Underworld, p. 41; Peddling Peril, pp. 33-34.

\textsuperscript{35} Deception, p. 177; Nuclear Black Markets, p. 19.
nowadays, the military is the only establishment which has overall experience in command and control over the development and deployment of nuclear capabilities.

Zia created several layers of control over the nuclear programmes. At the highest level of decision making Zia formed a policy oriented forum, the National Command Authority (NCA\textsuperscript{36}). Zia presided as its chairman, and his deputy (the Army Chief of Staff - COS) became his deputy on the committee\textsuperscript{37}. Most of the members of NCA were military generals.

Figure 2: Military Involvement in the Control System during the Martial Regime in the Period of 1977-1988

\textsuperscript{36} In some places NCA was also called the National Nuclear Command Committee (NNCC). See: Ian Bremmer and Maria Kuusisto, Pakistan’s Nuclear Command and Control: Perception Matters (London: South Asian Strategic Stability Institute, 2008), p. 8. Not to be confused with NCA established in February 2000 by the Chief Executive and COAS General Pervez Musharraf. For more details, see this chapter and Chapter Four.

\textsuperscript{37} COS was a position created by Zia following the military coup in order to command the Army after he became the head of state. COS was replaced later by the position of Vice COAS (VCOAS).
and almost none of the members were civilians outside the scientific cadre of the nuclear programmes.

The military quickly built a control mechanism as a main tool for consolidating its connection to the nuclear weapons programme and in order to assimilate it in the military establishment. In this regard, COS (and later Vice COAS) was responsible for the daily supervision of the clandestine nuclear weapons project\(^{38}\). Furthermore, a designated directorate for strategic development was established in the Army HQ (the General Headquarters - GHQ) that carried out most of the nuclear operational planning. The HQs of the Air Force and Navy (AHQ and NHQ, respectively) did not participate in the control mechanisms\(^{39}\).

One of the main shifts in the control system in its re-organisation under the military regime was the marginalisation of civilian agencies from control over the nuclear programmes. In this regard, the Foreign Ministry was removed from supervision over nuclear organisations and was absent from the decision-making process of their operation. The only exception was the former Defence Secretary, Ishaq Khan: as the appointed Finance Minister he was responsible for allocating funds for the clandestine nuclear programmes, and particularly for the nuclear uranium enrichment project\(^{40}\).

Parallel to the Army taking control over decision making on nuclear issues, and similar to Bhutto’s approach, the martial regime maintained autonomy of the nuclear organisations over technical and operational management\(^{41}\). The heads of the clandestine nuclear programme enjoyed total control over technical matters. They were given free access to the core of the military establishment\(^{42}\), and had direct contact with the military command and the national leadership\(^{43}\).

The military was more involved in the nuclear programmes than the former civilian regime, and more Army officers were posted to KRL to take responsibility for supervising all the agency’s operations and administration work\(^{44}\). In this regard, contacts between the nuclear organisations and entities outside the military establishment and state bureaucracy were carefully monitored: the Army restricted scientists’ movements and from time to time

\(^{38}\) Deception, p. 52.
\(^{39}\) Nuclear Black Markets, p. 65; Pakistan’s Arms Procurement and Military Buildup, pp. 69.
\(^{40}\) Deception, pp. 170-172; The Man from Pakistan, pp. 68-69.
\(^{41}\) Pakistan’s Arms Procurement and Military Buildup, p. 67.
\(^{42}\) Deception, 102-103; Shopping for Bombs, p. 17.
\(^{43}\) Deception, pp. 53, 58, 84-85, 90, 146; Pakistan’s Arms Procurement and Military Buildup, p. 67.
\(^{44}\) Deception, p. 102; Pakistan’s Nuclear Underworld, p. 43.
scientists were accompanied by Army officers. Every overlap between KRL personnel and foreigners and travel abroad could only be realised with Army approval\(^\text{145}\). However, AQ Khan’s special position in the nuclear establishment was preserved and he maintained the overall responsibility for his nuclear agency and continued to enjoy a relaxed military supervision as long as KRL continued forwarding the nuclear weapons programme. AQ Khan’s influential position was also a result of his leading role in two ventures which secured Pakistan’s success in developing nuclear weapons by the middle of the 1980’s: the clandestine nuclear procurement network and China’s transfer of crucial nuclear assistance.

From the early stages of the nuclear weapons programme the main objective of the control system was to protect the programme from outside attacks - military strikes, sabotage and espionage\(^\text{146}\). As a consequence, after the military coup of 1977, the military reinforced its responsibility for the security of the nuclear programmes (which had already been delegated to the Army during Bhutto’s civilian regime). There were three to four tiers of security around the nuclear facilities. Two army brigades and other military units were stationed there to guard the nuclear facilities. In addition, intelligence agencies directed the security apparatus: the ISI assumed responsibility for the information security of the nuclear organisations and for the safety of the top scientists\(^\text{147}\).

### 2.3. Military Control over Nuclear Organisations under the Civilian Regime (1988-1999)

Following Zia’s death in a mysterious plane crash in August 1988 the country returned to a parliamentary system of government. Although the new political circumstances forced the Army to allow the restoration of a civilian government, the Army strove to preserve its power within the internal arena and refused to share its responsibility for the nuclear weapon programmes which consolidated its prestige as the ‘defender of the nation’. The Army authority over the nuclear organisations strengthened its prominent position under a civilian government in any decision making on national security strategy. As will be presented in this section, in the decade of civilian regime, the control system over nuclear organisations remained militarised.

\(^\text{145}\) Deception, pp. 154, 296, 516 (no. 70); Shopping for Bombs, pp. 95-96.
\(^\text{146}\) Shaun Gregory, The Security of Nuclear Weapons in Pakistan, Brief No. 22 (November 18th 2007), Pakistan Security Research Unit (PSRU), pp. 6, 10.
\(^\text{147}\) Deception, pp. 94-95, 145; Pakistan’s Nuclear Underworld, p. 42.
In the general elections of November 1988 Pakistan People’s Party (PPP) won and its leader, Benazir Bhutto, became Prime Minister. The military feared her elevation to head of government: Bhutto was the daughter of Prime Minister Zulfikar Ali Bhutto who was toppled and executed by the military, and she led the main opposition to Zia’s martial regime. As a result, she was perceived by the military establishment as a threat to its national dominant position. The military was concerned that if Bhutto controlled the nuclear capabilities, she would be more amenable to American pressure to limit the development of the nuclear programmes.\(^{48}\)

\(^{48}\) The Man from Pakistan, p. 164.
As a consequence, soon after Bhutto’s electoral victory, the military pressurised her into conceding to a framework that would limit her influence on the nuclear programmes to a minimum. Officially, as in the days of Zulfikar Ali Bhutto, the nuclear organisations were positioned administratively under the Prime Minister’s Secretariat\(^\text{49}\). However, several institutional arrangements were made in order to preserve the military’s control over the nuclear organisations. Zia’s successors to the presidency and to the Army command formed a decision-making forum also named NCA for the nuclear programmes and for other strategic issues which included President Ishaq Khan, COAS General Mirza Aslam Beg, and Prime Minister Bhutto. The military created NCA in order to demonstrate its accountability to the government, and in turn for the latter to be held responsible amid international and American criticism.

Furthermore, despite being a civilian politician the President, Ishaq Khan, was a traditional supporter of the military and served in Zia’s military regime. As a result, NCA was controlled by two senior officials who perceived this forum as a means for protecting the military interests in the nuclear programmes. Bhutto was neutralised in the forum and excluded from any actual supervision over the nuclear capabilities. President Ishaq Khan and the chiefs of the Army and the ISI cautioned Bhutto to refrain from any involvement in the nuclear programmes. COAS Beg admitted that Bhutto’s participation in NCA was only a result of American pressure\(^\text{50}\).

Bhutto was without any authority over the nuclear organisations that were nominally under the direct control of the Prime Minister’s Secretariat. According to Bhutto’s own accounts, the Army chief, General Beg, refused to brief her on the development of the nuclear programmes and the first time she learned about her country’s own nuclear programmes was from US Intelligence officials during her state visit to Washington in June 1989. The heads of KRL and PAEC declined Bhutto’s summons, and in 1990 KRL returned to operation after a short interval without Bhutto’s knowledge. Bhutto also failed to exercise her authority and to lay down nuclear policy. Finally, Bhutto’s effort to intervene in the nuclear issue was probably one of the reasons for her dismissal\(^\text{51}\).

\(^{49}\) Ibid, p. 181.

\(^{50}\) Deception, pp. 188-189, 191.

\(^{51}\) Crossed Swords, p. 422; Deception, pp. 190-191, 200, 210-212; The Man from Pakistan, pp. 164, 169-171, 185; Pakistan’s Nuclear Underworld, p. 45.
The military was less passionate towards Prime Minister Nawaz Sharif, Bhutto’s successor (November 1990 - July 1993, and February 1997 - October 1999). In light of his cooperation with Zia’s military regime (during his term as Chief Minister of the Punjab Province in the 1980’s, and later as one of the main adversaries of Bhutto and her political party), Sharif was considered more accommodating towards the military’s interests\(^52\). Nevertheless, under NCA framework, Sharif played a limited role like Bhutto on the nuclear issue, and was outside the decision-making process on nuclear capabilities\(^53\). Similar to Bhutto, Sharif objected to the military’s dominance and strove to challenge it and refused to extend General Beg’s tenure as COAS\(^54\). Sharif applied similar drive to the nuclear issue, and he tried to exercise his influence, However Sharif was constantly sidelined by the Army\(^55\).

During Sharif’s first term, President Ishaq Khan remained the main non-military official involved in the nuclear issue. The influence of the President through NCA on decision making on nuclear capabilities lasted until Ishaq Khan’s resignation from the Presidency in July 1993. However, the strong position of the President in the control system was only a result of the Army’s admiration for Ishaq Khan. Ishaq Khan’s successors to the Presidency did not enjoy their predecessor’s strong affiliation to the military and his knowledge about the nuclear programmes. As a result, the NCA organisational arrangement was disregarded.

Following the marginalisation of NCA, the civilian Prime Minister could have enjoyed more influence over the nuclear issue. Without the constitutional support of the President, COAS could be coerced from time to time by an elected Prime Minister with strong opinions. Consequently, the civilian Prime Ministers had the possibility of being more involved in the nuclear programme. It should be emphasised that the Prime Minister was only able to pressurise for a broad directive or policy and intervene on specific issues. The military continued to carry out the daily supervision of the nuclear organisations.

Nevertheless, the Army maintained its dominant position in the supervision of the nuclear organisations. The military’s main political opponent, Benazir Bhutto, missed the opportunity to challenge the Army’s influence during her second term as Prime Minister (October 1993 - November 1996). Bhutto admitted that she had decided to maintain cordial relations with the military and to avoid clashes on issues that were under military responsibility, including the

\(^{52}\) Deception, p. 227-228; The Man from Pakistan, pp. 226-227.
\(^{53}\) Deception, pp. 182, 191.
\(^{55}\) Deception, p. 227; Pakistan: Between Mosque and Military, p. 222; Pakistan’s Nuclear Underworld, p. 45.
nuclear programmes. Similar to her first term as Prime Minister, Bhutto remained in the dark about defence issues, and especially about control over the nuclear programmes and their technological progress. Sharif in his second term as Prime Minister (February 1997 - October 1999) did not question military control over the nuclear programmes either, but he flexed his muscles more often. In this regard Sharif was in a position to steer nuclear policy following India’s nuclear tests in May 1998 and chaired a secret meeting of the Cabinet Committee for Defence (DCC) with the participation of the chiefs of the military services, and the heads of the nuclear organisations. Sharif decided on conducting nuclear tests and on PAEC (and not KRL) being in charge of this operation.

Regarding the routine control over the nuclear organisations, the Army was completely on top of it during the civilian regime. Since Zia’s days, the Army has maintained the only administrative agency that supervised the nuclear organisations. In 1993 COAS Abdul Kakar created in GHQ a designated directorate, the Combat Development Directorate (CDD). The main responsibility of CDD was operating the security apparatus of the nuclear programmes, including supervising KRL and PAEC, and monitoring personnel reliability and security information. Nevertheless, the inherited rivalry between the military and the civilian government attracted most of the attention of both of rivalling sides and probably less consideration by the senior officials was given to the actual supervision on KRL and other nuclear agencies. This situation enabled AQ Khan to strengthen his internal position and his room to manoeuvre between the different political forces.

In addition to the Army’s involvement in the nuclear programmes during the civilian regime through a designated directorate, several senior officers also participated in its coordination. COAS himself was the main figure responsible for the supervision of the nuclear organisations, both by being a prominent member of NCA and by being responsible for CDD. Furthermore, COAS was involved in the daily running of the nuclear programmes. For example, COAS General Kakar allowed the North Korean Minister of the People’s Armed Forces to visit KRL complex in Kahuta, and PAEC’s missile production facility. In addition,

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56 Deception, p. 249, 255; Pakistan: Between Mosque and Military, p. 229.
57 Deception, p. 271; The Man from Pakistan, pp. 228-229.
58 Kaleem Omar, Army to Decide between Polish and PRC’s Tanks, The News (August 17th 1993). Retrieved via the Federal Information Broadcast Service (FBIS); Deception, pp. 243-244, 248, 296.
COAS General Beg was the one who decided to publicise Pakistan’s nuclear weapons capabilities, and COAS General Karamat authorised KRL passive participation in the nuclear tests of May 1998\(^{59}\). The other senior general who was involved in the nuclear programmes was the Director General of Military Operations (DGMO) in the GHQ. Apparently, DGMO supervised the operational adjustment of the nuclear capabilities for military use. Furthermore, updated information points to the participation of DGMO in decision making concerning the nuclear programmes\(^{60}\).

2.4. Military Involvement in the Current Control Mechanism (Since 1999)

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The return of the Army to direct control of the country following the coup of October 1999 consolidated the Army’s dominant position in the command and control system over the nuclear organisations. The new military ruler, COAS General Pervez Musharraf, had already begun, after the nuclear tests of May 1998 (and before the coup), to implement a comprehensive plan for a national control mechanism. The reorganisation officially declared in February 2000 granted the military a leading position on issues related to nuclear programmes under any future regime. Nowadays, the military semi-constitutionally enjoys a critical position both in the decision-making process and in the administrative control of the nuclear programmes.

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A major part of the reforms was the establishment of another NCA in a new structure as the highest national decision-making forum on nuclear issues. NCA contains two committees: an Employment Control Committee (ECC) for supervising the operational and the decision-making aspects regarding the use of nuclear weapons\(^{61}\), and a Development Control Committee (DCC) for monitoring the technical and administrative matters of the nuclear programmes\(^{62}\). DCC was probably also responsible for authorising the export of nuclear-

\(^{59}\) Deception, p. 206, 250, 272; The Man from Pakistan, pp. 229-230.


\(^{61}\) Nuclear Black Markets, p. 111.

related equipment\textsuperscript{63}. The legal framework of NCA was later strengthened in a legislative act which lays down its responsibilities\textsuperscript{64}.

Although NCA is headed by a civilian Prime Minister\textsuperscript{70} almost half of its ten members are military officers: COAS, the Chairman of the Joint Chiefs of Staff Committee, the Chief of

\textsuperscript{63} Deception, pp. 297-298.

Air Staff (CAS), and the Chief of Navy Staff (CNS). Furthermore, DCC is responsible for the entire operation of the nuclear organisations, and has a majority of members who are military generals and the heads of the agencies responsible for nuclear development.\footnote{71}{In November 2009, Pakistan’s President, Asif Ali-Zardari, turned over the official control of NCA to the Prime Minister. See: Aric Auner, Pakistanti Nuclear Weapons Now Under PM, Arms Control Today, Vol. 40 (January-February 2010) <http://www.armscontrol.org/act/2010_01-02/PakistanNuclear> Accessed on March 13th 2012.}

Moreover, although NCA has far reaching authority over nuclear programmes, it is a nominal forum that provides a public posture for the national nuclear command, and consolidates the military share of responsibility for the nuclear issue. The founder of the new command and control system, COAS General Musharraf, preferred to consult with his colleagues in the Army command than convene NCA for decision making on issues concerning the nuclear organisations.\footnote{72}{Pakistan’s Nuclear Weapons: Proliferation and Security Issues, p. 5.} Musharraf’s successor as COAS, General Ashfaq Pervez Kayani, admitted to his American counterparts that he had upheld the decision about conducting additional missile tests and thus hinted that he had actual control over the development of Pakistan’s nuclear programmes.\footnote{73}{The Man from Pakistan, pp. 337.} The founder of the new command and control system, COAS General Musharraf, preferred to consult with his colleagues in the Army command than convene NCA for decision making on issues concerning the nuclear organisations.\footnote{74}{CENTCOM General Petraeus Meets with Pakistan COAS Kayani (cable code: 09ISLAMABAD155, January 24th, 2008). Wikileaks database of US diplomatic cables as published in ‘Dawn’ newspaper <http://www.dawn.com/2011/05/26/2009-kayani-and-petraeus-discuss-politics-aid-military-operations.html> Accessed on May 26th, 2011.} Musharraf’s successor as COAS, General Ashfaq Pervez Kayani, admitted to his American counterparts that he had upheld the decision about conducting additional missile tests and thus hinted that he had actual control over the development of Pakistan’s nuclear programmes.\footnote{75}{For example, see: Press Release (no. 29/2012) of Pakistan’s Inter-Services Public Relations (ISPR) on the participation in February 27th, 2012 of DG SPD in an exercise of Special Forces. <http://www.ispr.gov.pk/front/main.asp?o=t-press_release&id=1974&search=1> Accessed on March 10th, 2012.}

The new administrative unit which replaced CDD shortly after the nuclear tests of May 1998 was the Strategic Plans Division (SPD). Since its inception, SPD has been a military entity, and is defined as an inter-services organisation (like the ISI) with officers from all the armed forces, and is under the administrative responsibility of the Joint Staff Headquarters (JSHQ) which is in charge of military affairs relevant to all armed forces.\footnote{76}{Pakistan’s Nuclear Future, pp. 152-153; USG Media Leaks Have Pakistani Military Reviewing Contingencies (cable code: 08ISLAMABAD172, January 11th, 2008). Wikileaks database of US embassy cables as published in ‘Dawn’ newspaper <http://www.dawn.com/2011/06/03/2008-us-pakistan-fight-over-media-manipulation.html> Accessed on June 3rd, 2011; Pakistan: CJCS Mullen Meets with General Kidwai on Safeguarding Nuclear Assets (cable code: 07ISLAMABAD5391, February 20th, 2008). Wikileaks database of US embassy cables, as published in ‘Dawn’ newspaper <http://www.dawn.com/2011/06/03/2008-nuclear-security-in-charge-dismissed-idea-of-rogue-officers-in-pak-military.html> Accessed on June 3rd, 2011.} Within the military, the Army maintained its control over SPD. Although SPD was defined as a secretariat for NCA and since 2007 its Director General (DG) has been a civilian, it still operates from a military cantonment, and the current DG SPD is a retired Army General.\footnote{77}{For example, see: Press Release (no. 29/2012) of Pakistan’s Inter-Services Public Relations (ISPR) on the participation in February 27th, 2012 of DG SPD in an exercise of Special Forces. <http://www.ispr.gov.pk/front/main.asp?o=t-press_release&id=1974&search=1> Accessed on March 10th, 2012.}
SPD became the main power in the new control system and it centralised the administrative responsibilities which are part of supervising the nuclear organisations. SPD controls all matters related to the nuclear issue such as formulating nuclear policy and export control mechanisms. Furthermore, SPD is also in charge of the nuclear programmes development, security information, counter-proliferation and counter-intelligence. SPD’s overall responsibility for nuclear programmes was lately manifested in its authority over ambitious national planning for a nuclear programme based on plutonium production and the building of several nuclear reactors and other nuclear facilities in the coming years.

The nuclear organisations, which are civilian scientific agencies, were placed under the direct control of the military through SPD. A similarly arrangement was drawn up for the State Upper Atmosphere Research Commission (SUPARCO), which is Pakistan’s space agency and is involved in developing missile systems for nuclear capabilities: SUPARCO was brought under NCA and SPD authority in 2000. The new agency for military technological development (including developing missile systems), the National Engineering and Scientific Commission (NESCOM), was created in 2001 as part of the consolidation of the control mechanism, and was also placed under the supervision of SPD.

Another significant change that took place under the new control system was the decrease in responsibilities of the heads of the nuclear organisations. Under the new control system the director generals of PAEC and KRL were relieved of many of their responsibilities, including control over accounting and auditing, foreign travel, security and the screening of personnel. These responsibilities were transferred to SPD which took charge of protecting the nuclear facilities.
programmes’ infrastructure and manpower. SPD includes a Security Division and the security directors within the nuclear organisations are under its supervision.

The result of the reorganisation process of the control system over the nuclear organisations was the diminish role of AQ Khan and eventually his removal from his position as DG KRL in March 2001. The internal position of Khan was weakened in parallel to the completion of the construction of a nuclear arsenal and its means of delivery until the end of the 1990’s. The success of these efforts was demonstrated in the nuclear tests of May 1998 when Pakistan declared itself as a nuclear weapons country. Furthermore, the return to military regime following the coup of October 1999 limited AQ Khan’s ability to manoeuvre between the different factions of the internal system. Khan seems to fail to realise the meaning of the above development, refused to abide SPD’s instructions, and finally was eased out from KRL.

Following Pakistan’s nuclear tests of May 1998, one of the main goals of reforming the control system was to convince the international community that Pakistan is a responsible country that can supervise its nuclear capabilities. Hence, the new control system was meant to resemble its equivalents in western countries, and includes civilian agencies in order to portray it as an efficient and professional apparatus. Consequently, the reforms included a role for the civilian bureaucracy and political leadership in the control system over nuclear organisations, but without challenging the dominant position of the military. Most of the perceived responsibilities of the civilian agencies have been in two spheres that received higher international attention: the operation of nuclear capabilities in emergency scenarios, and the exercising of export controls over WMD-related items (The role of the civilian agencies in the export control mechanisms will be discussed in Chapter Four).

Regarding the possibility of employing Pakistan’s nuclear weapons, the most senior civilian authorities were part of NCA: the President was its chairman (until 2009), the Prime Minister served as vice-chairman (currently he is also the chairman), and the Ministers for Defence, Foreign Affairs, Interior, and Finance were members of NCA. Furthermore, all of the civilian members of NCA were in ECC which is responsible for discussing the operational dimension of the nuclear capabilities. As for export controls, civilian agencies received responsibilities but without direct supervision over the nuclear organisations.

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82 This position is also known as NCA’s Security Advisor.
83 Dimensions of Threat to Pakistan’s Nuclear Assets.
84 Shopping for Bombs, p. 107.
According to the reforms which were announced in February 2000 and following the establishment of the Strategic Export Control Division (SECDIV) in 2006, under its preview MOFA became the main civilian agency which takes part in export control mechanisms. SECDIV is responsible for implementing the Export Control Act of 2004 for nuclear, biological, and missile-related materials\(^{85}\). However, the Export Control Act does not apply to nuclear organisations. MOFA’s role is restricted to the export licensing process for the private sector, and has only a consultancy position on export controls connected to nuclear organisations which are under SPD supervision\(^{86}\). Other civilian agencies also have some role in the control system: MOD is authorised to exempt government agencies from the export control process\(^{87}\); The Ministry of Commerce (MOC) is responsible for administrating the export control legislation; and the Ministry of Defence Production (MODP) is responsible for the defence industries and the licensing process of defence exports\(^{88}\).

In short, SPD has overall authority over export control issues which are connected to nuclear organisations and SPD answers only to the Army senior command. Moreover, under the new control system the military is institutionally more involved in the affairs of the nuclear organisations. According to American diplomats and Pakistani scholars, SPD has more influence than MOFA on policy related to non-proliferation and arms control\(^{89}\).

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### 3. The ISI Role in the Control Mechanism as Additional Military Involvement

One aspect of the military control over the nuclear organisations which was neglected is the involvement of the ISI in the control system and its influence over decision making on nuclear capabilities. The ISI position in the defence establishment will be part of the

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\(^{88}\) Ibid, Schedule II (11) (13).

\(^{89}\) Pakistani Views on FMCT Still Malleable.
discussion in Chapter Two, and the character of the agency’s operations will be examined in Chapter Three. This part of the chapter will be dedicated to the ISI direct involvement in the control system as an additional layer of the military grip on the nuclear organisations. The ISI plays a significant role in formulating and implementing national security policies.

As described in the previous part of this chapter, the ISI does not have a formal position in the control mechanism. NCA, which is the senior decision-making forum for issues related to nuclear programmes, does not officially include the head of the ISI (DG ISI), and he is occasionally invited to NCA meetings. The ISI has responsibilities within the security apparatus guarding nuclear organisations. The ISI has constantly screened the activities of nuclear scientists, including AQ Khan, and travel abroad by delegations from the nuclear organisations is monitored by the ISI\(^90\). In addition, the ISI has collaborated with the Military Intelligence Directorate (MI) in GHQ and with the Intelligence Bureau (IB) in securing the nuclear programmes from external and hostile penetration. In the new control system over the nuclear organisations the ISI was designated as a collaborative agency with SPD’s Security Division in the fields of intelligence, security information and counter-intelligence\(^91\). As part of the above duties, in late 2003 and in 2004, the ISI assisted SPD in interrogating AQ Khan and his KRL’s associates in the nuclear proliferation network. In October 2001 the ISI also interrogated the two former senior nuclear scientists who met the Al Qaeda leader, Osama bin-Laden, shortly before the 9/11 terror attacks\(^92\).

Nevertheless, even when the ISI is secondary to SPD in the control system the ISI still holds influence on the activity of the system and on its nature. The ISI is part of the military and DG ISI is normally a close confidant of the Army chief who is the most influential figure in Pakistan’s internal arena and also within the control system. As with other national security issues, the ISI probably aspires to a role in one of Pakistan’s most remarkable assets - its nuclear weapons programmes.

Since the inception of the clandestine nuclear weapons programme in the 1970’s the ISI has played a role in promoting its development. At the level of national decision making, DG ISI utilised its proximity to COAS and was part of any consultations regarding the nuclear programmes. The ISI directorate was one of the main contributors to policy decisions, particularly when the country was under martial regime: during Zia’s military regime in the

\(^{90}\) Deception, pp. 296, 516 (no. 70); Nuclear Black Markets, pp. 112-113; Shopping for Bombs, p. 94.

\(^{91}\) Deception, p. 94-95, 145, 234; Nuclear Black Markets, p.112; Shopping for Bombs, pp. 95-96.

\(^{92}\) Deception, p. 320, 379; The Man from Pakistan, pp. 338-339.
1980’s the ISI collaborated with the Army in formulating national security policy, including the nuclear dimension and its consequences for the strategic situation.\(^93\)

The organisational culture of the ISI includes a clear perspective which will be discussed in Chapter Three. For the purpose of the current discussion it is sufficient to state that the ISI is much more than an intelligence agency equivalent to the intelligence services of western countries. The ISI is Pakistan’s military key operational arm and responsible for various covert operations: the ISI structure and character derives from this designation. As a result, the ISI directors are bound to have inherited an inclination towards a preference for employing intelligence operations in order to promote national security objectives, including in the nuclear sphere.

Hence, the ISI assisted in the clandestine operation of procuring materials and technologies for the new nuclear weapons programme and collaborated with SWO.\(^94\) The ISI had set up a division for equipment procurements which probably commenced immediately following Prime Minister Zulfikar Ali Bhutto’s decision in 1972 to initiate a nuclear weapons programme. It seems that at least until 2001 this division was included in Joint Intelligence Miscellaneous (JIM), one of the ISI’s eight former organisational sections (today probably part of the ISI’s ‘S Wing’).\(^95\) JIM was responsible for intelligence activities in foreign countries, including offensive intelligence operations, so this section of the ISI was likely the most suitable for covert acquisitions of nuclear-related equipment.\(^96\) JIM maintained close contacts with CDD in the Army HQ, and later with SPD, and assisted in their covert purchases and the shipments of missile systems and missile equipment from China and North Korea.\(^97\)

The organisational culture of the ISI which focused on covert operations encouraged close connections and organisational coordination with the nuclear organisations which were the main benefactors of the clandestine procurement venture. Furthermore, the heads of the

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\(^{93}\) Deception, pp. 94-95, 145, 172, 193, 234, 320; The Man from Pakistan, p. 159; Shopping for Bombs, p. 204.


\(^{95}\) Bahukutumbi Raman, Pakistan’s Inter-Services Intelligence (ISI), South Asia Analysis Group (SAAG), paper no. 287 (August 1st 2001). <http://www.southasiaanalysis.org/5Cpapers3%5Cpaper287.html> Accessed on November 27th 2010. ISI was probably reorganised after 9/11 terror attacks and the war in Afghanistan. Currently, ISI’s Security Wing (known as the External Wing) most likely replaced or controls JIM. See Chapter Two for more details on ISI organisational structure.

\(^{96}\) Rizwan Hussain, Pakistan and the Emergence of Islamic Militancy in Afghanistan (Burlington, VT: Ashgate, 2005), p. 250.

\(^{97}\) Deception, pp. 101, 182, 243-244, 248-249; Pakistan’s Inter-Services Intelligence (ISI).
nuclear organisations enjoyed direct access to DG ISI\textsuperscript{98}. The personal involvement of DG ISI in the nuclear programmes was so intense that occasionally he represented the interests of the nuclear organisations, and particularly those of KRL, in decision-making forums\textsuperscript{99}.

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Furthermore, the ISI did not halt AQ Khan’s covert operations when it was still possible. In this regard, the ISI was instructed several times to investigate AQ Khan’s actions, but remained elusive about its findings\textsuperscript{100}. The ISI warned KRL about some of its investigations and it strongly indicated the option that the ISI supported the continuation of the nuclear export project\textsuperscript{101}.

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\textbf{4. The Military Involvement in Nuclear Proliferation}

As mentioned in the Preface of this thesis, since the beginning of nuclear weapons development in the 1940’s the phenomenon of nuclear assistance from Pakistan has been the most extensive and prolonged. After illustrating the dominant role of Pakistan’s military in the control system under various regimes the following section will present the main evidence of the involvement of the military (mainly the Army and the ISI) in the nuclear export project which was implemented by AQ Khan’s nuclear proliferation network. It is vital for this thesis to determine the extent of the military involvement in nuclear assistance as the factual basis for analysing the nature of the military role in the control system, the efficiency of the control system, and how the character of the military involvement contributed to the occurrence of nuclear export: in other words, once the extent of the military involvement is established it will facilitate the discussion on the nature of the military supervision over the nuclear organisations. First, the discussion will elaborate on the indications which support Pakistan’s official line that it was only a private initiative behind the nuclear proliferation without any military involvement; then, the information which suggests military involvement (awareness and complicity) will be presented.

\textsuperscript{98} Deception, pp. 94-95, 145, 172, 193, 234, 320; The Man from Pakistan, p. 159; Shopping for Bombs, p. 204.


\textsuperscript{100} The Man from Pakistan, pp. 245, 255; Shopping for Bombs, pp. 96, 142, 145, 147.

\textsuperscript{101} Deception, p. 296; Pervez Musharraf, In the Line of Fire: A Memoir (New York: Free Press, 2006), p. 290; The Man from Pakistan, p. 245.
4.1. Evidence Suggesting that Pakistan’s Nuclear Exports Occurred without Military Involvement

It should be emphasised that the nature of the information implicating Pakistan’s government and military in nuclear exports is largely circumstantial. Even subsequent to the public exposure of the proliferation network and the interrogation of its prominent members, in Pakistan and in other countries, no direct evidence surfaced that any military general, minister or senior official in Pakistan was directly involved in the nuclear exports of the AQ Khan network: for example, no official document was exposed which included an instruction to export nuclear goods or conclusive evidence which connects the shipment of nuclear equipment with government and military officials.

As mentioned in the Introduction of this thesis, Pakistan’s official stance attributes nuclear exports to a private initiative of AQ Khan, the former DG KRL, and his associates in this agency. Pakistani officials emphasised that AQ Khan and KRL enjoyed autonomy over their affairs with minimal external scrutiny. As mentioned earlier in this chapter, it seems that this argument has substantial support both in the rationale and in the practices which guided the control system over the nuclear organisations at least until the formal completion of the nuclear weapons development in the nuclear tests of May 1998.

In the initial period of Pakistan’s nuclear weapons development (which lasted until the nuclear tests of 1998) the rationale behind the limited supervision of KRL and AQ Khan was a result of the following aspects:

1) AQ Khan’s indispensible personal contribution to Pakistan’s nuclear efforts. AQ Khan was able to promote Pakistan’s nuclear programme and in the middle of the 1970’s released this national project from deadlock: he offered the alternative of uranium enrichment with gas centrifuges for developing nuclear capabilities and provided the means to achieve this national objective. Khan had two essential assets for Pakistan’s nuclear ambitions: a comprehensive technical knowledge of constructing a uranium enrichment programme (which he obtained during his professional work in Europe); and

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102 By the middle of the 1970’s Pakistan was unable to obtain nuclear weapons through developing its plutonium programme in light of international pressure not to provide Pakistan with the necessary technologies. As a result, France backed down from its intention to supply Pakistan with a plutonium reprocessing plant which is mandatory for developing nuclear capability with plutonium. See: Samina Ahmed, Pakistan’s Nuclear Weapons Program: Turning Points and Nuclear Choices, *International Security*, 23:4 (Spring 1999), pp. 184-185.
contacts with private suppliers who could provide key components for a uranium enrichment project.

2) Unusually strong admiration of the Pakistani people for AQ Khan. Since the 1980’s AQ Khan has enjoyed the image of ‘national hero’ in Pakistan, and was internationally known as “the father of Pakistan’s nuclear bomb”. Khan cultivated this representation in several media interviews, and by aligning journalists with KRL. Even when AQ Khan was eventually arrested in January 2004 and interrogated about the activities of the nuclear proliferation network he was quickly pardoned by President Musharraf who explicitly declared that “he (Khan) is still my hero”. The militarised control system aspired to avoid a confrontation with the most admired Pakistani and risk the loss of public confidence in the regime.

3) ‘Customer-client’ approach of the control system towards AQ Khan and KRL. According to a former SPD senior officer: “As long as Khan’s group delivered the goods, no state authority questioned his tactics”. The control system showed reluctance to jeopardise AQ Khan’s contribution to the national nuclear efforts.

4) Disregard for the prevention of proliferation by the control system. Pakistani officials argued that the control apparatus over the nuclear organisations was primarily designated to prevent external attacks and sabotage in the nuclear programmes. Thus, the control system was inadequate to deal with internal loopholes such as nuclear exports directed by scientists which are part of the nuclear programmes. The approach of Pakistan’s civilian and military authorities towards AQ Khan as indispensable to the nuclear efforts and their admiration for Khan probably influenced the character of the control mechanisms over KRL. Moreover, to some extent, the control system adopted a similar lenient approach towards PAEC and other military R&D organisations.

5) Overlaps in the responsibilities of different nuclear organisations. The authorities of the control system intentionally arranged the R&D apparatus of nuclear programmes with

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103 The Man from Pakistan, pp. 150, 181, 254; Shopping for Bombs, pp. 147-148.
106 Pakistan’s Nuclear Future, p. 31.
107 Nuclear Black Markets, p. 112; Shopping for Bombs, p. 95.
similar projects in order to encourage competition within the scientific cadre as a driving force for the development of non-conventional capabilities\textsuperscript{108}. A similar rationale was applied to the nuclear programmes with the establishment of ERL (later KRL) in 1976 as a nuclear agency in charge of developing a uranium enrichment programme and the dismissal of suggestions about creating a unified nuclear agency\textsuperscript{109}. In parallel, PAEC remained the prominent nuclear organisation responsible for the bulk of scientific resources for the development of nuclear capabilities: for most of the nuclear scientific cadre and for the long technical experience (since the late 1950’s) in directing nuclear installations. Thus, PAEC has been responsible for almost all stages of the construction of the nuclear weapons programme, including the development of the nuclear weapons group, and for all the civilian nuclear facilities (nuclear reactors and other scientific facilities). Fierce competition and personal rivalry accelerated between KRL and PAEC as KRL aspired to take part in developing the nuclear weapons group and their means of delivery\textsuperscript{110}.

According to Pakistan’s official explanation for AQ Khan’s nuclear exports, the above elements which comprised the rationale behind the control system inevitably influenced the practices of supervising KRL:

1) AQ Khan was an invaluable point of contact between the suppliers and Pakistan’s control system over the nuclear organisations. In turn, Khan’s pivotal role enabled him to transform the procurement network for the export of nuclear equipment without the need for official approval. For example, KRL was the leading agency which served as the point of contact for cooperation with Iran, North Korea and Libya. It appears that KRL, through the proliferation network, was the first agency to provide Iran with components and materials of gas centrifuges used for uranium enrichment. Furthermore, in the late 1990’s KRL imported large quantities of nuclear materials which were shipped to Libya\textsuperscript{111}. AQ Khan also used the cooperation with North Korea on missile development in order to visit Pyongyang and discuss with his hosts the possibility of nuclear cooperation\textsuperscript{112}. Moreover,

\textsuperscript{108} Deception, p. 173; Shopping for Bombs, p. 43.
\textsuperscript{109} Deception, p. 146; The Man from Pakistan, pp. 181-182, 204; Pakistan’s Nuclear Future, p. 19; Shopping for Bombs, p. 17.
\textsuperscript{110} Deception, p. 273; The Man from Pakistan, pp. 113, 150-151; Shopping for Bombs, pp. 44, 82-84, 89.
\textsuperscript{112} The Man from Pakistan, pp. 158-159; Shopping for Bombs, pp. 92-94.
AQ Khan’s continued to play a key role in Pakistan’s nuclear procurement efforts after his retirement from KRL in March 2001, and thus continued to enjoy his freedom of operation\textsuperscript{113}.

2) Strong influence and close connections between the senior management of the nuclear organisations and the national leadership. Civilian and military heads of state maintained direct contact with the heads of the nuclear organisations, including AQ Khan: Prime Minister Zulfiqar Ali Bhutto was behind the elevation of AQ Khan in the nuclear apparatus and approved his request for the creation of ERL/KRL. Following the coup d'état of July 1977 AQ Khan strengthened his working connections with the senior Army command: senior generals protected AQ Khan while being perhaps not fully aware of Khan’s proliferation activities\textsuperscript{114}. The close connections between AQ Khan and the most senior figures and Khan’s responsibility for a crucial part of the nuclear weapons development process elevated KRL to a special status and the supervision over its internal affairs appeared to be in shambles. A retired Army general who served in the control system admitted that “his (AQ Khan) status and that of his organisation is so sacrosanct that if I point out anything, my own credibility and patriotism will be in doubt... Everybody knows Khan is walking in to see the Army chief and he doesn’t meet anybody below that. Who dares question these things?\textsuperscript{115}”.

3) Lack of scrutiny over KRL internal affairs, including its financial, technical, and security aspects. The designated directorate for supervising the nuclear organisations, CDD in GHQ (and later SPD under JSHQ) exercised limited scrutiny of KRL\textsuperscript{116}. Even more than other nuclear organisations, KRL and AQ Khan received full independence to run its internal affairs managing its complex. Consequently, KRL and AQ Khan were not subject to external audit which could trace financial transactions for the nuclear exports: KRL included an independent department for importing nuclear equipment (the Foreign Procurement Division - FPD), and AQ Khan could mobilise institutional resources in

\textsuperscript{113} The source for this information is an unidentified American expert who discussed the issue of AQ Khan with former SPD officials. See: Pakistan’s Nuclear Future, pp. 33, 54 (no. 129).
\textsuperscript{114} Deception, p. 236; The Man from Pakistan, pp. 67, 70, 133, 152; Peddling Peril, p. 145; Shopping for Bombs, pp. 42, 147;
\textsuperscript{115} This quote is from an interview with Brigadier-General (ret.) Feroz Hassan Khan who was a director in CDD and later in SPD. General Khan obtained an extensive experience in Pakistan’s control system. See: Shopping for Bombs, p. 147.
\textsuperscript{116} Deception, p. 518 (no. 41).
favour of the proliferation network\textsuperscript{117}. In addition, according to the official line, although a senior Army officer served as KRL’s security director he was administratively seconded to KRL, received his salary from the nuclear organisation and was directly subordinate to AQ Khan\textsuperscript{118}.

4) Lack of adequate financial resources to sustain the nuclear apparatus and indirect encouragement to KRL to fulfil its requirements independently. Military officials argued that the rivalry with PAEC was one of the main factors behind KRL’s inclination to conduct private initiatives, and trade nuclear-related equipment with foreign countries in return for funds and technical assistance. For example, according to the official line, nuclear cooperation between KRL and North Korea was a result of AQ Khan’s eagerness for the development of a long-range missile programme that would compete with PAEC’s equivalent technological project\textsuperscript{119}.

According to Pakistan’s official position supervision over the nuclear organisations was significantly improved following reforms in the control system after the nuclear tests of May 1998. President and COAS General Musharraf explained in his memoirs that the reforms were also aimed at ending the independent position of AQ Khan, but this goal was only achieved in March 2001 when Khan was removed as head of KRL. Strong support for the official argument that proliferation was a direct result of private motivation signalled the end of the use of KRL’s facilities and equipment by the proliferation network as a source for nuclear exports following AQ Khan’s dismissal\textsuperscript{120}. Additional evidence regarding the divergence between AQ Khan and the control system is the several investigations by the ISI into his activities. Although the investigations did not result in any punitive action they could still indicate that Khan was suspected of unauthorised activities and at least part of the nuclear proliferation activities were indeed without the involvement of the military or the civilian government\textsuperscript{121}.

Furthermore, Bruno Tertrais argues that if nuclear exports were indeed sanctioned by the military and were part of a state policy then it would be only logical that PAEC was also

\textsuperscript{117} Deception, pp. 309, 518; The Man from Pakistan, pp. 72, 112, 147, 229, 245, 257-259; Peddling Peril, p. 145; Shopping for Bombs, p. 42.

\textsuperscript{118} For example, see: In the Line of Fire, p. 287; Nuclear Black Markets, p. 108.

\textsuperscript{119} Shopping for Bombs, pp. 96, 144.

\textsuperscript{120} The Atomic Bazaar, pp. 163, 166; Deception, pp. 282, 307-308; The Man from Pakistan, pp. 259-260, 273-274.

\textsuperscript{121} Deception, pp. 309, 518; The Man from Pakistan, pp. 72, 112, 147, 229, 245, 257-259; Peddling Peril, p. 145; Shopping for Bombs, p. 42.
involved in the nuclear proliferation activity. Unlike KRL, PAEC was under wider institutional control and its involvement in the nuclear export project was more limited than that of KRL. PAEC activities in this connection would normally be followed by the Army or the ISI\textsuperscript{122}. A former senior official in Pakistan’s control system highlighted that flawed supervision over KRL was the main reason for its proliferation activities: unlike the problematic supervision over KRL, PAEC was ultimately answerable to the authorities\textsuperscript{123}.

One striking case which appears to demonstrate the incompetence of Pakistan’s control system after it was reorganised is the contacts between former senior nuclear scientists and Al Qaeda about developing a non-conventional capability, which took place in August 2001, just a few weeks before the 9/11 terror attacks. One of these scientists was a former manager of a nuclear reactor project (he was also one of the members of the founding scientific cadre of Pakistan’s nuclear weapons programme\textsuperscript{124}), and the other scientist was a former head of division in KRL. The two scientists met with Al-Qaeda leader, Osama bin-Laden, in Afghanistan in August 2001, and discussed with him the possibility of assistance in developing a non-conventional capability. They told bin-Laden that they would be able to export sensitive technologies from Pakistan by evading the formal export control mechanism. It seems that there was no connection between these scientists and AQ Khan or his proliferation network: Khan rejected Al-Qaeda’s requests for assistance on several occasions\textsuperscript{125}.

Although these two retired nuclear scientists probably acted on their own initiative without authorisation, according to intelligence information which was obtained by US government, the idea of selling radioactive materials to Al-Qaeda had already been discussed during the year 2000 between senior Army generals, KRL officials, and Al-Qaeda representatives\textsuperscript{126}. In addition, Pakistan’s security agencies received information about the two retired scientists and they were warned by the ISI\textsuperscript{127}. The ISI probably knew in advance about the meeting between the nuclear scientists and bin-Laden through retired ISI officers who were close to the

\textsuperscript{123} Pakistan’s Nuclear Future, p. 30; Shopping for Bombs, p. 147.
\textsuperscript{124} The nuclear scientist, Sultan Bashiruddin Mahmud, was also the head of ERL for a short time in 1974 before AQ Khan took his position.
\textsuperscript{125} Deception, p. 320; The Man from Pakistan, pp. 263-264, 270-271.
\textsuperscript{127} Daniel Pearl and Steve Levine, Pakistan has Ties to Group it Vowed to Curb, Wall Street Journal (December 24\textsuperscript{th} 2001). Accessed via Factiva Database.
scientists, including former DG ISI, Lieutenant-General Hamid Gul. Yet, it appears that the ISI did not interrogate these scientists: until the US insisted on their arrest, the ISI only warned them not to discuss any WMD issues with Al-Qaeda representatives. Following the scientists’ meeting with bin-Laden, several nuclear scientists from KRL and PAEC also had meetings with Al-Qaeda operatives.

4.2. The Extent of the Involvement of Pakistan’s Military in Nuclear Exports

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Pakistan’s official line strongly suggests a collateral malfunction of the control system, directed by the military, in fulfilling its non-proliferation objectives. Pakistan’s officials claim that the control system was unaware of the nuclear proliferation activities of AQ Khan’s network. Hence, if the official explanation is accepted, it is evident that Pakistan’s control system was inefficient and presented appalling standards in fulfilling its mission to secure Pakistan’s nuclear programmes. This mission also includes export controls over sensitive knowledge and sophisticated equipment.

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Without undermining the grave implications of the performance of the control system, this part of the chapter will discuss an even more disturbing scenario of collusion between Pakistan’s military and AQ Khan’s nuclear proliferation network: this option is plausible as an explanation for the incompetence of the control system. According to the reasoning behind the complicity, AQ Khan’s nuclear proliferation network was backed by the military which was not only well aware of the nuclear exports, but encouraged this activity.

In light of AQ Khan’s and KRL’s tangible autonomy over their affairs and the limited official supervision it is possible that a certain part of the nuclear assistance was indeed provided without specific official approval, and was a result of the profiteering of AQ Khan and his associates in the network. However, there is circumstantial evidence which strongly points to the possibility that Pakistan’s military was generally aware of the nuclear exports:

1) The wide scale of the nuclear export phenomenon and its intensive operation. AQ Khan’s proliferation network was able to supply advanced technologies from Pakistan’s nuclear

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128 Deception, pp. 310-311.
129 Pakistan has Ties to Group it Vowed to Curb.
130 Deception, pp. 320-321.
programme and KRL’s inventory: centrifuges prototype and parts, nuclear materials such as uranium hexafluoride, and highly sensitive data about nuclear weapon design\(^{131}\). Furthermore, the nuclear supply from Pakistan was usually delivered through numerous air shipments. The KRL complex and the senior nuclear scientists were guarded and monitored for their own protection against external threats; thus any shipment of nuclear equipment from KRL was bound to be noticed by the military security rings which fortified the nuclear complex. The visits abroad of nuclear scientists were probably known to the ISI and the Army senior command, and it is unlikely that routine nuclear shipments from KRL could have occurred without the knowledge of the ISI and other security agencies.

2) The proliferation network was able to offer and provide wide-scale nuclear assistance to foreign countries during a significant period of time (1987-2003). During the history of nuclear proliferation unauthorised export of nuclear-related equipment and dual-use items occurred from various countries including nuclear weapons countries and countries with advanced control systems. However, nuclear proliferation from Pakistan stands out for in its consistency and for its multiple parallel destinations.

3) The military admitted that it had strong suspicions about AQ Khan’s clandestine activities. The ISI conducted several investigations regarding Khan from the late 1980’s\(^{132}\) until the beginning of the millennium. Apart from numerous indications of Khan’s embezzlements and personal corruption with KRL financial assets, the investigations also revealed that KRL procured surplus nuclear equipment and that AQ Khan promoted deals on the nuclear black market and operated through front companies\(^{133}\). Furthermore, US officials warned Pakistan’s authorities several times that KRL and AQ Khan might be involved in nuclear proliferation: for example, US officials raised their suspicions about nuclear exports to Libya\(^{134}\). US warnings lacked specific information due to the sensitivity

\(^{131}\) Nuclear Black Markets, p. 79; Pakistan’s Nuclear Future, p. 26; Peddling Peril, pp. 149-150.
\(^{132}\) According to former ISI senior official who was quoted in: Farhan Bokhari, Victoria Burnett, Stephen Fidler, and Edward Luce, Pakistan’s ‘Rogue Nuclear Scientist’: What did Khan’s Government Know about His Deals, Financial Times (April 6\(^{th}\) 2004). Accessed via Factiva Database.
\(^{133}\) According to a former Pakistani official who was involved in the investigation of AQ Khan and was quoted in: Farah Stockman, Pakistan had Case against Scientist, Boston Globe (February 13\(^{th}\) 2004). Accessed via Factiva Database; Pakistan’s Nuclear Future, pp. 31-32; Shopping for Bombs, pp. 146-147.
\(^{134}\) Robert Einhorn, former Assistant US Secretary of State, said in an interview that in the summer of 2000 he raised the issue of nuclear exports to Libya with his Pakistani counterparts. See: Deception, p. 518 (no. 49).
of the intelligence resources and were largely ignored by Pakistan’s authorities while AQ Khan’s proliferation network continued to operate\textsuperscript{135}.

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Moreover, there is strong substantiation to support the possibility that the military not only knew about the nuclear exports but was their main patron and this activity was sanctioned as a government project. In this regard, the published ISI report on AQ Khan’s interrogation in 2004 clearly states that a measure of the nuclear assistance to Iran and Libya was part of an effort to maintain “friendly relations” between Pakistan and both countries, and as a result of several commitments given by Pakistan’s governments’ to these countries\textsuperscript{136}. Furthermore, a significant proportion of the nuclear shipments from Pakistan were handled by an air company affiliated to Pakistan Air Force\textsuperscript{137}.

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An outstanding case of nuclear assistance which was obviously sanctioned by Pakistan’s military was the cooperation with China in developing the nuclear weapons programme. Unlike the strong denials of Pakistan’s governments for any official authorisation to the nuclear exports to Iran, Libya, and North Korea it avoided a similar reaction to the reports about nuclear cooperation with China. Nevertheless, Pakistan’s nuclear assistance to China resembles the nuclear exports from Pakistan to other foreign countries.

Pakistan’s nuclear exports to China were in return for China’s unprecedented and critical nuclear assistance which enabled Pakistan to develop its nuclear capabilities significantly earlier than expected: between the late 1970’s and the middle of the 1980’s China delivered weapons-grade enriched uranium which was sufficient for two nuclear weapons, the entire

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\textsuperscript{135} Deception, pp. 298-299; Shopping for Bombs, p. 158.
\textsuperscript{136} The full document was obtained by Simon Henderson, a senior fellow at the Washington Institute for Near East Policy who is known for his contacts with AQ Khan. The document is available on Fox-News website under the title: The AQ Khan Report by Pakistan ISI (September 15\textsuperscript{th} 2011). \url{http://www.foxnews.com/world/2011/09/16/aq-khan-report-is/} Accessed on February 22\textsuperscript{nd} 2012.
\textsuperscript{137} For example, according to American and Pakistani officials, in 1998 AQ Khan used a flight of an air company (Shaheen Air International) affiliated to Pakistan’s Air Force to deliver centrifuges and uranium hexafluoride to North Korea as well as technical data related to uranium enrichment. See: Deception, pp. 277-278; Shopping for Bombs, p. 94.
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technical manual for developing a nuclear device with the specific materials needed for the process, and a large amount of uranium hexafluoride for feeding KRL’s gas centrifuges.\textsuperscript{138}

In exchange, China received Pakistan’s assistance in developing its own nuclear programme through the uranium enrichment route by using gas centrifuges - as operated by KRL. Similar to the cases of nuclear proliferation from Pakistan, the nuclear cooperation with China was discussed by Prime Minister Zulfikar Ali Bhutto and later by the military head of state General Zia ul-Haq. Furthermore, KRL was the main nuclear agency which cooperated with China in nuclear weapons development: as part of this cooperation KRL constructed a uranium enrichment facility in China, and Chinese scientists visited the KRL complex in Kahuta and received instruction on the operation of gas centrifuge cascades.\textsuperscript{139}

As for nuclear proliferation from Pakistan to other countries, at policy level, after the coup of 1977 the military also seized control over the nuclear organisations, and in order to strengthen its international legitimacy the military regime provided guarantees to the US that it would refrain from nuclear exports and reaffirmed this position on several occasions.\textsuperscript{140} However, according to information evaluated as reliable, in the first half of the 1980’s the military and the martial head of state, General Zia ul-Haq, adopted a contradictory approach regarding the utilisation of nuclear assets as Pakistan became the prominent US ally against the Soviet military presence in Afghanistan: most of the senior generals were of one mind that the US would avoid punishing Pakistan if it initiated nuclear assistance. As a result, General Zia steered highly secretive meetings to explore trading nuclear technologies and knowledge.\textsuperscript{141}

During the meetings it was decided to adopt a nuclear export policy which would serve three objectives: to increase the national financial reserves; to receive critical foreign assistance for

\textsuperscript{138} The information on China’s nuclear assistance to Pakistan is based on an interview with Pakistan’s former Foreign Minister, Agha Shai, who was deeply involved in the nuclear issue, and on AQ Khan’s own accounts. See: Deception, pp. 61-62; R. Jeffrey Smith and Joby Warrick, A Nuclear Power Act’s of Proliferation: Accounts by Controversial Scientist Assert China Gave Pakistan Enough Enriched Uranium in 82” to Make Two Bombs Washington Post (November 13th 2009). <http://www.washingtonpost.com/wp-dyn/content/article/2009/11/12/AR20091112111060_pf.html> Accessed on February 26th 2012.


\textsuperscript{140} The commitment to avoid nuclear transfers was made in October 1979 during a meeting between Zia’s COS General Khalid Muhammad Arif and Foreign Minister Agha Shai in Washington with the US State Secretary Cyrus Vance and his aides. In November 1981 Pakistan’s martial ruler gave a public commitment that “god willing we will never pass it (nuclear technologies) to any other nation”. See: Deception, pp. 68, 90; Pakistan’s Nuclear Future, pp. 15-16.

\textsuperscript{141} Deception, p. 133.
the military R&D programmes in return for nuclear technologies; and to support the nuclear ambitions of fellow Muslim countries\textsuperscript{142}.

The military regime took actual steps to facilitate nuclear export policy. General Zia initiated the first nuclear contacts with Iran, Libya, and North Korea all of which eventually received nuclear assistance through AQ Khan’s proliferation network. Regarding Iran, Zia signed, in 1986, a confidential accord which included nuclear cooperation through PAEC. Zia even tried to interest Saudi Arabia in the supply of nuclear warheads that might fit the Saudi acquisition of long-range missiles from China in 1986\textsuperscript{143}.

Apart from an indication of a clear policy of nuclear proliferation, there is also information on the personal involvement of the Army chiefs in implementing this policy. General Zia’s personal involvement in the nuclear export project also surfaced when it was needed to determine the framework for nuclear assistance to Iran: Zia’s suspicions towards the Iranian regime and Zia’s affiliation to Saudi Arabia (Iran’s rival) led him to authorise limited cooperation and the supply of only nuclear technologies for an experimental uranium enrichment programme. As a result, the contacts between AQ Khan and Iran in 1987 concluded with the supply of equipment and data for the construction of a pilot plant: spare parts for hundreds of outdated gas centrifuges and the drawings for the construction of an enrichment facility\textsuperscript{144}. After Zia’s death in August 1988 AQ Khan began to negotiate a wider framework for nuclear assistance.

General Mirza Aslam Beg who succeeded Zia as COAS also appeared to have substantial involvement in the nuclear export project. Beg made futile efforts to persuade the civilian national leadership (which succeeded Zia’s military regime in 1988) to sanction nuclear proliferation in return for financial gains. According to the ISI report of AQ Khan’s interrogation, General Beg supported “very close” nuclear cooperation with Iran in return for financial assistance\textsuperscript{145}: the funds were designated to support an insurgency campaign against India’s control over Kashmir\textsuperscript{146}. American officials also confirmed that COAS General Beg

\textsuperscript{142} Ibid, pp. 119-123, 133.
\textsuperscript{143} According to former American and Pakistani officials who monitored the nuclear connections between Pakistan and Saudi Arabia. See: Deception, pp. 173-174; Pakistan’s Nuclear Future, p. 17.
\textsuperscript{144} The information about Iran’s negotiation with AQ Khan’s nuclear proliferation network is based on IAEA reports on Iran’s nuclear programme. See: Nuclear Black Markets, p. 69; Pakistan’s Nuclear Future, pp. 17-18.
\textsuperscript{145} The AQ Khan Report By Pakistan ISI.
\textsuperscript{146} Deception, pp. 207, 223-225; Shopping for Bombs, p. 96.
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threatened to initiate nuclear export if the US halted its military aid\textsuperscript{147}. It was reported that General Beg planned to use a nuclear export project as a way to lower Pakistan’s dependency on the US: Beg opined that by offering nuclear assistance Pakistan would be able to forge alliances in the Muslim world; earn revenues for financing its nuclear programmes and for the insurgency campaign against India in Kashmir\textsuperscript{148}.

Contrary to the evidence regarding General’s Beg intentions to promote nuclear exports the information about his actual involvement in KRL’s nuclear exports is more circuitous, and Beg vehemently denies it. However, Beg himself admitted in 2001 that Pakistan clandestinely exported nuclear equipment\textsuperscript{149}. Beg also acknowledged that he had negotiated with Iran on nuclear assistance: both Prime Ministers Bhutto and Sharif testified that they had been asked by their Iranian counterpart for their consent for nuclear assistance which was promised by General Beg\textsuperscript{150}. Even assuming that the nuclear assistance of AQ Khan’s network to Iran took place without authorisation it seems highly plausible that Beg’s extensive dialogue with Iran on nuclear assistance facilitated from 1994 KRL’s supply of valuable technologies and knowledge which enabled Iran to build a full uranium enrichment programme: hundreds of unassembled gas centrifuges, the design of an advanced centrifuge model\textsuperscript{151}, and data on the fabrication process of a nuclear weapons device\textsuperscript{152}.

There are also indications that COAS General Pervez Musharraf, who was behind the reforms to consolidate the control system and acted against AQ Khan’s network in late 2003, in parallel had some involvement in the nuclear proliferation. As discussed earlier, Musharraf’s motivation for reorganising the control system appears to have been connected with preserving the dominant position of the military, and the actions against AQ Khan and his KRL associates were conducted in response to international pressure and after the network

\textsuperscript{147} US Ambassador to Pakistan and the Assistance Secretary of Defence both confirmed General Beg’s threats. See: Deception, p. 172; Exporting the Bomb, p. 138; Nuclear Black Markets, p. 69; Pakistan’s Nuclear Future, p. 19.
\textsuperscript{148} Deception, pp. 208, 219; The Man from Pakistan, pp. 177-179.
\textsuperscript{149} Beg’s article “Pakistan’s Nuclear Materials and Equipment for Sale” is included in an Urdu book by Shahid Nazir Ahmed, “Dr. AQ Khan” (Islamabad, 2001). See: Deception, pp. 297, 518 (no. 46).
\textsuperscript{150} Pakistan: Between Mosque and Military, p. 229; Deception, pp. 207-208, 223-224, 249, 255; The Man from Pakistan, pp. 176-177; John Lancaster and Kamran Khan, Pakistanis Say Nuclear Scientists Aided Iran; Iran Nuclear Effort Said Aided in Secret 80’s Deal, Washington Post (January 24\textsuperscript{th} 2004), accessed via Factiva Database; David Rhode, Nuclear Inquiry Skips Pakistani Army, New York Times (January 30\textsuperscript{th} 2004), accessed via Factiva Database.
\textsuperscript{151} Nuclear Black Markets, pp. 70-71.
\textsuperscript{152} According to IAEA reports on Iran’s nuclear programme AQ Khan’s network provided Iran with a document describing “the casting of enriched and depleted uranium metal into hemispheres, related to the fabrication of nuclear weapons components”. See: Pakistan’s Nuclear Security, p. 22.
had already been exposed. Hence, Musharraf’s initiative to consolidate the control system is not sufficient to ignore indications of his complicity in nuclear proliferation.

Between the years 1999 and 2003 during Musharraf’s rule, and parallel to the creation of the new control system, AQ Khan’s proliferation network was more involved in nuclear exports than ever before with Libya and North Korea as the prominent end-users of its assistance. There is no strong evidence to connect Pakistan’s military and Musharraf to nuclear exports.

As mentioned earlier, after AQ Khan’s retirement from KRL in 2001 the proliferation network supplied nuclear equipment from outside Pakistan, so it is more likely that a certain part of the nuclear proliferation activity was not known to Musharraf and Pakistan’s military. Nevertheless, in the first years of Musharraf’s as COAS, and prior to his alliance with the US following the 9/11 events, there were also indications of more blatant attempts by KRL to promote of nuclear exports which were most likely to be authorised:

1) In the late 1990’s KRL began to market its nuclear expertise commercially and openly. KRL was allowed to market its nuclear products and expertise to foreign participants at an international ammunition fair held in Karachi (IDEAS 2000) in November 2000. General Musharraf personally, along with other senior military generals, visited the fair and KRL’s stall.

2) KRL received exceptional authorisation in May 1999 to host, in its complex, a minister from United Arab Emirates (UAE). According to the Pakistani media AQ Khan agreed to train UAE scientists in the nuclear sphere.

3) The indirect involvement of Musharraf in nuclear transfers was noted following his signature, in May 2000, on a defence agreement with Libya: few months later the agreement was used to exempt nuclear shipments from KRL in military consignments from customs scrutiny.

In addition, COAS General Jehangir Karamat was also personally connected to nuclear exports. According to a document which is considered reliable, in 1998 Karamat received financial benefits in return for the air shipment of ‘document and components’ to North

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155 Deception, pp. 286-287, 372.
Korea. It was revealed that this flight carried KRL’s nuclear equipment, materials and technical data.\(^{156}\)

Apart from the Army chief (COAS), the officer most connected to the nuclear export project was KRL’s security director, usually of the rank of Brigadier-General (one star). The Army generals who served as head of KRL security knew about the entire nuclear export project, including AQ Khan’s travel and shipments of nuclear equipment from KRL to foreign destinations: when KRL’s security director was arrested in January 2004 (parallel to the interrogations of other KRL senior officials) he was accused by the authorities of involvement in nuclear proliferation. This general indirectly admitted that during the 1990’s he had accompanied AQ Khan on his visits abroad and was involved in the negotiations with Iran and North Korea on nuclear assistance.\(^{157}\)

As mentioned earlier, KRL’s security director was always an Army officer; nevertheless, Pakistan’s military has always argued that the security director answered only to DG KRL, AQ Khan. This argument contradicts the military’s own statements which suggest that the head of KRL’s security was directly subordinate to CDD/SPD for many years and thus allowed the ongoing nuclear proliferation: as early as 1993, COAS Kakar established CDD as the first GHQ control over KRL in order to monitor its personnel in direct response to proliferation concerns.\(^{158}\) Later, at the beginning of the reforms in the control system (after the nuclear tests of May 1998), all the security directors in the nuclear organisations were asked by the military to report directly to the new CDD/SPD, and COAS General Musharraf confirmed that as late as February 2000 the heads of nuclear organisations (including DG KRL) were relieved of the responsibility for security.\(^{160}\) Moreover, a close confidant of KRL’s head of security claimed that at least since the early 1980’s this general had been reporting to GHQ on any shipment to and from the KRL complex.\(^{161}\) In short, since by most accounts the security director knew about the nuclear export project and was under the direct authority of the Army it seems plausible that the nuclear assistance was authorised.

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157 According to the son of Brigadier-General Malik Khan Sajawal, KRL’s head of security. See: Deception, pp. 135-136, 249-250; Shopping for Bombs, p. 96.

158 Prime Minister Benazir Bhutto on her discussion with COAS Kakar. See: Deception, p. 243.

159 Nuclear Black Markets, p. 108.

160 In the line of Fire, p. 289; Musharraf’s presentation on the new control system was also conveyed to US President Clinton during his visit to Pakistan in March 2000. See: Deception, p. 295.

161 Deception, p. 95.
As for the civilian leadership, the nuclear export project was well-entrenched in the policy of the civilian leadership which preceded the coup of 1977. President and Prime Minister Zulfikar Ali Bhutto personally discussed with the leaders of Saudi Arabia and Libya the possibility of receiving financial support for Pakistan’s nuclear weapons programme in exchange for the future access of these countries to Pakistan’s nuclear programmes. However, actual nuclear exports apparently did not take place due mainly to the early stage of Pakistan’s nuclear weapons programme during Bhutto’s tenure.

The civilian leadership between 1988 and 1999 seemed to have been aware of the nuclear export project, as it was approached on the issue at least by COAS Beg, but with little actual involvement. For example, Prime Minister Benazir Bhutto tried to learn about nuclear assistance during her official visits to Iran in 1989 and 1996 when she met the Iranian President Rafsanjani. According to the structure of the control system the military had the dominant control over KRL during the operation of AQ Khan’s network leaving the secondary role for the civilian heads of state: Hence, the civilian governments had limited power to initiate or to cease nuclear proliferation without the consent of Pakistan’s military. One exceptional incident is a report about the involvement of Prime Minister Bhutto in delivering nuclear data to North Korea on her visit to Pyongyang in December 1993.

5. Conclusion

As demonstrated in this chapter, there is a strong connection between the phenomenon of nuclear proliferation from Pakistan and the dominant role of Pakistan’s military in the control system over the nuclear organisations. The Army and the ISI were deeply involved in all aspects of the nuclear weapons programme: almost since the beginning of this programme, Pakistan’s control system has been heavily militarised and controlled by Army bureaucracy, even during civilian regimes. On the national decision-making level military generals and specifically COAS control the decision-making forums and the administrative apparatus which supervised the nuclear programmes. The designated agencies responsible for the nuclear organisations, such as CDD and SPD, were military directorates, part of military HQs.

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162 The Atomic Bazaar, p. 167; Deception, pp. 20, 60-61, 298; The Man From Pakistan, pp. 21-23, 224; Pakistan’s Inter-Services Intelligence (ISI).
163 Deception, pp. 207-208, 223-224, 249, 255; The Man from Pakistan, pp. 176-177; Pakistan: Between Mosque and Military, p. 229.
The military senior command and the designated agencies received support from the intelligence apparatus and the ISI in scrutinising the activity of the nuclear organisations and in securing their activities from external threats. Hence, the occurrence of nuclear proliferation from Pakistan is linked to the efficiency of the military control over the nuclear organisations, and specifically KRL.

When analysing the different possible relations between the military control system and AQ Khan’s proliferation network (a private initiative, military awareness, and military authorisation) it is clear that in any interpretation of the nuclear export saga the military demonstrated collateral incompetence when securing sensitive nuclear equipment and knowledge. Furthermore, in view of the extent of the nuclear export project it is much more likely that it either operated with the full awareness of the military or with its approval. Although there is no specific information which implicates the military in nuclear exports, the warnings of US officials, the revelations encountered in internal investigations, and the knowledge of the civilian heads of state about nuclear assistance (although they were blocked from any significant role in the control system) strongly suggest that the military senior command was aware of the problematic situation, and decided to avoid taking any action. Moreover, the allocation of a senior Army officer to assume responsibility for KRL’s security, the air shipments of nuclear equipment by a company affiliated to the military, and KRL’s own open and aggressive marketing of its nuclear expertise seriously point to the possibility of Pakistan’s military involvement in nuclear exports.

Despite the military control over the nuclear organisations it is not clear if the military indeed sanctioned all nuclear transfers: AQ Khan enjoyed an independent status and there were some private initiatives taken by him and his associates in the proliferation network. The private initiative of several nuclear scientists to help Al-Qaeda suggested that the notion of private nuclear assistance was at least considered within the nuclear agencies. Nuclear assistance to foreign countries could have been initiated without the consent of the control system or by ignoring its instructions, particularly in cases when the nuclear proliferation network supplied equipment from external sources outside Pakistan.

As for the new control system over nuclear programmes which was announced in February 2000 (and began to operate after the nuclear tests of 1998), it appears inefficient in fulfilling
the mission of counter-proliferation even after the exposure of the AQ Khan’s network. First, as elaborated, the main objective of creating the control system was to consolidate the dominant position of the military on nuclear issues (which is most unusual in today’s international community among nuclear weapons countries - see Chapter Four). Hence, the reforms only strengthened existing practices and arrangements which were already in place and gave the military the monopoly over the nuclear sphere. These organisational measures did not prevent nuclear exports from Pakistan during the 1980’s and 1990’s. Second, the reformed control system was powerless too: the first years after the reform were exemplified by extensive nuclear proliferation from Pakistan and higher volume: the turnkey nuclear project in Libya and the clandestine uranium enrichment programme in North Korea.

After illustrating Pakistan’s control system and its performance in regard to nuclear proliferation the next chapters will be based on the working assumption promoted earlier that the Army and the ISI were deeply involved in the nuclear export project. The following chapters will utilise this working assumption in order to focus on the structural factors and organisational culture of the control system which facilitated the nuclear proliferation. These chapters will examine the control system both as part of Pakistan’s defence establishment and on a comparative basis with other national control systems.
**Chapter One: Glossary of Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>AHQ</td>
<td>Air Force Headquarters</td>
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<td>AQ Khan</td>
<td>Abdul Qadeer Khan</td>
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<td>CAS</td>
<td>Chief of Air Force Staff</td>
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<td>CDD</td>
<td>Combat Development Directorate</td>
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<td>CENTCOM</td>
<td>United States Central Command</td>
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<tr>
<td>CJCSC</td>
<td>Chairman of the Joint Chiefs of Staff Committee</td>
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<td>CJCS</td>
<td>Chairman of Joint Chiefs of Staff (of the United States)</td>
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<td>CNS</td>
<td>Chief of Navy Staff</td>
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<tr>
<td>COAS</td>
<td>Chief of Army Staff</td>
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<tr>
<td>COS</td>
<td>Chief of Staff</td>
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<tr>
<td>DCC</td>
<td>Cabinet Committee for Defence</td>
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<tr>
<td>DG ISL</td>
<td>Director General, Inter-Services Intelligence</td>
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<td>DG KRL</td>
<td>Director General, Abdul Qadeer Khan’s Research Laboratories</td>
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<td>DG SPD</td>
<td>Director General, Strategic Plans Division</td>
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<td>DGMO</td>
<td>Director General of Military Operations</td>
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<td>DPD</td>
<td>Defence Production Division</td>
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<td>ECC</td>
<td>Employment Control Committee</td>
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<td>ERL</td>
<td>Engineering Research Laboratories</td>
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<td>FBIS</td>
<td>Federal Broadcast Information Service</td>
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<td>FMCT</td>
<td>Fissile Material Cut-off Treaty</td>
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<td>FPD</td>
<td>Foreign Procurement Division</td>
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<td>GHQ</td>
<td>General Headquarters</td>
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<td>IAEA</td>
<td>International Atomic Energy Agency</td>
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<td>IB</td>
<td>Intelligence Bureau</td>
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<tr>
<td>IDEAS 2000</td>
<td>International Defence Exhibition and Seminar of the year 2000</td>
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<td>INFCIRC</td>
<td>Information Circular</td>
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<tr>
<td>ISI</td>
<td>Directorate of Inter-Services Intelligence</td>
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<tr>
<td>ISPR</td>
<td>Inter-Services Public Relations</td>
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<tr>
<td>JIM</td>
<td>Joint Intelligence Miscellaneous</td>
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<tr>
<td>JSHQ</td>
<td>Joint Staff Headquarters</td>
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<tr>
<td>KANUPP</td>
<td>Karachi Nuclear Power Plant</td>
</tr>
<tr>
<td>KRL</td>
<td>Abdul Qadeer Khan’s Research Laboratories</td>
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The Role of Pakistan’s Military in the Control System over Nuclear Programmes

MI - Military Intelligence Directorate
MOC - Ministry of Commerce
MOD - Ministry of Defence
MODP - Ministry of Defence Production
MOF - Ministry of Finance
MOFA - Ministry of Foreign Affairs
NCA - National Command Authority
NESC - National Engineering and Scientific Commission
NHQ - Navy Headquarters
NNCC - National Nuclear Command Committee
PAEC - Pakistan Atomic Energy Commission
Pinstech - Pakistan Institute of Nuclear Science and Technology
PPP - Pakistan People’s Party
PRC - People’s Republic of China
PSRU - Pakistan Security Research Unit
SW - Security/External Wing
SECDIV - Strategic Export Control Division
SPD - Strategic Plans Division
SRO - Statutory Regulatory Order
SUPARCO - State Upper Atmosphere Research Commission
SWO - Special Works Organisation
UAE - United Arab Emirates
UF6 - Uranium Hexafluoride
US - United States of America
USG - Untied States Government
VCOAS - Vice Chief of Army Staff
WMD - Weapons of Mass Destruction
Chapter Two: Pakistan’s Defence Establishment, its Influence on National Security Thinking, and on the Control System over the Nuclear Programmes

1. Introduction

After presenting the main data about the military role in the control system over the nuclear organisations and the extent of the military involvement in nuclear exports from Pakistan (conducted by AQ Khan’s proliferation network) this chapter will discuss the organisational dimension of the military and its effect on the efficiency of the control system. The objective of this chapter is to present the character of Pakistan’s defence establishment, and to explain how it affects the national control system over the country’s nuclear assets and its ability to prevent proliferation. This chapter suggests broader explanations for the paradox which is manifested in Pakistan’s control mechanism: because of its military character, the control system is naturally expected to be more efficient and disciplined than in other countries. A militarised control system is expected to function in a hierarchical and orderly manner, and to be less influenced by political considerations than a civilian bureaucracy. However, as illustrated in Chapter One, the empirical results strongly indicate the opposite: Pakistan was more involved in nuclear assistance than any other nuclear weapons country.

This chapter will endeavour to explain the above anomaly by presenting and analysing the character and organisational culture of Pakistan’s defence establishment. Numerous examples of this character will be cited in the chapter and particularly the nature of the Army which elevated it to its pivotal position. As will be illustrated, Pakistan’s defence establishment has a strong inclination to preserve its traditional ways which allows a comparison between its past and current constitution. As a consequence, and in light of the prominent position of the defence establishment, its analysis could provide an explanation for Pakistan’s current national security policies on core issues: the War on Terror in Afghanistan, the Indo-Pakistani conflict, and the nuclear policy. However, due to the limited scope of this thesis, the conclusion will be devoted to the subject of Pakistan’s control system over nuclear organisations.
The sensitivity of the operational framework of the defence establishment, and particularly the establishment’s involvement in control mechanisms over nuclear organisations, makes it difficult in an academic platform to fully demonstrate the procedures and bureaucratic arrangements of this establishment. Furthermore, the information resources on the precise administrative processes and structures are scarce as a result of constant efforts to keep them under wraps, mainly those of the intelligence agencies. The working assumption behind this analysis is that the agency procedures, which are part of the defence establishment and particularly the staff work of the various headquarters and directorates, are similar. Hence, it is possible to offer some explanations to the role of the defence establishment in the control system by comparing its functioning on other issues which are under its responsibility: planning and conducting military campaigns, orchestrating covert operations, and guaranteeing its interests in Pakistan’s internal affairs.

This chapter is divided into two conceptual sections. In the first section the structure of Pakistan’s defence establishment will be presented, the division of responsibilities, the power centres, and the connections between its different agencies. A separate part will be dedicated to examining the functions and organisation of Pakistan’s prominent intelligence agency, the Directorate of Inter-Services Intelligence (ISI), in light of its influence on national security decision making and policy implementation and its involvement in the nuclear issue (as demonstrated in Chapter One). The second section of this chapter will analyse the main elements of the organisational culture of the defence establishment with emphasis on the military. This section will manifest the relevance of these focal elements of the defence establishment to the military role in the control system over the nuclear organisations.
2. Pakistan’s Defence Establishment: Background, Structure and Working Procedures

Figure 5: Main Positions and Agencies in Pakistan’s Defence Establishment
2.1. The Heritage of the British Colonial Period, and the Historical Development of the Defence Establishment

Pakistan’s defence establishment was shaped by the country’s British colonial heritage and the partition of the Indian sub-continent in 1947. The main characteristics of the defence establishment and of the military as determined in the de-colonial process and in the formative years after independence are still prominent. The partition of the Indian sub-continent included the disassembly of the British-Indian military, and its division between the newly-born countries. During the first years of Pakistan’s independence the Army (and the other military services) continued to receive close guidance from British instructors who still held the position of Commander in Chief (C-in-C)\(^\text{165}\). Pakistan’s military was primarily constructed from the former Muslim units of the British Raj military. These units and particularly the officer corps was mainly based on ethnic Punjabis that the British used to refer to as ‘the martial race’: the Punjabis were considered more adaptable to the military way of life than other ethnic minorities. Until today, the elite of the military has mainly consisted of particular areas and social circles in the Punjab province. Furthermore, the Punjabis, along with the Muslim Urdu speakers who emigrated from northern India (known as ‘Muhajirs’) also became the backbone of the Pakistani civil service\(^\text{166}\).

The partition process contributed to the dominant role of the Army in the new military over the other armed forces: the Navy and Air Force. Pakistan received scant portion of the original resources of the British Raj military, and its Navy and Air Force were established on a limited budget. Pakistan’s Army also suffered from insufficient resources, but it inherited important cantonments and instruction facilities that were located in Pakistan’s designated territory\(^\text{167}\). As a result, the Army became the dominant agency within the defence establishment and spearheaded the other military services.


\(^{167}\) The British Indian military was heavily deployed along the Indian sub-continent frontiers near to the western border with Afghanistan in order to counter a Russian invasion or militant turbulence from Afghanistan. As a result, the British Raj maintained a large garrison in the city of Rawalpindi and several training and instruction facilities such as the military officer’s college in Kakul. These military infrastructures were used by the Pakistan Army after independence.
The British colonial experience also shaped the internal relations between the different organisations of Pakistan’s defence establishment. Under the British colonial principal of centralisation, the position of C-in-C\textsuperscript{168} of each of the armed forces was strengthened: his authority became crucial in every decision-making process on defence issues, and his role has been far more important than any other commander or senior staff officer in military headquarters\textsuperscript{169}.

Furthermore, Pakistan’s political system was in disarray in the first years of independence following the deaths of the country’s founder, Muhammad Ali-Jinnah, and his close partner, Pakistan’s first Prime Minister, Liaqat Ali-Khan\textsuperscript{170}. The political system lacked prominent civilian figures that could be considered both by the masses and the elite as national leaders. As a result, the civilian bureaucracy approached the armed forces in order to consolidate its position in the newly-born nation. The apparent inferiority sentiments of the civil service regarding the military generated a Ministry of Defence (MOD) which was similarly defined to its British equivalent: an agency in charge of coordination between the armed forces and the civilian government. MOD surrendered its authority to the military chiefs when the Army C-in-C (and the future President), General Ayub Khan, became Defence Minister in 1958\textsuperscript{171}. Hence, MOD could not evolve as the main agency in charge of implementing defence policy and as the civilian supervisor of the military, and a few years after independence the role of the civilian bureaucracy on defence issues dwindled to administrative duties in the service of the armed forces.

\textbf{2.2. The Role of Civilian Agencies in the Defence Establishment and Bhutto’s Reforms in the High Defence Organisations}

The unchallenged dominant position of the Army in defence issues has been maintained for two and half decades since Pakistan’s independence. During this period the country experienced feeble civilian governments which were replaced in 1958 by martial regimes controlled by two consecutive Army chiefs: Ayub Khan (1958 - 1969) and Yahya Khan (1969 - 1971). The most significant development in the position of the defence establishment

\textsuperscript{168} Until 1972 the heads of the Armed forces (Army, Air Force, and Navy) were called C-in-C, and since then they have been named Chief of Staff. See: Crossed Swords, p. 326.

\textsuperscript{169} Pakistan’s Arms Procurement and Military Buildup, p. 35.

\textsuperscript{170} Liaquat Ali Khan was assassinated on October 16\textsuperscript{th} 1951, after four years in office. In the same location former Prime Minister Benazir Bhutto was also assassinated on December 27\textsuperscript{th} 2007.

\textsuperscript{171} Crossed Swords, p. 252; Pakistan’s Arms Procurement and Military Buildup, p. 41; Pakistan: Between Mosque and Military, p. 15.
followed Pakistan’s military defeat in the War of 1971 and the loss of East Pakistan (which became Bangladesh). The new ruler, President (and later Prime Minister) Zulfiqar Ali Bhutto, introduced, through policy papers in 1973 and 1976, a new framework of command and control. The two objectives of the new policy were to reorganise civil-military relations by delegating broader authority to the government, and by strengthening the concept of joint defence planning. These two objectives were part of the effort to limit the influence of the Army on defence policy and decision making\textsuperscript{172}.

The influence of the new reforms was limited. The Pakistan Army maintained its dominance over the various agencies within the armed forces, the defence establishment, and even over the civilian government system. The result was a \textit{de-jure} civilian command and control mechanism over the armed forces and a \textit{de-facto} preservation of the Army’s dominance over the defence establishment and national security affairs. Nonetheless, the 1973 ongoing reforms created a structural framework and mechanism for civilian governments to introduce a comprehensive defence policy and supervision over the armed forces. This framework is still a potential instrument for use by civilian leaders.

Regarding the reforms in the civilian section of the defence establishment (the reforms in the higher defence organisations of the armed forces are discussed later), the Cabinet Committee for Defence (DCC\textsuperscript{173}) was re-established as the highest national forum for defence and military issues, and the Prime Minister chaired its meetings. DCC is responsible for policy planning and its execution. Its members include political representatives, while the chiefs of the three military services can only observe the meetings. DCC includes the ministers for Defence, Foreign Affairs, Finance, and Interior and their respective secretaries (equivalent to director generals). The Defence Council which is chaired by the Defence Minister works under DCC and its main objective is to monitor the implementation of DCC’s decisions regarding the armed forces, the inter-services organisations (i.e. agencies which employ manpower from all the armed forces and are not part of their HQ’s, such as the Inter-Services Intelligence - ISI), and the defence industries. The Defence Council is also responsible for coordination between the different security agencies in face of a threat which can be addressed by an inter-agency coordinated effort\textsuperscript{174}.

\textsuperscript{172} Crossed Swords, p. 343; Pakistan’s Arms Procurement and Military Buildup, p. 38.
\textsuperscript{173} Not to be confused with the Development Control Committee (DCC) of NCA, the highest national forum for discussions about the nuclear organisations.
\textsuperscript{174} Pakistan’s Arms Procurement and Military Buildup, pp. 35-38, 40; G. Balachandran and Shahid Hamid, Roles and Responsibilities of Ministries of Defence in India and Pakistan (Islamabad: PILDAT, 2010), p. 19.
However, the politicians in DCC usually lack the necessary knowledge regarding military affairs, necessary for the supervision of the military. DCC has no independent sources of information on national security, and its decisions are dependent on data transferred through the information channels of the military and intelligence agencies. Similarly, the Defence Council rarely convenes and its influence on decision making is negligible. As a result, the military seems to be able to easily promote its agenda and interests in the high defence forums.

Furthermore, when civilian regime was restored in Pakistan in November 1988 (after more than a decade of military regime - since July 1977) Prime Ministers Benazir Bhutto and Nawaz Sharif maintained their position as head of DCC. However, Bhutto’s and Sharif’s influence over the military was limited: the responsibility for the armed forces was transferred to the President. Since the military coup of 1977, the President has also appointed the chiefs of the armed forces (Army, Air Force, Navy, and Joint Staff). The result has been the lack of a consistent chain of command in the national leadership, and absence of a clear division of responsibilities between the two national leaders while the Prime Minister maintained his/her authority as Chief Executive. This complicated division of responsibilities served the purposes of the military senior command: this structure led to the absence of coherent civilian supervision over military affairs and controversies among the civilian leadership could be exploited by the military high command.

The void of civilian authority in military affairs reflected on the feeble position of civilian agencies which have a role in defence issues and participate in national decision making. Branches of the civilian government serve as junior partners in the military bureaucracy. As mentioned earlier, MOD’s authority within the defence establishment was emasculated both by the Army and the civil service. Officially, MOD is the main organisation responsible for implementing the policies formulated by the top decision-making management. It serves as the top management’s channel of communication and control of the armed forces. MOD is a formal bureaucratic agency responsible for all matters pertaining to defence.

However, MOD is too ineffectual to enforce its instructions on the armed forces or to interfere in disagreements among the armed forces. Furthermore, although most of MOD’s personnel...

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175 Pakistan’s Arms Procurement and Military Buildup, pp. 37, 50, 72; Roles and Responsibilities of Ministries of Defence in India and Pakistan, p. 19.
176 Pakistan’s Arms Procurement and Military Buildup, pp. 38, 73.
177 Ibid, pp. 41-42, 69.
are civilian mandarins, it includes military officials in top positions in the ministry: the Defence Secretary and his under secretaries (equivalent to heads of departments) are usually military officers (or retired ones) who can control and monitor the work of the ministry’s sections according to the desire of the military services. Each of the under secretaries usually represents one of the three military services and is entrusted with their affairs in MOD. In addition, the culture of decision making has a military orientation thus enabling the military officers in MOD to control a large number of civilian administrators.\(^\text{178}\)

Other civilian agencies whose input is essential for formulating defence policy and planning are also marginalised by the military. The civilian agency which is systematically cast aside is the Ministry of Foreign Affairs (MOFA) - its position vis-a-vis the defence establishment will be broadly discussed later in this chapter.\(^\text{179}\) Another marginalised government agency is the Ministry of Defence Production (MODP) which was established as a separate government ministry in 2004 and is responsible for the defence industry (but not the R&D organisations involved in nuclear programmes). MODP is controlled by acting and retired military officers, and the director generals of the different defence industries are acting military generals appointed by the Army chief. The military control over MODP enables him to ensure that the R&D of defence technologies will be in accordance with the needs of the three military services.\(^\text{180}\)

It should be mentioned that inter-services organisations are officially under the constitutional responsibility of MOD and handled by its Inter-Services Wing: it includes nuclear organisations under the supervision of the Strategic Plans Division (SPD), the ISI and the Joint Staff Headquarters (JSHQ). However, MOD only provides administrative services for these organisations in human resources, finance, and logistic issues.\(^\text{181}\)

\(^{178}\) Ibid, pp. 41-42, 69-70.

\(^{179}\) Ibid, p. 72.

\(^{180}\) Crossed Swords, p. 445; Website of the Ministry of Defence Production <http://www.modp.gov.pk/>; Pakistan’s Arms Procurement and Military Buildup, pp. 43-45.

2.3. The Command and Control of the Armed Forces

Figure 6: Organisational Mechanisms for Coordination in Pakistan’s Defence Establishment

Chapter Two
The Role of Pakistan’s Military in the Control System over Nuclear Programmes

The Joint Chiefs of Staff Committee (JCSC) is the only joint forum of the three services. All the heads of the military forces are members of JCSC, and also the Defence Secretary (the senior mandarin of MOD, usually a retired military officer). The forum of JCSC was created in 1976, as part of Prime Minister Bhutto’s reforms in the defence establishment, in order to curtail the Army’s influence on military policies and planning. Bhutto’s reforms were introduced in order to strengthen the standing of the committee by creating the position of Chairman of JCSC (CJCSC) in 1976 which is a full general (four stars), equivalent in rank to the other military chiefs. CJCSC is the nominal head of the armed forces and responsible for coordination between inter-services organisations and the different military HQs.

CJCSC is responsible for the Joint Staff Headquarters (JSHQ) which also acquiesces to the instructions of the JCSC forum. JSHQ is mainly responsible for coordination among the different military services. JSHQ is also in charge of formulating strategic plans for the entire military in accordance with the input of the three services. Furthermore, JSHQ has an administrative responsibility for inter-services organisations, including coordination and planning between the independent directorates of the ISI and SPD and the armed forces.

However, the main objective of the JCSC committee is to preserve the consensus between the military services. Each military service is responsible for its own planning and control and CJCSC is not authorised to interfere in the routine management and direction of the armed forces’ chiefs. The Army, as an organisation, has a larger capacity (in manpower, budget, facilities and hardware) than Pakistan Air Force (PAF) or Navy (PN). In addition, the Army’s active involvement in the country’s politics place it in a dominant position over the other two services, creating an imbalance in the military system and a lack of coordination among the armed forces. Although the civilian regimes have an interest in empowering CJCSC in order to balance the Army, CJCSC has never received substantial responsibility for supervising the

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182 Pakistan’s Arms Procurement and Military Buildup, p. 37; Roles and Responsibilities of Ministries of Defence in India and Pakistan, p. 19.
185 Pakistan’s Arms Procurement and Military Buildup, pp. 45-46.
armed forces HQs: JSHQ cannot impose its will on the different armed forces. CJCSC is also considered weaker than the military chiefs in light of his lack of command on any combat formation.

2.4. The Pakistan Army: Structure and Functions

Pakistan’s armed forces are one of the biggest in the international community with more than six hundred thousand personnel on active duty. The Army is the largest military service with more than five hundred thousand soldiers and officers. The magnitude of the Army’s total strength is manifested by the number of senior officers within its ranks. The chapter will focus on the Army in light of its position as the most dominant organisation in Pakistan and thus the potential influence of the Army senior command on the nuclear issue, both at the policy level and with regard to the nature of the connection with the nuclear organisations.

The Army command is divided into two broad functional categories: an operational arm which includes combat units organised in a military formation of nine corps and auxiliary sections; and a services arm which includes administrative personnel (such as medical staff, ordnance, electrical and mechanical engineers, military police, etc). The head of both sections is the Chief of Army Staff (COAS) who is a full general (four stars) and considered the most powerful military figure in the country. COAS also took control over the country for long periods by conducting coups and imposing martial law. The position of COAS has emerged as the focal power point both on military and political matters. From time to time, and mainly during military regimes, COAS appoints a Vice COAS (VCOAS) who is responsible for the Army while COAS is dealing with national affairs. VCOAS, like COAS, is a full general, and is usually designated to succeed the Army chief.

The Army Headquarters (General Headquarters - GHQ) is the Army’s administrative wing for command and control over its combat formations. GHQ is responsible for staff work on planning, and for decision making on overall Army affairs and strategy.

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188 Pakistan also maintains para-military forces which are usually headed by an Army General. However, these forces are under the control of the Ministry of Interior and are not part of the Army’s order of battle.
189 The Armed Forces of Pakistan, p. 46; Pakistan’s Arms Procurement and Military Buildup, pp. 49, 61; Stephen Philip Cohen, Pakistan: Army, Society and Security, Asian Affairs, 10:2 (Summer 1983), pp. 3-4.
191 Crossed Swords, p. 33.
GHQ includes Principal Staff Officers (PSOs), all Lieutenant-Generals (three stars), who assist COAS in managing the Army organisation. Each PSO is responsible for a branch in GHQ. The most important position in GHQ is the Chief of General Staff (CGS) who assists COAS in managing GHQ. CGS is also in charge of the General Staff Branch (GS) that includes two important directorates:
1) Military Operations Directorate (MO) which is responsible for formulating the Army’s policies on a range of issues: from military operational activities to national security concerns.

2) Military Intelligence Directorate (MI) which as an intelligence agency has wide responsibilities, including a role in the control system over the nuclear programmes (see Chapter One). MI has greater power than its counterparts in PAF and PN: it can gather intelligence about politicians and other key civilian players. Until the 1980’s, MI retained its purely military emphasis and had a major role in providing support for the military’s activities, including in neighbouring countries. MI has been the Army’s main tool (together with the ISI) for interfering in politics by manoeuvring some of the actors in the political system and promoting military objectives. In this regard, MI was involved in manipulating several election results\(^{192}\).

Apart from PSOs in GHQ, the corps commanders represent the operational segment of the Army. The Army’s corps are the highest level of military unit formation, and they are responsible for a geographical sector of operation. Corps commanders are part of the highest forum of decision making in the Army. The Corps Commanders’ Conference (CCC) convenes once a month or bi-monthly with the participation of the PSOs of GHQ and the rest of the Army’s senior command. After a decision is made all the members of the top echelon of the Army (both corps commanders and PSOs in the GHQ) are committed to it and cannot openly object to it\(^{193}\). In addition, Corps X’s responsibility for the defence of the national military and government centres (both in Rawalpindi and in Islamabad) places its commander in a pivotal position whenever the army’s high command decides to overthrow the civilian government.

The Air Force and The Navy Headquarters (AHQ and NHQ, respectively) are identically organised. Unlike the Army, these military services deal only with matters concerning their respective military affairs, and usually are not involved in issues on a national level or in


\(^{193}\) Crossed Swords, p. 517; Pakistan: Between Mosque and Military, p. 258.
politics. As mentioned earlier, both chiefs of PAF and PN are involved in the armed forces decision-making processes as members of JCSC\textsuperscript{194}.

2.5. Pakistan’s Intelligence Community

Pakistan’s intelligence agencies are an important part of the defence establishment, and are well-known for their central role in decision making on national security matters, including issues relating to the nuclear organisations (see Chapter One). The Army utilizes the intelligence apparatus in order to consolidate its dominant status in the country. The intelligence agencies have two main objectives: to limit the influence and power of the Army’s opponents in the internal arena (mainly in the political system), and to promote the defence establishment’s vision for a regional order that includes a disorientated India and dominated Afghanistan (see Chapter Three).

Pakistan’s intelligence community includes three main agencies: the Directorate of Inter-Services Intelligence (ISI), the Directorate of Military Intelligence (MI) in GHQ, and the Intelligence Bureau (IB) which operates under the Prime Minister with administrative responsibility of the Interior Ministry (MOI)\textsuperscript{195}. The ISI is the main intelligence agency and this chapter will focus on its role in decision making and its impact on national security issues\textsuperscript{196}.


\textsuperscript{195} Another intelligence agency under MOI is the Federal Investigation Agency (FIA) which concentrates on criminal investigations, and has minor influence over national decision-making.

The ISI has much more power and far more missions than equivalent intelligence agencies in western countries and its prime responsibility is for intelligence operations. In its creation in 1947 (the year of Pakistan’s independence) the ISI originally received duties which are usually under the responsibility of intelligence agencies: counter-intelligence, analysis, coordination between the other intelligence services of the military and attending Pakistani military attachés. However, after a short period, the ISI began to concentrate its main activities on special operations: in the first aggression between India and Pakistan over the Kashmir region in October 1947, the ISI was responsible for recruiting tribal armed groups.

**Figure 8**: Pakistan’s Intelligence Apparatus, and an Estimated Structure of the ISI
against India, and for providing them with logistic support. Since the general elections of December 1970, the ISI has been granted the authority to handle domestic political analysis, and it began making efforts to link up with elements in the political parties, in particular the Islamic parties, with a view of recruiting them as a foil for popular non-religious parties. Following the 1971 War, the ISI’s responsibilities were expanded, and the agency initiated a much more aggressive intelligence collection system. Furthermore, the ISI began large scale operations in India with a larger group of agents and resources. Following the Soviet invasion of Afghanistan in 1979, the ISI was given further impetus to conduct special operations against the Russian forces.

The ISI is a military organisation whose Director General (DG) is a senior officer (Lieutenant-General - three stars), usually from the Army, and normally appointed according to COAS’s discretion (although officially the national leadership has authority over the appointment). DG ISI as a general is part of the Army senior command and participates in the military and the Army’s decision making. Officially, the ISI is directly subordinate to the Prime Minister, and DG ISI maintains direct contacts with the President and the Prime Minister, and receives their instructions. Nevertheless, due to the ISI’s strong military affiliation, it generally follows the directives of the upper most ranks of the Army and specifically COAS’s instructions. Unlike MI, the ISI is an independent directorate and it is not part of the Army’s GHQ.

It is important to evaluate the ISI structure in order to identify its strong operational tendencies which might indicate the nature of its influence within the defence establishment. In light of the ISI’s character as an intelligence agency together with its cloak of secrecy, it is difficult to determine its exact organisational structure. In addition, intelligence organisations, mainly those which are responsible for special operations, tend to modify their structure according to changes in their focus and prime missions. According to several sources, there are approximately six directors (DG) spearheading the ISI’s various sections. At least four of them are also deputies of DG ISI (DDG). All of the directors are military officers of the armed forces, although usually most of them (if not all of them) are Army two star generals (Major-General), and each director heads a wing. A proposed contemporary structure of the

197 Crossed Swords, p. 373; Padam D. Sharma, Inter-Services Intelligence of Pakistan and its Activities (New Delhi: Minerva Press, 2004), p. 16.
198 Crossed Swords, p. 373; Inter-Services Intelligence of Pakistan and Its activities, pp. 26, 28-30.
ISI through a combination of relevant data on its current and former organisational framework is as follows:

1) DDG of Analysis and Foreign Relations Wing [DDG (A)]. This wing is responsible for the overall intelligence assessment of the ISI. It probably also maintains official contacts with foreign intelligence agencies and with Pakistan’s military attachés who serve in diplomatic missions across the international community.200

2) DDG of Counter Intelligence/Internal Wing [DDG (C)]201. This wing is considered one of the most important wings of the ISI: ‘C Wing’ was responsible for monitoring the political system and probably also the civilian society and its institutions. ‘C Wing’ was the ISI’s main tool for influencing political issues and political processes, including general elections. Pakistan’s government announced the abolition of the Political Section of ‘C Wing’ as part of a process to distance the military from politics202; However, DG ISI decided to leave only the post of director of the Political Section vacant, while maintaining the section: there are several reports which claim that the ISI’s capabilities to interfere in the political arena were not hurt by the decision203. Furthermore, ‘C Wing’ is still likely to be responsible for countering subversive activities against the regime, and preventing foreign intelligence agencies from operating in Pakistan and particularly within its establishment.204

3) DDG of Security/Strategic/External Wing [DDG (S)].205 This wing is responsible for directing intelligence operations outside Pakistan. In this regard, ‘S Wing’ managed the overall connection with militant organisations in the Kashmir Region against India and in Afghanistan. ‘S Wing’ was probably responsible for facilitating the recruitment and training of militants and helping to construct their training operation camps.206 After the

200 Inter-Services Intelligence: Pakistan’s Long Arm of Proxy-War and Jihad, p. 200.

201 This wing was also known as the “Political Wing”, although officially it was not called by this name.


205 ‘S Wing’ is also known as the ‘Operation Wing’.

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capture of Al Qaeda’s leader, Osama bin-Laden, in May 2011 ‘S Wing’ was mentioned as accountable for maintaining contact with bin-Laden even after the 9/11 terror attacks. In addition, ‘S Wing’ maintains contacts with organisations that have been involved in terror attacks against NATO forces deployed in Afghanistan since 2001.

4) DDG of ‘B Wing’ [DDG (B)]. It is not clear what this wing is responsible for, although there is information on its existence. By comparing the current structure of the ISI with the former one which was revealed in the 1990’s, it could be conjectured that ‘B Wing’ dealt with special operations.

5) DG of Counter Terrorism Wing [DG (CT)]. This wing is probably responsible for intelligence support in military efforts to eliminate terror groups which challenge the authority of the government. ‘CT Wing’ most likely concentrates on following and collecting information on militant groups which gained control over territories in the remote region of the country, mainly in FATA, Khyber Pakhtunkhwa Province (until 2010 called NWFP), and in Baluchistan Province. ‘CT Wing’ is likely to be one of the newest wings of the ISI, and apparently was created after the 9/11 terror attacks and the increase in terror activities in the country.

6) DG of Technical Wing [DG (T)]. This wing is likely to be responsible for the R&D of devices and communication systems for the ISI’s special operations and intelligence gathering. In view of the fact that DG (T) is the only director in the ISI from the Army’s

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208 Afghan Strikes by Taliban Gets Pakistan Help, US Aides Say; Rizwan Hussain, Pakistan and the Emergence of Islamic Militancy in Afghanistan (Burlington, VT: Ashgate, 2005), pp. 250-251.


210 The importance of ‘B Wing’ is clearly reflected in the personality of its former director general, Major-General Asif Yasin Malik, who was promoted in April 2010 and became Corps Commander XI responsible for combating militant groups in the Federally Administered Tribal Areas (FATA) and in the northern areas - both are near the Afghan border and crucial to a successful outcome of the war on terror. See: Four New ISI Directors Appointed; Major Generals Asif Yasin, Awais promoted, Frontier Star (March 15th 2010). Accessed via Factiva Database.

Signal Corps, this wing is probably also responsible for gathering information through communication and signal intelligence\textsuperscript{212}.

3. The Main Characters and Organisational Culture of Pakistan’s Defence Establishment

Illustrating Pakistan’s defence establishment, the structure and functions of its main agencies, and its prominent players, facilitates the following discussion about the main character of its bureaucratic system. This character could strongly indicate where the overlaps exist in the system, with emphasis on decision making, which could in turn provide some explanations why nuclear proliferation was possible from Pakistan. This part of the analysis will focus on the following aspects of Pakistan’s defence establishment which are most likely to influence its management of the control mechanism over the nuclear organisations:

1) The extent of the interaction of the military establishment with civilian agencies which can contribute to the formulation of national security policy and decision making.

2) The internal dynamics in the Army’s HQ and senior command that could influence its administrative work and execution of policies.

3) The involvement of the national leadership in decision making on national security issues, and its access to valuable information that could possibly support its conclusions.

4) The interoperability of the armed forces and the coordination between different HQs and independent military directorates.

5) The scope and nature of the influence of Pakistan’s intelligence community on decision making on national issues.

The above parameters of Pakistan’s defence establishment were carefully chosen while taking two assumptions in consideration. First, the character of the defence establishment is fundamental to any activity of organisations which are part of this apparatus; therefore, defining them could assist in illustrating the role of the defence establishment in the control

\textsuperscript{212} Inter-Services Intelligence: Pakistan’s Long Arm of Proxy-War and Jihad, p. 195; Bahukutumbi Raman, Pakistan’s Inter-Services Intelligence (ISI), South Asia Analysis Group (SAAG), paper no. 287 (August 1\textsuperscript{st} 2001). <http://www.southasiaanalysis.org/%5Cpapers3%5Cpaper287.html> Accessed on November 27\textsuperscript{th} 2010.
mechanism over nuclear organisations. In particular, the above analysis would help explain how efficient Pakistan’s control system is, and what its strengths and weaknesses might be.

Second, defence establishments strongly tend to preserve their methods of operation and to be reluctant about any major reform that could significantly modify their organisational behaviour. This explanation also applies to Pakistan’s defence establishment which has experienced minor modifications since Pakistan’s independence in 1947. As a consequence, it is possible to assume continuity in the methods and in the organisational culture of Pakistan’s defence establishment which allows inductive analysis of its activities: it should be possible to present conclusions about the entire defence establishment, and explain its character.

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3.1. Marginalisation of the Civilian Agencies

Pakistan’s decision making on national security issues is heavily militarised: the Army and particularly its chief (COAS) are the dominant players in shaping national security policy, its priorities and objectives. The military agencies (the ISI and MI) are the key players in the intelligence community which holds considerable influence on national security issues and on the internal situation. As a result, civilian ministries and agencies with input on national security affairs are usually marginalised in decision-making processes.

The Army always found it difficult to trust civilian institutions and their bureaucracy. It was clearly shown during the martial rule of the Army chiefs Field Marshal (five star general) Ayub Khan (October 1958 - March 1969) and General Yahya Khan (March 1969- December 1971): although the various civilian agencies were carefully constructed under military supervision, they were marginalised and deprived of a significant part of their responsibilities\(^{213}\).

This pattern was intensified following the military coup of COAS Zia ul-Haq in July 1977 until his death in August 1988. In view of the low level of the Army’s confidence in civilian agencies, the Army deepened its penetration, in the Zia period, into the public sector: at the level of central government roughly one-fourth of the senior bureaucratic positions were occupied by senior military officers. In a structure similar to a shadow government, the Army appointed officers to shadow civilians at all levels of the administration\(^{214}\). A similar practice

\(^{213}\) Pakistan: Between Mosque and Military, p. 52.
\(^{214}\) Crossed Swords, p. 387.
was exercised by COAS General Musharraf after he initiated a military coup in October 1999. Until Musharraf’s retirement as commander of the Army (November 2007), there was a massive induction of military personnel into civil administration: more than a thousand officers were brought into senior positions in the civil administration in all sectors of human endeavour. Furthermore, hundreds of retired military officers manned top positions in the civil bureaucracy. MOD too was controlled and filled by serving military personnel at the end of their career or after their retirement. In several instances, as after Benazir Bhutto’s victory in the general elections of November 1988, the Defence Minister was appointed at the discretion of the Army.

The marginalisation of the civilian organisations was not always a central feature of Pakistan’s decision making on national security issues. In the first decade after independence (1947-1958), civilian governments played the leading role in decision making on national security issues. For example, following India’s incursion into the Kashmir region in October 1947 Prime Minister Liaquat Ali Khan called for an ‘unofficial conference’ in Lahore which was led by senior civilian officials (such as the Defence Secretary and the Chief Minister of Punjab). The meeting was concluded with the formation of the Committee for the Liberation of Kashmir. The involvement of civilians in decision making on defence issues was maintained during the first years of the martial regime headed by C-in-C Ayub Khan. Ayub Khan designated MOFA as the responsible organisation for policy formulation on the Kashmir issue: the inter-agency mechanism for the issue known as the ‘Kashmir Cell’ (including senior officials such as the Defence Secretary, and DGMO as the Army representative) was headed by the Foreign Secretary (MOFA’s director general) who reported directly to Ayub Khan. The ‘Kashmir Cell’ was responsible for planning the participation of irregular forces in a future conflict with India following a popular uprising in Kashmir.

However, soon after the first military coup of 1958 and until now, the Army HQ (GHQ) has taken the responsibility for national security matters, and has become the hub of strategic

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217 Pakistan: Between Mosque and Military, p. 203; Pakistan’s Arms Procurement and Military Buildup, pp. 45, 70.
218 Crossed Swords, pp. 50-51.
planning. The Army’s agenda always prevails and has been favoured over the organisational position of civilian agencies. During Yahya Khan’s military regime (1969 - 1971) bypassing the formal state machinery of decision making was considered a routine procedure. This character of the military regime was one of the factors behind the devastating consequences of Yahya’s policies on East Pakistan. This policy led to civil war in 1971, to a humiliating military defeat against India, and eventually to the independence of East Pakistan as the Republic of Bangladesh. During Yahya Khan’s rule, he never convened DCC nor the Secretaries’ Coordination Committee on defence planning under the responsibility of civilian agencies and government ministries. Senior officials of MOD and MOFA were out of the loop on decision making and could not provide input on Pakistan’s international situation and national security.\(^{220}\) The absence of the professional mandarins from national decision making and entrusting it to Yahya’s close circle of political advisors and military officers led to a distorted understanding of the contemporary situation and to ill-judged decisions.\(^{221}\)

The military maintained its dominant position under civilian governments. If an inter-agency forum convened it would usually be dominated by the military participants, and the national leadership was more attentive to their agenda. For example, in May 1992 the US threatened to declare Pakistan as a state sponsoring terrorism. Prime Minister Nawaz Sharif presided over a meeting with the participation of senior officials from MOFA, the ISI, and the military. The Foreign Secretary objected to the suggested policy which included supporting terror organisations, but his position was rejected by Prime Minister Sharif who supported the dominant military stance.\(^{222}\) In addition, even after Sharif acquired more experience in his second term as Prime Minister (February 1997 - October 1999), he rarely convened DCC to discuss national security issues: during the ‘Kargil crisis’ in 1999 DCC only met at the end of the crisis: on the eve of Sharif’s critical visit to the US in July 1999 which ended the crisis with the withdrawal of Pakistan’s forces from Indian-controlled Kashmir.\(^{223}\)

MOFA was the main agency limited in its sway on decision making because of the Army’s authoritative position. Military officers have reservations in consulting MOFA on a regular basis on defence-related issues, and it is rarely consulted on matters pertaining to military


\(^{221}\) *Crossed Swords*, pp. 311-313; *Pakistan: Between Mosque and Military*, p. 70.

\(^{222}\) *Pakistan: Between Mosque and Military*, pp. 295-296.

\(^{223}\) *A History of the Pakistan Army*, p. 392.
This marginalisation of MOFA led to a breakdown in communications between MOFA and the military establishment during the Kargil operation in spring 1999. As a result, the military planning did not include any reference to the vigilant international environment that followed India’s and Pakistan’s nuclear tests of May 1998, and to the concerns within the international community regarding a nuclear conflict in the Indian subcontinent. Eventually, international pressure led to the withdrawal of Pakistan’s forces without any political achievements and a significant change in Pakistan leverage vis-a-vis India.

In addition, MOFA’s inferior position is illustrated in critical decision-making processes. In the 1950’s and 1960’s MOFA was deeply involved in decision making on the Kashmir issue, as mentioned. However, its position diminished under the military regime of Zia in the 1980’s. MOFA’s feeble position in decision-making was perpetuated under the civilian regime between 1988 and 1999. For example, during Benazir Bhutto’s first term as Prime Minister (December 1988 - August 1990), the ISI launched the ‘Kashmir Operation’ which included massive assistance and support to militant organisations. Although the ‘Kashmir Operation’ had detrimental implications for Pakistan’s relations with India and for its success in maintaining international backup for its claim on Kashmir, MOFA’s opinion was not heard during the operational planning. In addition during Bhutto’s and Sharif’s first terms as Prime Minister MOFA had strong reservations regarding the Army’s Afghan policy and particularly its support for extreme Islamic factions; however, MOFA was shunned by the Army and the ISI.

It should be noted that the mindset of the defence establishment (and mainly the Army and the ISI) towards the civilian bureaucracy could be perceived as including certain duality, particularly under civilian regimes: parallel to the Army’s ‘routine procedure’ to disregard civilian agencies and deprive them of tangible power, it still makes an effort to preserve their standing as the responsible authority for national affairs. This approach could be observed in the role the Army designated to a civilian government in its national security agenda: although the civilian agencies could not influence the agenda of the defence establishment,
they were expected to contain international pressure arising from the policy of the defence establishment in Afghanistan, towards India, and on the nuclear issue.\textsuperscript{228}

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The marginalisation of civilian agencies and inter-agency mechanisms which grant them active participation and influence is also one of the main underlying principles behind the structure of the control system over the nuclear organisations: as described in Chapter One it is centralised under the military with minimal participation and influence of civilian agencies.

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\textsuperscript{228} Pakistan’s Arms Procurement and Military Buildup, pp. 72-73.
3.2. Centralisation and Collective Decision Making

As mentioned earlier, the Army is the most powerful organisation in Pakistan’s domestic system and the most influential on national security policies while the other armed forces play a secondary role in national security issues. Furthermore, the Army is the dominant agency in the control system over the nuclear organisations, and predominantly the nuclear programmes. As a consequence, the character of the Army and its operational approach are likely one of the most critical elements for illustrating Pakistan’s control mechanism.

The Army is known for being a disciplined and professional organisation with high quality manpower and senior ranking officers. Furthermore, like the armed forces of other countries, the Pakistan Army holds to its traditions and organisational culture and prefers to preserve them. In this section, the Army will be scrutinised regarding the elements in its character which are relevant to the evaluation of its influence on the control system over the nuclear organisations and the potential efficiency of the Army’s role in this mechanism.

3.2.1. The Power of Army Chief vs. the Generals

The Army is operated by its top echelon which consists of senior officers (PSOs) responsible for GHQ’s diverse administrative divisions, and commanders of army corps. The most senior position in the Army is COAS who represents its interests and can mobilise the Army’s strength and influence. COAS’s dominant position as the head of the Army is also most pertinent to the control mechanism over the nuclear organisations. Understanding the power of COAS, its limitations, and his relations with his generals could indicate the extent of his role in the nuclear issue, and primarily if COAS is able to centralise the decision making without due consideration for other voices within the Army and in the state apparatus.

It should be emphasised that COAS’s influence is not limited to military affairs and his authority essentially shapes the entire political sphere of Pakistan. COAS is the pivotal player in any decision making on national security affairs, and holds internal influence in Pakistan’s political system. COAS has the capacity to decide on a military coup which would hand him direct control of the country. During periods of civilian regime COAS has been deeply

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229 Crossed Swords, pp. xxxv-xxxvii, xl-xlxi; The Idea of Pakistan, pp. 128-130.
involved in political issues, and was part of the power equilibrium between the different factions in Pakistan’s internal arena. For example, in 1993 COAS General Abdul Waheed Kakar coerced both Prime Minister Sharif and President Ishaq Khan to resign and agree to new general elections.\textsuperscript{230}

COAS has powerful leverage over the Army’s senior command: he is usually the only full general (four stars) in the Army’s hierarchy\textsuperscript{231} and holds significant authority over the entire operation of the Army and over several administrative issues. Moreover, COAS usually selects his close associates for high command, thus eliminating the possibility of a challenge to his authority.\textsuperscript{232}

Although decision making at senior levels in the Army command is achieved through collective forums the Army is not a pluralist organisation: the commander-in-charge is ultimately the sole authority who decides on the course of action. As a result, although COAS can use official procedures for consulting the generals (by convening CCC or gathering his PSOs in GHQ) he is entitled to take any decision irrespective of consensual thinking within the senior ranks. For example, following the 9/11 terror attacks COAS General Pervez Musharraf encountered objection in the high command to the idea of assisting the US in eliminating the Taliban and Al Qaeda terror infrastructure in Afghanistan. The most vocal opposition was heard from senior officers: Musharraf’s deputy, General Usamani, along with DG ISI and two other generals, argued strongly against this course of action. However, COAS Musharraf, who was also the head of government following the 1999 military coup, decided otherwise, and shortly after allying with the US and the War on Terror his senior dissenters were retired from the Army.\textsuperscript{233}

In addition, the entire hierarchy and promotion system in the Army is based on seniority, and the leading candidate for COAS is usually the officer with the longest military service. A


\textsuperscript{231} VCOAS is also a four star general; however this position is normally occupied only when COAS is also head of state. CJCSC who is usually a full Army General is not part of the Army hierarchy.


\textsuperscript{233} Deception, pp. 313-314; K.P. Warran, Musharraf Has Upper Hand, New Strait Times (November 2nd 2001), Accessed via Factiva Database.
military coup and the long tenure of COAS strengthen his position vis-a-vis his generals in light of his seniority and experience. The new generation of generals would be more estranged from COAS than the generals of his own generation. As a result, during the eras of Ayub Khan, Zia ul-Haq and Pervez Musharraf as Army chiefs and as heads of state their position was almost unquestioned within the Army, and they tended to ignore other opinions. For example, General Zia became ‘a one-man administration’, aided only by his immediate team. The corps commanders were not given a detailed explanation in real time, and Zia did not allow significant conversations in CCC, and treated his colleagues as junior acolytes²³⁴. COAS General Musharraf experienced a similar transition throughout his lingering tenure as head of state (1999 - 2008): a generation gap gradually became a barrier between him and the generals²³⁵.

Furthermore, all Army chiefs have tended to centralise the supervision of the Army and its activities. For example, COAS General Zia did not permit any of his deputies to supervise the Army in his absence. Zia also encouraged corps commanders and other senior officers to bypass his deputies and approach him directly²³⁶. In addition, COAS General Musharraf centralised the planning of the Kargil Operation in 1999, and allowed the participation of only three generals²³⁷. The operational planning was presented to CCC in March 1999 as a fait accompli, and at this stage traditionally no one would challenge the Army chief. Corps Commander XII, Lieutenant-General Teriq Perves, criticised the command during the Kargil Operation, and was forced to retire from the military²³⁸.

The protracted tenure of COAS encouraged decision making in informal ways. For example, Zia as Army chief was surrounded by a circle of political advisors and a few chosen aides who omitted him from alternative routes of information. Similar informality in decision making surrounded Chief Martial Law Administrator (CMLA) General Yahya Khan²³⁹. Assisted by his inner circle of advisors, Yahya came up with both political and military ideas and orders without the benefit of debate or input from relevant elements in the Army, (nor

²³⁴ *Crossed Swords*, pp. 380-385, 396.
²³⁷ The three senior officers were: CGS Lieutenant-General Aziz Khan, who was responsible for the overall performance of GHQ; Commander of Corps X, Lieutenant-General Mahmud Ahmed, who was responsible for the combat divisions on the Kashmir border with India; and General Officer in Command (GOC) of the Force Command of the Northern Area (FCNA). See: Shaukat Qadir, *An Analysis of the Kargil Crisis 1999*, *RUSI Journal*, 147:2 (April 2002), pp. 25-26.
²³⁹ *Crossed Swords*, pp. 380, 396; *Pakistan: Between Mosque and Military*, p. 274; *The Last Days of United Pakistan*, pp. 50-51.
Navy or PAF). Yahya could not tolerate disagreement with his views, and would postpone decisions when faced with arguments that did not accord with his views.\(^{240}\)

The result of informal decision making and centralisation has been a tendency of Army chiefs to conclude strategic decisions without proper consultation. The most vivid example is C-in-C Yahya Khan and his loss of control in 1971 over the situation in East Pakistan which led to its independence as Bangladesh. Without any formal consultation Yahya decided on a military response to the political deadlock which followed the general election of December 1970. This internal crisis erupted as a result of the refusal of the military and political elite of West Pakistan to transfer power to the Awami League party that represented the Bengali people of East Pakistan.\(^{241}\) In spite of the far-reaching implications of a decision to suppress the civilian unrest in East Pakistan by force, GHQ’s involvement was limited: Yahya instructed a close circle of six senior Army officers\(^{242}\) to formulate an operational plan for curbing the agitation in the Eastern province.\(^{243}\) Later, COAS General Zia adopted a similar stance in decision making and ignored the opinions of his fellow senior officers on national affairs. In 1984, Zia was also able to ignore the CCC strong opinion in favour of new general election and the transfer of power to an elected government. In May 1988, Zia decided to dismiss Prime Minister Junejo without ratifying the decision with the Army’s top echelon. VCOAS and DG ISI, who were responsible for evaluating the stability of the regime, were not privy to the plan.\(^{244}\)

On the other hand, in spite of COAS’s authority and firm control over the Army, the Army’s senior brass exerts sway on decision making and has the power to challenge COAS. Normally, the option to question COAS’s judgement is more plausible when COAS does not enjoy authority as head of state or if he fails to address a major crisis. The 1971 War was a challenge to the authority of the Army chief General Yahya Khan who was perceived within the armed forces to be responsible for the devastating outcome of the military conflict. As a result, in December 1971 Yahya was forced to resign by senior officers who argued that he no

\(^{240}\) Crossed Swords, pp. 311-313.

\(^{241}\) A History of the Pakistan Army, p. 170.

\(^{242}\) The group included the Martial Law Administrator (MLA) of East Pakistan, GOC of the 14th division in East Pakistan, the head of civil administration under martial law (an officer of the rank of Major-General), the Chief of Staff (COS) of the Eastern command, the PSO to the President, and DGMO - the only representative from GHQ.

\(^{243}\) Crossed Swords, pp. 264-265.

\(^{244}\) Ibid, pp. 379-385, 421.
longer enjoyed the confidence of the officer corps. Their demand for Yahya’s resignation was raised in light of agitation in the ranks of the young Army officers and in GHQ. It should be noted that even in normal times COAS has to calculate the opinions of his generals in decision making. For example, in October 2009 COAS General Ashfaq Pervez Kayani clarified to the American ambassador in Islamabad his stance regarding US policy stating that his position was crucially influenced by the reactions of the corps commanders to the implications of US policy. Furthermore, COAS needs his colleagues’ consent for his position as the head of the army, and they can formally remove him from his post: Field-Marshal (five star general) Ayub Khan was forced by the Army high command to retire in March 1969 following the outcome of the 1965 War with India and due to his protracted term of office (1958-1969).

Similarly, COAS General Musharraf could not have carried out a military coup in October 1999 without the support of his fellow generals: CGS, Corps Commander X, and Corps Commander V in Karachi. These generals directed the entire coup and took over the government while Musharraf was still confined on board a flight. Musharraf managed to hold his position as Army chief despite being dismissed by Prime Minister Sharif who appointed DG ISI to head the Army. Before and after the coup Musharraf made significant efforts to secure the Army’s support for his leadership: he consulted frequently with the generals, and after the debacle of the Kargil Operation Musharraf toured the garrisons and confronted the low morale and bitterness of the lower ranks. Similar to Musharraf, COAS General Ashfaq Pervez Kayani toured the garrisons in May 2011 following the US unilateral commando operation to capture Osama bin-Laden without the cooperation of the Pakistan Army which aroused discontent among the officer ranks.

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245 Crossed Swords, pp. 313, 321-323; Pakistan: Between Mosque and Military, pp. 89-90, 322.
247 Crossed Swords, pp. 243-244; Pakistan: Between Mosque and Military, pp. 50-53.
248 Karachi is Pakistan’s national financial centre. It was also the destination of Musharraf’s flight when the coup was underway.
249 Musharraf was on board a commercial flight to Pakistan from Sri-Lanka after concluding an official visit.
250 Deception, p. 319.
Widening differences of opinion between the senior brass and COAS, who has a fixed term of office and does not function as head of state, could lead to his removal or to the adoption of a different policy than that advocated by the Army chief. COAS General Beg was a dominant Army chief but he still depended on the support of his generals. When Beg acted against Prime Minister Bhutto in 1990 in order to overthrow her government, he had to guarantee the support of the senior brass (through CCC). Later, the generals managed to block some of Beg’s main initiatives: For example, Beg’s agenda for supporting Saddam’s regime in Iraq in the Gulf War of 1991 was blocked by the fierce opposition of the majority of the Army senior command that did not want to aggravate the US and Saudi Arabia, and Prime Minister Sharif ignored Beg’s initiative. Finally, the generals supported Prime Minister Sharif in his move to announce Beg’s successor three months before Beg’s retirement thus turning him into a lame duck in decision making. Another Army chief, General Karamat (1996 - 1998), strongly believed that his dismissal by the Prime Minister was also encouraged by senior generals.

The strong position of the Army chief enables him to promote his own initiatives with more independence than other generals, including in the nuclear sphere. As described in Chapter One, COAS General Beg enthusiastically advocated nuclear assistance to Iran and it seems he was able to promote it without the need to consult his colleagues in the Army who might have supported his retirement after General Beg had already initiated nuclear exports to Iran. The option of nuclear export initiated by the Army chief is still relevant in light of the direct subordination of SPD to COAS and SPD’s control over the nuclear organisations.

3.2.2. Small Circle of Powerful Positions

Apart from COAS there are several key positions in GHQ that are considered more influential in decision making than the other PSOs. In addition, some posts of Army corps commanders are also pivotal positions in the Army’s hierarchy.

252 Crossed Swords, pp. 397, 430.
As mentioned, VCOAS, when appointed, is only second to COAS in the Army’s senior command and considered to be the leading candidate to succeed him: all the Army chiefs (Generals Yahya Khan, Zia ul-Haq, and Pervez Musharraf) who appointed a deputy were succeeded by him.\textsuperscript{255} However, VCOAS is a temporary position and the division of responsibility with COAS is flexible and is left to the latter’s own discretion. As discussed earlier, COAS could still maintain a high profile in Army business, and could easily ignore the opinion of VCOAS who did not have an official role in decision making in GHQ.\textsuperscript{256}

When COAS does not appoint a deputy, CGS is usually the most powerful position in Army HQ. CGS is responsible for GHQ’s smooth operation and coordination between the different sections of GHQ and the relevant Army corps. Furthermore, CGS is directly responsible for military operations and military intelligence. Hence, CGS has authority regarding the key elements in any military activity, and half of the Army chiefs were elevated to their position after they served as CGS.\textsuperscript{257} In light of the focal position of CGS in the Army high command, as part of the Army organisational culture COAS appoints one of his close colleagues to this position.\textsuperscript{258}

The position of DGMO who works under CGS empowers the latter and gives him authority over the entire sphere of military planning. Generals Kayani and Musharraf were elevated to the post of COAS after serving as DGMO. In several instances DGMO was part of the close circle of military planning while his superior, CGS, remained uninformed: for example, in 1971, DGMO was the only senior officer in GHQ involved in the initial plan of ‘Operation Blitz’ to seize control over East Pakistan.\textsuperscript{259} DGMO was also very dominant in planning the use of militant groups as proxies in Afghanistan and Kashmir: in 1993, DGMO General Musharraf was behind a plan to recruit militant organisations and send them to Kashmir, and in 1994 initiated contacts with the Taliban in Afghanistan. In addition, DGMO has been part

\textsuperscript{255} Generals Gul Hassan Khan, Aslam Beg, and Ashafaq Pervez Kayani, respectively.

\textsuperscript{256} Khaleeq Kiani, Commanders Discuss Situation, \emph{Dawn} (October 7\textsuperscript{th} 2001). Retrieved from the Dawn Wire Service <http://www.lib.virginia.edu/area-studies/SouthAsia/SAserials/Dawn/2001/oct1301.html#comm> Accessed on April 24\textsuperscript{th} 2011; Deception, pp. 313-314.

\textsuperscript{257} Pakistan had fourteen Army chiefs (C-in-C and later COAS) including the current one, General Kayani. The Army’s first two C-in-C were British officers, and six out of the twelve Pakistani Army chiefs manned the CGS position: General Yahya Khan, Lieutenant-General Gul Hassan Khan, General Mirza Aslam Beg, General Asif Nawaz, General Abdul Waheed Kakar, and General Jehangir Karamat. Furthermore, five out of nine Army generals who became CJSCC (without serving in parallel as COAS) served earlier as CGS: General Khalid Shameen Wyne, General Tariq Majid, General Muhammad Aziz Khan, General Shamin Alam Khan, and General Muhammad Iqbal Khan.

\textsuperscript{258} Crossed Swords, pp. 282, 320-322; Deception, pp. 291, 499 (no. 25); Pakistan: Between Mosque and Military, pp. 89-90.

\textsuperscript{259} Crossed Swords, pp. 264-265; Kayani Exercises Influence with New Military Appointments.
of the decision making particularly if it had operational consequences: DGMO has been the main authority in coordinating the Army’s activities in the War on Terror\textsuperscript{260}.

Apart from the three senior positions in the Army hierarchy who have been mentioned, DG MI is also considered to have some influence on decision making in policies and planning within the Army. DG MI is responsible for three elements which secure his position in the senior command: intelligence to support military operations, acquiring information on the political leadership by monitoring the stability of the government, and supervising information security within the Army which enables him to collect information on members of the high command\textsuperscript{261}.

The corps commanders are not involved on a daily basis in policy decisions which take place in GHQ. However, COAS usually needs at least their tacit support for his policies and decisions - which are presented to them in CCC. Among the corps commanders, Corps Commander X is considered a crucial position in the Army hierarchy. As a result of his responsibility for the protection of the federal government, this commander is a key player in any attempt at a military coup, and he is usually a trusted close colleague of COAS\textsuperscript{262}. Naturally, the commander of the SFC is more involved than other corps commanders in decision making on issues related to the nuclear issue\textsuperscript{263}.

\begin{itemize}
\item The limited position of power of position in the Army which might have influence over the nuclear issue (as a result of its influence on national security policies, normally discussed in the Army senior command) simplifies the option for COAS to secure a consensus on any alteration in the non-proliferation policy. Naturally, DG SPD who is not part of GHQ and supervises the nuclear organisations must also accept the new policy.
\end{itemize}


\textsuperscript{261}Ayesha Siddiqa-Agha, What’s up in the GHQ? (May 13\textsuperscript{th} 2010). <http://ayeshasiddiqa.blogspot.com/2010/05/whats-up-in-ghq.html> Accessed on March 12\textsuperscript{th} 2012.

\textsuperscript{262}An Analysis of the Kargil Crisis 1999, pp. 25-26.

\textsuperscript{263}Pakistani Views on Fissile Material Cut-off Treaty (FMCT) Still Malleable (cable code: 09ISLAMABAD2840, November 24\textsuperscript{th} 2009).
3.2.3. The Concept of Operations and Plans

Examining the planning of the Army, both its operations and policies on national security issues might provide some insights into the Army’s overall capability to control the nuclear organisations. The planning process, mainly in GHQ, could reveal what the deliberations of the Army’s decision-makers are and their ability to take into consideration the broader implications of their policies. Mastering this skill is essential when dealing with nuclear capabilities which are a focal element in Pakistan’s national security paradigm.

According to past experience, there is a substantial basis for questioning the Army’s calibre in strategic planning which is essential for handling complex circumstances and considering the various factors. As a result, grave reservations might appear about the Army's ability to maintain proper administrative work in its control over the nuclear organisations and to evaluate the overall environment for their activities. These problems would be displayed when presenting the Army’s evaluation of external factors in its planning, its definition of the framework for the operation and the Army’s ability to optimise its professionalism and improve its *modus operandi*.

Regarding the Army’s ability to maintain a wide perspective, as mentioned earlier, the Pakistan Army marginalises MOFA in the decision-making process and prevents it from influencing the national strategy which is solely in the realm of the military. In parallel, the Army has not developed an equivalent self-capability for the evaluation of the international environment which should be considered when formulating the objectives of national security. Furthermore, the Pakistan Army traditionally tends to project growing impatience towards senior officers who advise caution and restraint due to the international implications of suggested policies or military actions.\(^{264}\)

The Army consistently misperceives the wider implications of its military operations. The Army failed to anticipate the results of its military campaigns in 1971 and in 1999. In the 1971 War, which began as an operation to rein in public agitation in East Pakistan, the Army did not take into consideration the possibility of complex eventualities for Pakistan and for its national security. Among the scenarios which were not contemplated and later materialised

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\(^{264}\) *Pakistan’s Arms Procurement and Military Buildup*, p. 73.
were: the mass desertion of Bengali soldiers; the creation of Bengali refugee camps in India as a source of instability in East Pakistan; the establishment of a Bengali separatist militant force with the assistance of India which operated against Pakistan Army; and eventually India’s military invasion into East Pakistan.\textsuperscript{265}

In the ‘Kargil Operation’ of 1999, the Army failed to grasp the new strategic circumstances of its campaign following Pakistan’s and India’s nuclear tests in May 1998. It should have considered international concerns regarding a conflict between the nuclear rivals and the problematic timing for a military initiative in Kashmir only a year after the nuclear tests. Hence, even with some tactical achievements in the battlefield, the operation appears to have been doomed to fail in pressurising India to agree to negotiations from a weaker position. Neither did the Army give serious consideration to the possibility of expansion of the conflict to other areas along the border between the two countries.\textsuperscript{266}

Furthermore, the crucial factor in the Army’s misperception of its strategic situation for achieving its objectives is its apparent misunderstanding of the nature of US foreign policy, and particularly towards South Asia. This inherent failure in the Army’s strategic thinking was one of the main factors behind its imbroglio in the 1971 War. C-in-C General Yahya Khan was convinced that he could rely on an American military intervention if India gained the upper hand in a military conflict with Pakistan. Yahya was firm in his conviction about being indispensable in the eyes of Washington following his pivotal role in the engagement between the US and China in the late 1960’s (which eventually led to a normalisation in US-China relations).\textsuperscript{267}

Furthermore, as will be discussed in Chapter Three, the Army’s traditional perception included US military support as one of the pillars of Pakistan’s national security, and thus the Army’s top echelon was convinced that the US as a superpower would rescue Pakistan from its inferior position in the power equation with India. However, the US was careful in its commitments to Pakistan and avoided obligating itself to any military intervention. The Army held onto this conviction about the US, although a lack of understanding about the limits of US involvement occurred during the 1965 War, also known as ‘Operation Gibraltar’. The Pakistan Army, under the control of President Ayub Khan, also counted on US military

\textsuperscript{265}A History of the Pakistan Army, p. 176; Pakistan: Between Mosque and Military, p. 72.
\textsuperscript{266}A History of the Pakistan Army, pp. 390-392; An Analysis of the Kargil Crisis 1999, pp. 5-6, 9-10; Crossed Swords, pp. 511, 512, 514, 518.
\textsuperscript{267}Pakistan: Between Mosque and Military, pp. 80-83.
support for its initiative in light of Pakistan’s alliance with the US and the tension between the US and India. However, as a result of the outbreak of conflict, the US imposed an arms embargo on India and Pakistan and remained neutral during the military conflict.\textsuperscript{268}

The flaw in grasping the complex conditions in which the military operation was taking place and in miscalculating the impact of these conditions on strategic planning also had repercussions in defining the operational framework and objectives. In the Indo-Pakistani war of 1965 there was no clear definition regarding how the operation would eventually assist Pakistan in exerting pressure on India on the Kashmir issue. The top command maintained ambiguity about the final objective: was the purpose of the military operation to occupy territory or merely to increase diplomatic pressure on India? In addition, the Army planned to rely on the support in the operation of the Kashmiri people under India’s control; however, they abstained from a widespread uprising against India, and determined the operation’s failure.\textsuperscript{269}

The War of 1971 was the first test of the Army’s grand strategy for defending the eastern region of Pakistan. According to the Army’s strategic thinking, the western part of Pakistan was more vital to the existence of the country and had to be protected by the majority of the military forces. In an emergency crisis, due to the geographic constraints that impeded substantial military assistance to the eastern region (the distance between the two sectors of the country was more than a thousand kilometres and between them lays the territory of India, Pakistan’s arch-enemy), the military forces in the west were designated to attack India. However, when India invaded East Pakistan in November 1971, the Army command avoided a full-scale war that might have jeopardised the western region too. Eventually, the Pakistani forces in the east, were outnumbered and organised for riot control missions with no heavy weaponry, were defeated within two weeks by India’s armed forces.\textsuperscript{270}

Regarding the Army’s record in improving its procedures, it also has mixed results. After the devastating consequences of the Army’s strategy in 1971, it avoided in-depth examination of its operation or the foundation of its military thinking which were the main factors behind the failure. The final report of the commission, compiled at the end of the war to investigate the

\textsuperscript{268} Ibid, pp. 46-47, 80-83.
\textsuperscript{269} Pakistan: Between Mosque and Military, p. 47; Ahmad Faruqui, Rethinking the National Security of Pakistan: The Price of Strategic Myopia (Aldershot: Ashgate, 2003), p. 56.
\textsuperscript{270} A History of the Pakistan Army, p. 176; Pakistan: Between Mosque and Military, pp. 78-79; Rethinking the National Security of Pakistan, p.58-59.
military failure (‘Hamoodur Rahman Commission’) was ignored and censored in order to avoid further embarrassment for the Army\textsuperscript{271}.

Furthermore, as part of the Army’s culture and internal discourse, several alien elements penetrated the planning process and accentuated its inadequacy. The Indian soldiery was reported as “too cowardly and ill-organised to offer any effective military response which could pose a threat to Pakistan”. A similar approach was designated to the Bengalis as a ‘non-martial race’: Yahya Khan, along with most of his generals and senior officials believed that the Bengalis would succumb to military repression and said that “show them the teeth and they will be all right”. The underestimation of Pakistan’s rivals was followed by the glorification of the Army as invincible which in turn reinforced the tendency of the high command to avoid scrutinising malfunctions in the Army apparatus. Furthermore, the Army preferred, in its concept of operation, to emphasise the element of surprise as a response to its fundamental inferiority \textit{vis-a-vis} India. For example, according to the basic planning of ‘Operation Blitz’ of March 1971, the campaign was to be launched with great cunning, surprise, deception and speed. A similar perception accompanied the planning of the ‘Kargil Operation’ in 1999\textsuperscript{272}. During the tenure of COAS General Zia ul-Haq the military planning of the Pakistani Army came under the heavy influence of Islamic teaching in the form of Islamic slogans and prayers. As a result, cold military logic was neglected and likewise the methodology of subjecting plans to military critique and precision\textsuperscript{273}.

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As evident in the military planning, the Army presented a limited ability to comprehend Pakistan’s strategic environment and its influence on the prospects of the planned operation. A particular shortfall is noticed when calculating the approach of major powers such as the US, and international constrains which need to be calculated in any planning of a major operation, particularly in a sensitive conflict such as between Pakistan and India. The limited consideration by the Army of international implications and US interests, whether as a result of misperception or due to the marginalisation of this dimension in the planning stage, is even

\textsuperscript{271} Pakistan: Between Mosque and Military, pp. 92, 94.
\textsuperscript{273} Crossed Swords, p. 510.
more crucial when considering a policy of nuclear non-proliferation: This aspect is a key obstacle for a nuclear weapons country when offering its assistance to foreign countries.

3.3. Lack of Civilian Supervision over the Military

One of the most important aspects in the character of any defence establishment is its relations with the national government which has the authority to supervise its activities. These relations are particularly important regarding control over the nuclear programmes and its military character. As a result, the national leadership should have a firm hold on the armed forces in order to influence the operation of the control system, and particularly military policy guidelines and procedures. Civil-military relations define the extent of military involvement in politics and domestic affairs, and the military influence on national security thinking. In the case of Pakistan, the armed forces and especially the Army were always the dominant organisations on defence issues and most of the time they had an overwhelming influence on other national affairs. Furthermore, the military has controlled Pakistan for half of the period since its independence and maintained a dominant position even when it was formally subordinate to a civilian government.

During periods of civilian regime, the Prime Minister has been the Army’s main contender for the national dominant position, and the Army has aspired to be involved in the appointment to this position. It should be emphasised that the founders of Pakistan conferred on the Prime Minister a major role in any issue pertaining to national security. For example, in the Kashmir crisis of 1948, the Prime Minister was the one who made the crucial decisions. Although the President is Pakistan’s nominal head of state and appoints the chiefs of the armed forces, Pakistan constitutionally has a parliamentary system of government which hands most of the responsibilities for the affairs of the nation to the Prime Minister. The President has the prerogative to dissolve parliament and call for new general elections (nowadays, only with the approval of the Supreme Court), but the Prime Minister appoints the cabinet and presides as head of government on national security issues.


\[275\] In light of the Army’s interest in restraining any potential adversary to its influence in the internal arena, under martial law the position of the Prime Minister was abolished and the Army chief usually became the head of government parallel to his appointment as President (head of state): there was no Prime Minister...
The military has used several ways in order to marginalise civilian governments and prime ministers. The most fundamental one has been the ‘divide and rule’ principle. A necessary precondition for consolidating the Army’s dominance was to have a seriously divided parliament and warring political parties, so that the Army could assume the role of referee. For example, COAS General Kakar forced both President Ishaq Khan and Prime Minister Sharif to resign in 1993 following their legal row over the eighth constitutional amendment (allowing the President to dissolve Parliament)\textsuperscript{276}.

A great deal of effort was devoted by the Army for supporting weak parties, and ensuring that they performed well. Behind the scenes, the formula required both manipulation of the political process and use of state mechanisms and the influence of the intelligence agencies on the political system to enforce the Army’s position on the civilian leadership. Apparently, similar techniques were used by COAS General Kayani on the civilian government in order to guarantee the preservation of the military agenda both on the War on Terror and the relations with the US\textsuperscript{277}. In parallel, the military resorted to co-opting the President as a junior partner in defence decision making and formulation of policies that affected the armed forces. The President was there to ensure that the interests of the defence establishment would be protected even without direct military control over the country\textsuperscript{278}.

Another approach which was selected by the Army was to deprive the Prime Minister of any substantial authority over defence issues. This stance was employed during Prime Minister Bhutto’s first term (1988-1990). Bhutto was also forced to accept that her Foreign Minister and the Defence Minister would be appointed at the Army’s discretion and she would not be able to intervene in the Army’s expenditure and privileges. During her first term Bhutto tried to take control of the military: she appointed a new DG ISI after removing the former DG. However, COAS General Beg centralised all intelligence responsibilities within MI in GHQ, and effectively isolated the ISI from any important role in intelligence operations. Bhutto’s attempts to appoint her own candidate for the position of CJCSC also failed\textsuperscript{279}.

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under the martial law of both Generals Ayub Khan and Yahya Khan nor in the first eight years (July 1977 - March 1985) of Zia’s military regime, and the first three years (October 1999 - November 2002) of General Musharraf’s military regime.

\textsuperscript{276}Deception, p. 230; Pakistan: Between Mosque and Military, p. 54.


\textsuperscript{278}Pakistan’s Arms Procurement and Military Buildup, p. 73-74.

\textsuperscript{279}Crossed Swords, pp. 425-427; Deception, p. 193; Pakistan: Between Mosque and Military, p. 203.
\end{flushright}
In addition, the military was able to control the information available to Prime Ministers Bhutto and Sharif. In his first term, Sharif was kept ignorant by the ISI of the criticism against him within the Army’s senior command. Regarding Bhutto, as mentioned, in the late 1980’s the military tried to diminish Bhutto’s political power and to remove her from the position of Prime Minister, and as a consequence Bhutto was not informed on a regular basis about defence issues\textsuperscript{280}. Furthermore, Bhutto argued that she did not have prior knowledge of the ISI’s support for the insurgency in Kashmir. Later, following the ‘Kargil Operation’ in 1999, Prime Minister Sharif complained that he too had not been informed about the Army’s operational planning regarding India. COAS General Musharraf only casually broached Sharif about the Kargil Plan in December 1998, but the Army did not present any well-planned operation\textsuperscript{281}.

Parallel to the Army’s attempt to isolate Prime Ministers, during Ghulam Ishaq Khan’s term as President (August 1988 - July 1993), his role, as perceived by him, was to guard and cater to the military’s long-term political interest. In this regard President Ishaq Khan admitted that he had dismissed Prime Minister Bhutto following a request from the military\textsuperscript{282}.

Another method which was used by the Army was to receive the principle authorisation of the Prime Minister in advance for any operation without the need for it to be approved again later. For example, the ‘Kashmir Operation’ was planned in the late 1980’s by COAS General Beg and DG ISI Lieutenant-General Hamid Gul. The operation included recruiting tens of thousands of volunteers from Afghanistan for an insurgency operation inside Indian-controlled Kashmir. In November 1989 when briefing Prime Minister Bhutto on the Kashmir plan General Beg asked for authorisation to strike whenever it was needed without recourse to the Prime Minister\textsuperscript{283}.

\textsuperscript{280} \textit{Crossed Swords}, p. 438; \textit{Deception}, p. 198. For example, in December 1988 senior civil servants allowed a hijacked Soviet plane to land in Pakistan without consulting Bhutto, see: \textit{Pakistan: Between Mosque and Military}, p. 204.

\textsuperscript{281} An Analysis of the Kargil Crisis 1999, pp. 25-26, 28; \textit{Deception}, p. 288. \textit{Pakistan: Between Mosque and Military}, pp. 212-213. The dependence of the Prime Minister on the information of the defence establishment was grotesquely demonstrated in Bhutto’s second term as Prime Minister. COAS General Karamt, and DG ISI Lieutenant-General Javed Ashraf Qazi told Bhutto that Pakistan should break from its international commitments and recruit militants to fight in Indian-controlled Kashmir because the Indian security forces killed all Kashmiri men over the age of sixteen. Instead of confronting her generals, Bhutto repeated this argument in her meetings with foreign interlocutors. See: \textit{Pakistan: Between Mosque and Military}, pp. 236-237.

\textsuperscript{282} \textit{Pakistan’s Arms Procurement and Military Buildup}, p. 73-74; \textit{Pakistan: Between Mosque and Military}, p. 217.

\textsuperscript{283} \textit{Deception}, pp. 240, 287-288.
The Army command made the same request of Bhutto in 1993 during her second term as Prime Minister. DGMO Major-General Musharraf asked Bhutto to give the Army the responsibility for deciding the timing of conflicts in Kashmir, suggesting the move would enable the Pakistani military to react more quickly if there was a pre-emptive strike by India. In both instances Bhutto refused the requests; however, the Army’s position was sufficiently strong to pressurise Bhutto into choosing a policy with higher stakes: Bhutto claimed she had felt obliged to appease the Army and had approved a low intensity insurgency into Kashmir.

At least in one instance Bhutto’s tacit approval led to the undesired results she aspired to prevent: Her consent for the Army’s operation exacerbated the situation in 1990 between India and Pakistan following an increase in the number of training camps and the volume of fighters that were being sent into Indian-controlled Kashmir.

This attitude which emphasised the government’s appeasement of the Army and intelligence agencies was dominant in Bhutto’s second term as Prime Minister. Bhutto was not able to answer to western pressure and halt terror in Kashmir for fear of her own intelligence agencies. Bhutto was convinced that the ISI and the military “would never leave her alone” if she interfered in national security policies, and so merely refrained from any confrontation. Prime Minister Sharif adopted the same approach in his first term, and allowed the military a free hand in national security matters. Apparently, the approach of ‘do not ask, do not tell’ of the civilian leadership is still relevant: US Secretary of State, Condoleezza Rice, described in her memoir that following the Mumbai terror attacks of November 2008 Pakistan’s President Asif Ali Zardari and Prime Minister Yousuf Raza Gillani flatly denied that Pakistan was the origin of the attack possibly because they were ignorant of the full account of the terror operation.

On other occasions, the Army did not even pretend to ask for government approval or chose to ignore the instructions of the Prime Minister:

1) The Army and the government had different objectives during Bhutto’s first term as Prime Minister: Bhutto favoured a negotiated settlement in Afghanistan, while the Army and the ISI wanted to facilitate the Mujahedeen’s defeat of the regime in Kabul. In addition, Bhutto wanted to moderate the support for the insurgency in Kashmir, but the Army,

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284 Deception, pp. 206-207.
pleased with this enhanced capability against India, wished to escalate it. In this regard, Bhutto’s government gave approval for the ISI to provide some support to indigenous Kashmiri groups in their demand for a plebiscite, funding for refugee rehabilitation as well as for a media campaign on behalf of the Kashmiris. However, the ISI went further and expedited the process of setting up training camps for militants who would wage an armed insurgency inside Indian-Kashmir. 

2) the ISI continued to support insurgent activity in Afghanistan, although Prime Minister Sharif, during his first term, was in favour of a reconciliation process between the rival Afghan factions.

3) Following the failed attempt by former Mujahedeen fighters to attack the World Trade Centre in New York in February 1993, under American pressure, Prime Minister Sharif ordered the ISI to shut down militant camps in ‘Azad Kashmir’ (Pakistani-held Kashmir). However, the ISI ignored the instruction and relocated camps to areas adjacent to the Afghan border.

4) Bhutto ordered, in December 1995, the arrest of terror leaders who were involved in kidnapping foreign tourists in Indian-controlled Kashmir, but the ISI misled her into believing that it had no connection with these leaders and it refrained from arresting anyone. Furthermore, Bhutto could not stop the ISI from allowing the terrorists who were involved in the terror attack to return to Pakistan and receive a public rally.

On extreme occasions, the Army turned against the Prime Minister with the clear objective of preventing him from exercising his power. This was the case in Prime Minister Bhutto’s first term when she was surrounded by deliberate incompetence. The civilian and military bureaucracies deliberately prevented the smooth operation of the Prime Minister’s Secretariat: phone calls were misdirected, files went missing, and Bhutto’s servants were blackmailed by the ISI. Similar incidents happened to undermine Prime Minister Sharif in the early days of his first term and his phone was wiretapped.

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287 Pakistan: Between Mosque and Military, pp. 227-228.
288 Deception, p. 229.
289 Pakistan: Between Mosque and Military, pp. 236-237, 298.
290 Pakistan: Between Mosque and Military, p. 204; Steve Coll, Intrigue Permeates Pakistan; A Political Culture of ‘Shadow Games’, Washington Post (December 15th 1991), Retrieved through the Washington Post Historical Archive.
The civilian government was also restrained in its reactions to the military agenda. One of the methods adopted by civilian governments for reducing the Army’s influence was to support the smaller military services. On rare occasions, the civilian leader was able to exercise his power over the Army’s high command and appoint or dismiss COAS\textsuperscript{291}. On other occasions, it was demonstrated that prime ministers have the power to enforce their will if they decide to confront the defence establishment. For example, in the late 1980’s Prime Minister Bhutto refused on the ISI request to extend diplomatic recognition to the Afghan interim government\textsuperscript{292}.

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In short, the civilian leadership has been constantly marginalised with little influence on national security issues and nuclear matters as well. It appears that the civilian government since the late 1980’s showed inferiority sentiments when dealing with defence policy and most of the time preferred to avoid confrontation with the military for fear of severe retaliation. Hence, it can be evaluated that the role of the civilian leadership in the control system over nuclear organisations through their participation in NCA meetings and its committees is equally feeble to their position in Pakistan’s civil-military relations.

\textbf{3.4. Flawed Inter-Agency Mechanisms within the Armed Forces}

Evaluating the inter-agency mechanism is significant in any analysis of a government system such as control systems (see Chapter Four) which include various government agencies. In Pakistan, in light of the dominant position of the military in the control system, it is particularly important to examine the procedures and character of the interactions between the different military services, and between their respective HQs, in order to evaluate if this bureaucratic arrangement is ingrained in Pakistan’s military. In this connection, the interrelationships between the HQs of the different military services, including the Joint-HQ (JSHQ) should also be assessed.

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It appears that another fundamental shortcoming in Pakistan’s defence establishment is its ineptitude in joint planning, and the lack of interoperability of the armed forces. The reforms

\textsuperscript{291} Crossed Swords, pp. 481-482; Deception, p. 227; Pakistan: Between Mosque and Military, pp. 223, 248, 281.
in the defence establishment which were initiated in the 1970’s by Prime Minister Zulfikar Ali Bhutto were meant to improve this flaw in the defence establishment. However, the inter-agency mechanism was always a major weakness in the work of Pakistan’s armed forces. It was clearly demonstrated in their lack of interoperability during military conflicts when it was essential for a successful outcome of the military campaign. All large-scale military operations were planned by the Army without any significant input from the Air Force and Navy. Moreover, AHQ and NHQ were aware that a military operation was taking place only after it had been instituted by GHQ: ‘Operation Gibraltar’ of the 1965 War was formulated without the involvement of PAF or the Navy. The military effort to seize the Indian part of Kashmir was considered the sole responsibility of the Army293.

The lack of operability was one of the main contributory factors in the defeat in the 1971 War when the capabilities of the Air Force and Navy were not utilised properly in an attempt to rescue the Army from a military defeat. Absurdly, NHQ and its maritime forces ascertained information about the commencement of the Army’s ‘Operation Searchlight’ in March 1971 through an Indian radio broadcast. Later, despite the grave implications for Pakistan’s security, the Navy chief was not even informed by the Army chief about the opening of the western front, and learnt about it from CAS. During the conflict there was a lack of coordination between AHQ and GHQ, and PAF was incapable of delivering air support to the combat units294. It seems that these failures are still relevant: the committee for investigating the military activity surrounding the American capture in May 2011 of Al Qaeda leader, Osama bin-Laden, examined the possibility that some of the malfunctions were the result of a lack of coordination within the armed forces295.

The Army’s disregard for the other military services was also exemplified whenever the Army decided to conduct a coup and rule the country. The chiefs of the Air Force and Navy and their HQs played a negligible role in the process of imposing martial rule and usually did not receive any alert about the Army’s intentions296.

Apart from the bureaucratic arrangements for inter-agency coordination within the armed forces, the informal level of the bureaucracy is also quite instrumental in the lack of routine joint efforts of the military services. The personality of the services’ chiefs is pivotal in

293 Crossed Swords, pp. 223, 295; Pakistan’s Arms Procurement and Military Buildup, p. 37.
296 Crossed Swords, pp. 170-171; Pakistan’s Arms Procurement and Military Buildup, p. 61.
securing the services position in the defence establishment and in the degree of influence it commands on decision making. Hence, the chiefs of the armed forces have consistently concentrated on strengthening their own internal position rather involving themselves in collaboration with other military services\textsuperscript{297}.

In addition to the HQs of military services, JSHQ was persistently marginalised by the Army. Prior to the creation of JSHQ in 1976 the Army chiefs who were also the military rulers of the country avoided any substantial use of the inter-services’ mechanisms of consultation and coordination within the armed forces. For example, CMLA General Yahya Khan intentionally paralysed the essential strategic operative coordination between the military senior commands within the framework of JCSC\textsuperscript{298}. The Army aspired to curtail the scope of CJCSC and the responsibilities of JSHQ: following the coup in 1977 CJCSC was consolidated in practice as a ceremonial position without any authority over the chiefs of the military services\textsuperscript{299}. The relatively weak position of CJCSC in the defence establishment reflected directly on the responsibilities of JSHQ. Instead of being the focal point of military policy and planning it was limited to administrative duties. CJCSC and JSHQ were not party to the Army’s decision to launch a coup in July 1977 and were later kept in the dark about significant military operations such as the ‘Kargil Operation’\textsuperscript{300}.

\footnotesize{\textbf{♦♦♦}}

As clearly exemplified, the Army is remotely limited by the organisational positions of the other military services, and can execute its own policies, plans, and operations without a mandatory obligation to coordinate them within the armed forces: as evident from historical experience, the Army chose this option on more than one occasion. The main consequence for the control system is more centralisation of power in GHQ with no effective influence of the other military chiefs (who are NCA members) and their HQs on a possible alteration in the non-proliferation policy. Although SPD is an inter-services organisation its direct control by the Army guarantees that the other services will not be able to interfere in its activities.

\footnotesize{\textbf{♦♦♦}}

\textsuperscript{297} Pakistan’s Arms Procurement and Military Buildup, pp. 62-63, 65.
\textsuperscript{298} Crossed Swords, p. 312.
\textsuperscript{299} What’s up in the GHQ?
\textsuperscript{300} Crossed Swords, pp. 352-353, 514; What’s up in the GHQ?
3.5. Significant Influence of the Intelligence Agencies on National Security Issues

Pakistan’s intelligence community is a prominent section of the defence establishment, and is considered most influential in decision making. Furthermore, the intelligence services have a crucial impact on the country’s strategic situation due to their character as operational entities at the service of the Army.

As described in Chapter One on Pakistan’s control system, the ISI, and to some extent the other intelligence agencies, also have a role in the supervision of the nuclear organisations, mainly regarding the security of these organisations’ activities and in their procurement efforts in foreign countries. As a consequence, the ISI probably has access to the nuclear organisations’ technologies, materials and knowledge. Due to its responsibilities in the security apparatus of the nuclear programmes the ISI obtained sensitive information on all the employees at all levels in the nuclear organisations during their vetting stage and through routine security verification. Furthermore, the ISI has direct access to the manpower of the nuclear and missile industrial complex.

In light of the ISI’s role in the control system and its dominant position in Pakistan’s defence establishment, the final section of this chapter will be dedicated to the character of the ISI as the core of Pakistan’s intelligence community and as a player in decision making on national security issues. Through this discussion it should be possible to identify the ISI’s function in national affairs and how it might impinge on its influence within the realm of the nuclear organisations.

3.5.1. Organisational Inclination towards Special Missions and Operations

The ISI’s character could be essentially defined by its designation as the operational arm of the military for special and sensitive missions. The ISI is foremost an operational organisation for clandestine missions and its scope of activities has always been wider than the traditional responsibilities of intelligence agencies. As a security service the heavy burden of preserving the stability of the regime lies with the ISI.
According to the estimated structure of the ISI presented earlier, four out of its six organisational wings (‘S’, ‘C’, ‘CT’, and ‘B’ wings) are probably focused on intelligence operations. These wings are responsible for missions which are connected to insurgency groups in Afghanistan and India; for promoting the defence establishment interests in the political system; for countering terror attacks against the state apparatus and particularly the military; and for launching special operations within Pakistan and abroad. As a result, the ISI has a strong tendency to conduct operations with little consideration for international implications and political considerations. It was principally in the interests of the ISI’s operational wings to continue with large-scale special intelligence missions which gave them greater influence.\footnote{Pakistan: Between Mosque and Military, pp. 141-142.}

By affiliating themselves to covert operations the ISI was involved in various key events which determined Pakistan’s strategic situation and its national security thinking. The main ISI operation which elevated its position in the defence establishment was its responsibility for the insurgency in Afghanistan against the Soviet military occupation between 1979 and 1989: following the ‘Afghan Operation’, the ISI was forged as a combination of elements of the military and special operations.\footnote{Crossed Swords, p. 373; James Rupert, Pakistan Seen Favouring Afghan Fundamentalists; Anti-Western Rebel Group in Key Position for Future Power, Washington Post (March 6th 1989), Retrieved from the Washington Post Historical Archive.}

The agency was soon designated as a point of contact with militant organisations and it gained comprehensive responsibility for one of the most important strategic tools of Pakistan’s defence establishment (see Chapter Three). The ISI controlled the militant organisations fighting in Kashmir which were its creation and were occasionally reorganised according to operational objectives. Similar manipulations were employed by the ISI on militant groups operating in Afghanistan: for example, militants who fought in Afghanistan were sent by the ISI to Kashmir in 1998 after the Taliban movement established its control over the majority of the Afghan territory.\footnote{Sushant Sareen, The Jihad Factory: Pakistan’s Islamic Revolution in the Making (New Delhi: Har-Anand, 2005), pp. 134-135, 138-139, 279; Inter-Services Intelligence of Pakistan and Its Activities, p. 48.}
In addition, it was an ISI initiative to launch a proxy war against the Soviet forces in Afghanistan by assisting the Mujahedeen. The ISI favoured military means in order to establish Afghan Muslim fundamentalists as the dominant political force in Afghanistan. The agency rejected the perspective of MOFA which favoured diplomacy for promoting Pakistan’s interests in Afghanistan. Furthermore, prolonging the ‘Afghan Operation’ was in the interests of the ISI’s operational wings giving them greater influence as the designated agency responsible for the entire Afghan policy and as Pakistan’s official liaison with the Afghan factions. The ISI was also designated by the Army and government to be responsible for contacts with the Taliban regime in Afghanistan between 1994 and 2001. Later, the ISI was authorised to have direct contacts with the Taliban regime in Afghanistan, and in September 2001, following 9/11, the ISI negotiated with the Taliban on US demands.

The ISI was also the main operator of the ‘Kashmir Operation’ in its different transformations since the 1960’s. Following the ISI’s proven success in arranging a proxy war in Afghanistan, the agency received, in the late 1980’s, the leading role in organising the insurgency in Kashmir by deploying the operational capabilities of the militants who fought in Afghanistan. The ISI was responsible for escalating the situation in 1990, by increasing the number of training camps and the volume of fighters that were being secretly sent to cross the Indian border.

The ISI’s actions clearly countered any substantial possibility for Pakistan’s civilian government to exercise its diplomatic measures and promote a political settlement for the Kashmir conflict. Although the ISI was instructed by the Army and operated under civilian governments which reconciled with the agency initiative, the ISI’s dedication to the operations, which brought the agency a central role in shaping the national security policy, was far greater than any consideration for the international implications of the operations for Pakistan.

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304 Pakistan: Between Mosque and Military, p. 184; Pakistan Seen Favouring Afghan Fundamentalists; Anti-Western Rebel Group in Key Position for Future Power.
305 Deception, pp. 229, 242, 293, 317; Pakistan: Between Mosque and Military, pp. 141-142, 184.
306 Crossed Swords, p. 206; Deception, pp. 207, 240; Pakistan: Between Mosque and Military, p. 47.
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Apart from involvement in insurgency in neighbouring countries the ISI has been suspected of being affiliated to terrorists who have endangered the stability of the international community. It appears that the ISI was ready to utilise these terrorists as long as they served its purpose. In this context, the ISI had contacts with Al-Qaeda leader, Osama bin-Laden. Bin-Laden had lengthy experience in the service of the Mujahedeen groups which fought against the Soviet occupation of Afghanistan, under the instructions and with the assistance of the ISI. At the end of the 1980’s DG ISI Lieutenant-General Hamid Gul (together with future Prime Minister Nawaz Sharif) met bin-Laden and asked him to fund the overthrow of incumbent Prime Minister Bhutto. Bin-Laden also maintained close contacts with the the ISI bureau in Peshawar³⁰⁷.

Bin-Laden’s involvement in terror attacks did not deter the ISI from preserving its contacts with him and with Al-Qaeda. As late as 1999, the US had information on the ISI connections with bin-Laden in all likelihood for the ISI to acquire his services in Kashmir. There was also speculation that bin-Laden had been warned by the ISI in 1998 of the US cruise missile attack against his camp in Afghanistan³⁰⁸.

Later, following the 9/11 events the ISI was suspected of aiding bin-Laden to find shelter in Pakistan and to flee from Afghanistan as a result of the military operation of the US-led coalition. According to an ISI agent who was in charge of contacts with Al-Qaeda, he helped bin-Laden to cross to Pakistan on the instruction of his superiors and with the help of two other agents³⁰⁹. Furthermore, after bin-Laden’s capture in Pakistan in May 2011, and the revelations about his residence in the country for several years, US intelligence was suspicious that bin-Laden had been under the ISI protection - possibly its ‘S Wing’³¹⁰.

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³⁰⁷ Deception, pp. 194, 289.
³⁰⁸ Deception, p. 289; Pakistan: Between Mosque and Military, pp. 299-300.
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Unconfirmed reports even claimed that bin-Laden had been living in an ISI safe house\textsuperscript{311}. In addition, it was argued that the Taliban leader, Mula Omar, was living in Peshawar, the capital city of Baluchistan Province, under official protection, most probably of the ISI\textsuperscript{312}.

Moreover, the ISI itself is suspected of involvement in aiding terror activities which stretch beyond the defined goal of Kashmir or with militants who launch terror attacks against NATO forces in Afghanistan. According to US Chairman of Joint Chiefs of Staff, Admiral Mullen, the ISI helped to orchestrate the terror attack on the American embassy in Kabul in September 2011, and US intelligence senior officials claimed that the ISI was behind the terror attack on the Indian embassy in Kabul in July 2007\textsuperscript{313}. Several reports suggest that the ISI also assisted with the training and planning of the terror attack on the Indian city of Mumbai in November 2008\textsuperscript{314}. In addition, according to US intelligence reports, the ISI planned several suicide attacks against NATO forces in Afghanistan\textsuperscript{315}.

Although Pakistan’s affiliation with terror attacks has severe repercussions on its relations with its neighbouring countries and with the US, and on its position in the international community, these considerations have been overshadowed by the operational aspects and agenda of the ISI and the Army. As a consequence, following the 9/11 events the ISI vehemently objected to the decision of COAS General Musharraf, to support the US in the


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War on Terror, and America’s determination to overthrow the Taliban regime in Afghanistan which was under the ISI patronage316.

At most, the diplomatic dimensions which follow the ISI’s activities have been taken into consideration as a constraint which demands intense secrecy in the contacts between the ISI and militant organisations. Following the 9/11 events the ISI made efforts to conceal its involvement in the insurgency in Kashmir. Furthermore, following President Musharraf’s speech on January 2002 advocating action against terror organisations the ISI arrested hundreds of militants who were members of organisations which operate in Kashmir only to release them after a short period317.

3.5.2. Promoting its Own Agenda

Apart from its character as an operational agency, which affects the ISI’s role in decision making on national security issues, the question of control over the ISI is also crucial. It is necessary to discern the extent of freedom the ISI enjoys in the promotion of its agenda and its organisational interests, particularly at the expense of its superiors: the military high command and the federal government. Control over the ISI has implications for the agency’s role in the state supervision of the nuclear organisations, and especially for the ISI’s inclination to pursue an independent agenda on the issue of nuclear export. As discussed earlier, the ISI seems to assign little consideration to international implications which in turn represent a significant factor in Pakistan’s strategic thinking regarding the avoidance of nuclear assistance to foreign countries. As a consequence, the ISI without the effective supervision of the military and government which has a greater awareness of the international dimension might consider allowing nuclear proliferation from Pakistan or even assisting the officials behind it in Pakistan’s nuclear programmes and defence establishment.

The ISI is observed as an interventionist organisation which aggressively promotes its own agenda on national security: the agency shapes events through its covert operations. Since the ISI became a powerful agency in the Afghan war in the late 1970’s, whenever there has been a civilian government, the agency has generally ignored its instructions. Attempts by Prime

316 Deception, pp. 313-314.
317 The Jihad Factory, pp. 126-127; Pakistan: Between Mosque and Military, pp. 303-304.
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Minister Bhutto in 1989 and Prime Minister Gilani in 2008 to rein in the ISI and to place the agency under civilian control failed miserably. The ISI also turned against prime ministers in order to preserve the defence establishment’s perception of national security. For example, the ISI challenged the Afghan policy of Prime Minister Sharif for a political settlement and continued its support of the Afghan warlords. Sharif also retreated from his diplomatic efforts towards India, due to ISI objections.

Occasionally, the ISI was used by the Army command against the civilian leadership in order to diminish its political support and to prevent it from acting against military dominance on national security issues. Between January 1989 and July 1990 the ISI steered the destabilisation of Pakistan’s biggest province and its largest city, Punjab and Karachi (respectively), in order to undermine the public and political support of Prime Minister Bhutto’s government. Furthermore, the ISI was behind the establishment of political parties to counter PPP, the ruling party, and helped Bhutto’s main political rival, Nawaz Sharif, to reside as the Chief Minister of Punjab. Later, Bhutto’s widower and the co-chairman of PPP (and future president), Asif Ali Zardari, complained about the ISI’s attitude towards him following the general elections of February 2008.

In addition, DG ISI Lieutenant-General Asad Durrani publicly admitted that the ISI was also responsible for funding the activities against Bhutto’s government. In the general elections of November 1988, the ISI mobilised Islamists against PPP and Bhutto in order to limit her political power as the prominent rival of the defence establishment. the ISI also tried to form a government coalition of the IJI political party. In the run-up to the general elections of February 2008 the ISI was involved in designating the next Prime Minister and pressurised Saudi Arabia to halt its funding of Sharif’s party - PML (N). The ISI was also involved in


319 Deception, p. 223; Pakistan: Between Mosque and Military, pp. 227-228, 280.


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securing a sanctuary for President Musharraf in a third country following his anticipated impeachment by parliament in August 2008.

The relations between the ISI and the military, and especially the Army, are more respectful. It seems that the ISI is genuinely answerable to the military senior command and especially the Army chief. There are two main reasons for the Army’s efficient control of the ISI. First, although the ISI exists as an independent directorate, the agency is part of the military machine in major aspects: manpower, budget, and resources. The Army controls the ISI in spite of DG ISI being officially appointed by the Prime Minister: The core of its personnel is drawn from the Army. The ISI officers are dependent on the military for their career and are part of the military hierarchy and chain of command. It provides COAS with substantial leverage for using the ISI to serve the greater organisational interest of the armed forces.

Second, the Army agenda usually corresponds with that of the ISI’s: in light of the Army’s inferior position versus the Indian military and its incapability to control Afghanistan or even large parts of the tribal areas in FATA and the north-west province, the Army is interested in strengthening the ISI which proved its credibility in the past in these two critical sectors of Pakistan’s national security, and in manipulating the domestic arena.

The Army has also been able to decide on initiatives which are opposed by the ISI. In 1999 the Army decided to launch the ‘Kargil Operation’ in spite of the ISI’s objection to it on operational grounds. The most famous clash between the ISI and the Army occurred concerning the strategic decision of COAS General Musharraf to side with the US after the 9/11 attacks. DG ISI Lieutenant-General Mahmud Ahmed objected to the decision, failed to convince his ‘protégé’, the Taliban regime in Afghanistan, to accept the US demands, and was forced to retire a few days later prior to the start of the US military campaign in October 2001.

However, it seems that the ISI could gain the potential to challenge the Army senior command, irrespective of the consequences, if it so desired. Shuja Nawaz argues that the ISI broadened its role and became a pervasive force in Pakistani politics that could even force the hand of its benefactors or sponsors, the Army chief included. The Afghan operation in the late

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325 Pakistan’s Arms Procurement and Military Buildup, p. 76.
326 Pakistan: Between Mosque and Military, p. 274.
327 Crossed Swords, p. 513; Deception, pp. 313-314.
1970’s gave the ISI an autonomy and financial strength that it had not possessed before, creating independence from the Army\textsuperscript{328}. Furthermore, the ISI has its own capabilities to influence the internal situation in Pakistan and the Army’s public image. Nevertheless, it should be emphasised that a substantial gulf between the Army and the ISI, regarding their agenda and interests, is currently only a theoretical scenario with no hold on the current situation within the defence establishment. In addition, it is difficult to evaluate accurately what the outcome of such friction would be.

4. Conclusion

The organisational culture of Pakistan’s defence establishment contains several features which could influence the capabilities and efficiency of the control system over nuclear organisations. These traits have been demonstrated since Pakistan’s independence and clearly still carry weight in the performance and perceptions of the defence establishment. The principle inherent explanation for the entire work of this establishment, and largely for Pakistan’s strategic situation, is the dominant position of the Army in the national security policy and its ability to coerce all the other state agencies to fulfil its agenda for the nation.

As a result, the Army systematically marginalises civilian agencies such as MOFA and MOD whose potential contribution to national security thinking is essential. The Army, together with the other military services, seizes the ministries’ constitutional responsibilities and sets the national foreign and defence policies while neglecting the contribution of civilian agencies.

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The potential contribution of the civilian agencies to national security remains limited, and in turn the diversity of perspectives which should be the platform for formulating policies is curtailed. The outcome might probably be a narrow viewpoint of the strategic situation, mainly of the international environment. This state of affairs affects the control system which deals with sensitive issues that require the close examination of their international dimension as a crucial factor in the decision-making process. In practice, the civilian agencies (like SECDIV which is under MOFA - see Chapter One) probably have a secondary role in the control system. The apparatus’ professionalism is severely weakened and it can easily ignore the international implications in its decision-making process.

\textsuperscript{328}Crossed Swords, pp. 373, 425.
In addition, the civilian leadership lacks efficient tools to supervise the defence establishment and particularly the armed forces: the cabinet depends on its decision making on selectively released information from the military, and the military has autonomy over defence matters (like the composition of the defence budget). The leadership relies on the goodwill of the high command of the military services and the intelligence agencies which influence the government’s political stability and policies. In light of the dependence of the heads of state on the military for their political survival as well, they usually try to please it and not question its agenda. As a result, the leadership is reluctant to impose inter-agency mechanisms on the Army and deprive it of its exclusiveness on national security issues: the national leadership has the power to oppose the Army’s interest on specific issues; however the more it tends to exercise its authority on sensitive issues, the more it risks military efforts to subvert it. This equation is particularly relevant to the nuclear issue and to the military control over the nuclear organisations.

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The lack of inter-agency bureaucratic mechanisms also illustrates the relations between the Army and other military services: PAF and the Navy. The Army is not constrained by its obligation to formulate the coordinated policy and agenda of the armed forces. As a result, the Army aspires to restrict the position of the inter-agency structural manifestations: JSHQ, CJCSC, and JCSC. Their inferior position deprives them of significant participation in the control system over the nuclear organisations, although it is a strategic issue, one of the highest in the national security framework, and despite the fact that SPD is an inter-services directorate. JSHQ could potentially offer broader deliberations on the interests of the military and their relevance to decision making in the operation of the nuclear organisations.

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The Army, as the main agency which shapes national security policies, functions on the principles of centralisation and strict discipline - both are the legacy of the British Indian military. The Army chief holds a significant amount of power and authority which can only be questioned in extreme scenarios when his failure is obvious. COAS, together with the consent of a few close aides, can reach critical decisions without involving the entire Army machinery or even the high command. Although the generals can resist the broader agenda of the Army chief and limit his ability in decision making on the overall national security policy, it is anticipated that they will face obstacles in influencing COAS to avoid specific initiatives
that he can promote in a short time and with a close circle of confidants. As a consequence, COAS and several senior officers in key positions (such as DG SPD, CGS, DGMO, DG MI, and DG ISI) can decide on a policy of nuclear assistance, and there is no official mechanism or informal organisational arrangement that can be used to block their intentions.

Another shortcoming in the Army’s organisational culture (which contains wider consequences beyond the issue of nuclear proliferation from Pakistan) is the reluctance to learn from its failures. As far as it is known, the Army also avoided any thorough investigation into the circumstances which allowed the activity of AQ Khan’s nuclear proliferation network, although Pakistan’s official version about the network stated that it was an unauthorised private initiative. It seems that since the exposure of the proliferation network in January 2004 the Army has maintained the practices and structure of the control system over the nuclear organisations, thus, theoretically, enabling the possibility of nuclear export activity. On the other hand, if the proliferation network operated according to official instructions, then the conditions for the reoccurrence of that structural procedure would still be valid.

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One of the major failures which was exposed in the military planning process, particularly during the 1971 War and the ‘Kargil Conflict’ in spring 1999, is the inadequate consideration of international circumstances and US foreign policy. The Army’s misperception of the international environment eventually hindered the successful outcome of military operations. Similarly, the Army might be inclined in its decision-making process to underestimate the international implications of another episode of nuclear export.

A further possibility for malfunctions in the control system is the inefficiency in the Army’s routine control of the nuclear organisations and in preventing proliferation as a result of the private initiative of their personnel or officials and middle ranking officers. As evident, the Army finds it difficult to control entities which are connected to it, but are not an integral part of its apparatus, such as militant organisations based in Pakistan (see also Chapter Three). Moreover, there is a possibility for independent initiatives of lower ranks within the ISI which is part of the military, but is a separate directorate. In extreme situations, such as the 1971 War, The Army central command lost control of several combat units which fought in East Pakistan. As a consequence, although the Army generally has proved to be a well disciplined
organisation, its strict supervision over the nuclear organisations might be partial, particularly when they serve its objective to empower Pakistan’s military strength: it seems that the Army’s senior command shows little interest in the internal affairs of the affiliated organisations as long as they serve the Army’s objectives.

In addition to the Army, the intelligence community sustains a role in national security decision making far beyond the traditional position of intelligence and security agencies. The intelligence agencies, and particularly the ISI, are one of the most important pillars of military dominance in Pakistan and have overwhelming influence on the national security agenda. The intelligence apparatus has an inherent tendency to favour covert operation as the main tool for handling the country’s security challenges due to its strong affiliation to the covert operations in India and Afghanistan.

The ISI’s intimate contacts and vested interests make the agency reluctant to maintain a proper balance between launching militant attacks in order to promote national interests and the international implications of these actions. Furthermore, the covert operations have positioned the ISI as a key player in any decision making on national security issues in light of its responsibility for the leverage Pakistan currently holds in the form of terror proxies against its arch-enemy, India; and in successfully guaranteeing a pro-Pakistani regime in Afghanistan. Hence, the ISI is unlikely to restrain its operations and give proper consideration to the diplomatic dimension of its activities.

The influence of the ISI and other intelligence agencies on national decision making is also relevant to their role regarding control over the nuclear programmes. The above tendencies might be an indication for the ISI’s favourable approach towards nuclear proliferation which is usually a clandestine project designated to promote Pakistan’s strategic objectives and ignore the strict international norms which forbid direct assistance to foreign nuclear programmes. The ISI might even show leniency towards private initiative to offer nuclear assistance to countries and elements in the Muslim world in view of the long period of radical influence of the militant groups and their spiritual leaders through their connections with the agency.

It seems that a reform to improve the control system over nuclear organisations should be closely linked to reforms in the defence establishment. In both cases assimilating the character of inter-agency cooperation is mandatory for sound decision making which takes a broader view on national security, as was intended in Bhutto’s unfulfilled reforms in the defence
establishment. In this regard, parallel to empowering inter-agency mechanisms for defence issues (namely JSHQ, JCSC and DCC), it is vital to strengthen the civilian flank of the defence establishment.
**Chapter Two: Glossary of Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AFI</td>
<td>Air Force Intelligence Directorate</td>
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<tr>
<td>AG</td>
<td>Adjutant General Branch</td>
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<td>AHQ</td>
<td>Air Force Headquarters</td>
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<td>AQ Khan</td>
<td>Abdul Qadeer Khan</td>
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<td>ASFC</td>
<td>Army Strategic Forces Command</td>
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<td>BBC</td>
<td>British Broadcasting Corporation</td>
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<td>C-in-C</td>
<td>Commander in Chief</td>
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<td>CAS</td>
<td>Chief of Air Force Staff</td>
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<td>CCC</td>
<td>Corps Commanders’ Conference</td>
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<td>CGS</td>
<td>Chief of General Staff</td>
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<td>CIA</td>
<td>Central Intelligence Agency</td>
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<td>CJCS</td>
<td>Chairman of Joint Chiefs of Staff Committee</td>
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<td>CLS</td>
<td>Chief of Logistic Staff</td>
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<td>CMLA</td>
<td>Chief Martial Law Administrator</td>
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<td>CNS</td>
<td>Chief of Navy Staff</td>
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<td>COAS</td>
<td>Chief of Army Staff</td>
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<td>CTJWG</td>
<td>Counter-Terrorism Joint Working Group</td>
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<td>DCC</td>
<td>Cabinet Committee for Defence</td>
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<td>DDG (A)</td>
<td>Deputy Director General, Analysis and Foreign Relations Wing</td>
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<td>DDG (B)</td>
<td>Deputy Director General ‘B’ Wing</td>
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<tr>
<td>DDG (C)</td>
<td>Deputy Director General, Counter-Intelligence/Internal Wing</td>
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<td>DDG (S)</td>
<td>Deputy Director General, Security/External Wing</td>
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<td>DG</td>
<td>Director General</td>
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<td>DG (CT)</td>
<td>Director General Counter-Terrorism</td>
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<td>DG (T)</td>
<td>Director General, Technical Wing</td>
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<td>DG ISI</td>
<td>Director General, Inter-Services Intelligence</td>
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<td>DG MI</td>
<td>Director General, Military Intelligence</td>
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<td>DG SPD</td>
<td>Director General, Strategic Plans Division</td>
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<td>DMS</td>
<td>Directorate of Medical Services</td>
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<td>FATA</td>
<td>Federal Administrative Tribal Areas</td>
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<td>FCNA</td>
<td>Force Command Northern Area</td>
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<td>FIA</td>
<td>Federal Investigation Agency</td>
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<td>FMC</td>
<td>Foreign Military Cooperation Directorate</td>
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GHQ - General Headquarters
GOC - General Officer in Command
GS - General Staff Branch
HQ - Headquarters
IB - Intelligence Bureau
IGA - Inspector General Armament
IGC&IT - Inspector General Communications and IT Branch
IGT&E - Inspector General Training and Evaluation Branch
IISS - International Institute for Strategic Studies
IJI - Islami Jamhoori Ittehad
IS Wing - Inter-Services Wing
ISI - Directorate of Inter-Services Intelligence
ISPR - Inter-Services Public Relations
ISSB - Inter-Services Selection Board
JAG - Judge Advocate General Branch
JCSC - Joint Chiefs of Staff Committee
JI&IO - Joint Intelligence and Information Operations Directorate
JSHQ - Joint Staff Headquarters
JW&TRG - Joint Warfare and Training Directorate
MES - Military Engineering Service
MI - Military Intelligence Directorate
MLA - Martial Law Administrator
MO - Military Operations Directorate
MOD - Ministry of Defence
MODP - Ministry of Defence Production
MOF - Ministry of Finance
MOFA - Ministry of Foreign Affairs
MOI - Ministry of Interior
MS - Military Secretary
NATO - North Atlantic Treaty Organisation
NCA - National Command Authority
NDU - National Defence University
NI - Navy Intelligence
NHQ - Navy Headquarters
NWFP - North West Frontier Province
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OP&PL - Operations and Plans Directorate
PAF - Pakistan Air Force
PILDAT - Pakistan Institute of Legislative Development and Transparency
PM - Prime Ministry
PML - Pakistan Muslim League
PML (N) - Pakistan Muslim League (of Nawaz Sharif)
PN - Pakistan Navy
PSO - Principal Staff Officer
QMG - Quarter Master General
R&D - Research and Development
RUSI - Royal United Services Institute
SAAG - South Asia Analysis Group
SD - Starr Duties Directorate
SECDIV - Strategic Export Control Division
SPD - Strategic Plans Division
STAFFDEL - Congressional Staff Delegation
VCOAS - Vice Chief of Army Staff
Chapter Three: The Strategic Thinking of Pakistan’s Military and the Element of Using Proxies as the Framework for Connections with Terror Organisations and the Nuclear Proliferation Network.

1. Introduction

After discussing, in Chapter Two, the main elements in the nature of Pakistan’s military and how they influenced the operation of the control system over the nuclear organisations this chapter will examine the second factor which encouraged nuclear proliferation from Pakistan: military strategic thinking and the extent of the integration of the notion of nuclear assistance in this conceptual framework. The emphasis of the analysis will be on the principle of using proxies which seems to be part of the military strategic thinking on both nuclear proliferation and terror sponsorship and they are also the main methods of the military in promoting its interpretation of national security objectives.

The accounts of AQ Khan’s nuclear proliferation network are a litmus test for evaluating the efficiency, capability and will of Pakistan’s control system over the nuclear organisations to prevent the incidence of nuclear export. The network operated, between 1987 and 2003, as an export venture involving nuclear technologies and related equipment. The network was originally created as an import network to answer the needs of Pakistan’s nuclear programme at least in the 1970’s and in the first half of the 1980’s.

As elaborated in Chapter One and in the Introduction of this thesis, Pakistan officially denied any complicity in the nuclear exports executed by the proliferation network. Soon after the exposure of the network through which Libya’s nuclear ambitions were realised and the revelations of the network assistance to Iran’s nuclear programme, the military regime in Islamabad quickly dismantled the network and neutralised the network’s main operators, and its head, the former DG KRL, AQ Khan. Pakistani spokesmen and scholars argued that AQ Khan operated without government authorisation and enjoyed a free hand in developing the nuclear programme under his responsibility (the uranium enrichment programme). It has been emphasised that most of AQ Khan’s partners in the proliferation network were non-Pakistanis and thus the responsibility for the nuclear proliferation should be shared by several countries, including western countries.

Even when concurring with Pakistan’s explanations about the proliferation network as a private venture without the knowledge or approval of Pakistan’s authorities, one should still question the efficiency of Pakistan’s control mechanism over the nuclear organisations due to
its poor performance in preventing nuclear proliferation from the country. Hence, it is vital to evaluate AQ Khan’s network as a phenomenon that might be only an inductive expression of a systematic malfunction in Pakistan’s control over its most sensitive assets.

Nevertheless, it appears that the nature and objectives of AQ Khan’s network have strong similarities to the operations of other non-state players which seem to serve Pakistan’s essential interests: militant organisations which operate to undermine India’s control of Kashmir and to promote the objective of an Afghanistan controlled by Pakistan’s allied militants after the military withdrawal of US and NATO forces. AQ Khan’s proliferation network appears to directly promote Pakistan’s interests too as manifested by consecutive heads of state (Prime Minister Zolfikar Ali Bhutto and martial ruler General Zia ul-Haq) and by one Army chief (General Mirza Aslam Beg): gaining financial revenues, acquiring valuable technologies for developing the nuclear weapons programme, strengthening Pakistan’s connections with Muslim countries, and creating a leverage in order to pressurise the US to maintain military and economic assistance (see Chapter One).

Moreover, if it is possible to portray a similar rationale of using non-state actors as proxies of Pakistan’s national security agenda for both nuclear exports and the militant attacks in India/Kashmir and Afghanistan, it will contribute additional support to the argument of this thesis (and of most scholars) that Pakistan’s nuclear exports were either sanctioned or with the awareness of Pakistan’s control system. Hence, the reinforcement of the above assumption that the military is responsible for the occurrence of nuclear proliferation suggests that its current character could again lead to nuclear exports.

This chapter will aim to examine the relations between the concept of nuclear assistance and the military’s strategic thinking by examining the element of using proxies in this intangible framework. It should be noted that this chapter will concentrate on proposing an analysis for the military connection with terror organisations. A scrutiny of these relations deserves a much broader analysis which is beyond the scope of this thesis. At the beginning, the strategic thinking of the military will be presented and will demonstrate how well-rooted the use of proxies is in Pakistan’s historical experience. Next, the organisational arrangements for directing both the proliferation network and the militant groups will be illustrated and finally
the discussion will deal with the similarities and differences between the two operations of the non-state participants.

2. Pakistan’s Strategic Thinking and the Significance of Proxies

The notion of promoting strategic objectives through third parties or proxies is incorporated in Pakistan’s national security thinking. Pakistan’s agenda was heavily influenced by the military and particularly by the Army which is the most dominant organisation in Pakistan’s defence establishment (see Chapter Two). Furthermore, for significant periods the Army had direct control over the country through martial rule. The Army itself had to rely heavily on security agencies (such as the Directorate of Inter-Services Intelligence - ISI) to maintain its interests in the internal arena and these agencies in turn contributed to the Army’s perceptions of the country’s strategic situation. In practice, Pakistan’s national security thinking was developed and conceived in the military’s various HQs and academic institutions, rather than in MOD or in any other civilian agency.

As a result, the strategic framework is concentrated in a limited military orientated perspective and less on a broader approach regarding Pakistan’s regional and global position and focus on the opportunities and threats which derive from its overall status. The considerations for ‘soft power’ such as diplomatic and economic leverages are on the sidelines of the consensual approach of promoting Pakistan’s national security through evident force and violent means. It would be inaccurate to assert that Pakistan is not an active player in diplomatic arenas (and in some forums even very active) when promoting its agenda, or tactfully adjusting its contacts with its neighbouring countries (mainly India and Afghanistan). However, Pakistan’s defence establishment (which determines both defence and foreign policies) has a strong inclination towards projecting power via aggressive means, such as military force and intelligence operations.

The ‘proxy approach’ of Pakistan is fundamental in its national security thinking in light of its strategic environment. According to Pakistan’s comprehensive defence policy, its main adversary has been India since the bitter partition of the two countries in August 1947 which caused large-scale inter-community violence between Muslims and Hindus and millions of refugees who were exchanged by both countries in the biggest population swap of all time. Furthermore, Pakistan’s abrupt independence process within a short period and the fact that its two sections were on opposite sides of the Indian sub-continent created various
complications for the newborn state which lacked any proper institutions and bureaucracy. Pakistan’s creation in a delicate situation led India’s prominent political figures to question its ability to survive as a unified sovereign entity. In turn, pessimistic Indian assessments had ignited Pakistan’s concerns about India’s aspirations to annex Pakistan into the Indian federation\textsuperscript{329}.

Pakistan also received a small portion of the mutual resources of British-India while most of the finances, production lines and military means were seized by India\textsuperscript{330}. In addition, in 1948, a few months following the partition, both countries clashed over the control of the Kashmir region, and this conflict has remained unresolved.

Moreover, India threatens the very core of Pakistan’s legitimacy by representing an opposite model for self-determination: Pakistan officially presents itself as the national homeland for Muslims in South Asia while India is a secular state which encourages the assimilation of Muslims in its society and in its civil service and political system. Pakistan’s position was weakened following the 1971 War when it lost its eastern region (Bangladesh), and thus its identity as representing the majority of Muslims in South Asia. Currently, around a third of the Muslims in South Asia reside in Pakistan while most of them remained in India or became citizens of Bangladesh.

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The above historical circumstances led to Pakistan’s designation of India as its main foe which must be confronted. Pakistan aspires for equilibrium with India in the power balance, with an emphasis on military strength, so Pakistan would be able to promote its interests in South Asia without India’s supremacy which has overshadowed Pakistan’s international and regional position. From this perspective Pakistan shaped its entire national security thinking: the need for an alliance with a superpower (usually the US) in order to create a balance with India, the aspiration for ‘strategic depth’ and control of Afghanistan, and intimate contacts with China following the latter’s enmity towards India, and the Sino-Indian military conflict of 1962.

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An equal position to India would enable Pakistan to promote its agenda for Kashmir and would allow it to consider various military options in order to take hold of that region. Elements in the senior command of Pakistan’s military might even aspire to change the entire power balance with India by separating India into different parts according to ethnic and religious affiliations. Moreover, Pakistan’s political and military leadership has always aspired to a central role for Pakistan among Muslim countries and in international and regional arenas: in light of Pakistan’s designation as a homeland for Muslims it pursued a leading position within the Islamic civilisation as a tower of Islamic thought and culture which could influence the entire Muslim Ummah.

However, Pakistan has been powerless to enforce its interests on India as a result of the latter’s superior position in South Asia. The military balance has always been in India’s favour having the resources to become a potential regional power in Asia and even a major power in the international community. Pakistan attempted, in 1948 and in 1965, to use conventional force in order to occupy the Indian part of Kashmir, but failed despite taking the initiative and by exploiting the element of surprise. In the ‘Kargil Operation’ of spring 1999 Pakistan failed even when it downgraded the scope of the military operation and its objectives: Pakistan strove for a limited territorial achievement in Kashmir which would strengthen its position vis-a-vis India. The operation was meant to force India into negotiating on the future of the region from a weaker position.

Failure when using conventional force led Pakistan to decide to turn to asymmetric means which would neutralise India’s conventional supremacy which is by all accounts continuing to increase. One obvious asymmetric means has been Pakistan’s pursuit of nuclear capability since the beginning of the 1970’s as a response to India’s nuclear programme development and its nuclear test in May 1974, and to the catastrophic outcome of the Indo-Pakistani war of 1971. Not only did Pakistan fail in two previous wars (in 1947-1948 and 1965) to force India to negotiate on a political settlement for the Kashmir conflict, but following the 1971 war it was severely weakened and this considerably diminished the prospect of coercing India on the Kashmir issue. As a result, following the 1971 war Pakistan’s strategic objective was to develop nuclear capability which would neutralise India’s conventional military supremacy.

In a similar way to the perception of using militant organisations to promote Pakistan’s agenda in Kashmir and in Afghanistan, there is a strong possibility that the Pakistan Army
assimilated the operation of nuclear entities in its strategic thinking. If indeed nuclear assistance was sanctioned by the military (as discussed in Chapter One), the assistance derives from Pakistan’s national security objectives. The nuclear export project was firmly connected to the perception by Pakistan’s defence establishment of India as Pakistan’s archenemy and the objective of this establishment was to achieve strategic parity with India. Following Pakistan’s successful campaign to acquire nuclear capability as a means to counter-balance nuclear India and its conventional military superiority it appears that Pakistan aspired to utilise its new capabilities in other ways in order to narrow the power gap with India.

First, Pakistan’s nuclear expertise and components were offered for sale in order to fund its development of nuclear and missile programmes and to launch extensive militant attacks in Indian-held Kashmir. Second, Pakistan essentially contacted Muslim countries in order to help them develop their indigenous nuclear capabilities in return for backup from its fellow Muslim countries in its struggle against India. This reasoning was foremost in Pakistan’s nuclear assistance to Iran, considered as potential strategic depth in the scenario of a full military conflict with India331.

Third, nuclear proliferation appears to be used to strengthen Pakistan’s leverage of the US in order to preserve American military and economic assistance to Islamabad and to prevent Pakistan’s international isolation. US support was one of the main pillars in Pakistan’s strategic thinking regarding the prime objective of modifying the strategic balance with India332. By allegedly initiating the nuclear export project Pakistan’s defence establishment aspired to signal its potential to jeopardise the international norm of nuclear non-proliferation and US interests, not only in South Asia but in other regions too such as the Middle East and East Asia. A limited assistance also increases the possibilities for future support and for more financial revenues. As a result, Pakistan probably avoided delivering complete capabilities (i.e., nuclear device/warhead or fissile material).

Fourth, in the specific cases of China and North Korea nuclear assistance was offered in return for a desired military capability which immensely improved immensely Pakistan’s deterrence against India: Pakistan received long-range missile systems (capable of carrying

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332 Pakistan: Between Mosque and Military, pp. 30-36.
nuclear warheads) from North Korea and critical nuclear assistance from China in the early and critical stages of Pakistan’s nuclear weapons programme.

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The nuclear capability, which became operational as late as the mid 1980’s, was quickly used as an umbrella for another kind of asymmetric war against India’s presence in Kashmir: insurrectionary attacks against India’s security forces and public installations parallel to agitation among the Muslim inhabitants who constitute the majority in the province. The excellent results of the militant forces in Afghanistan in the 1980’s against the Soviet occupation and their successful campaign (with external support including that of Pakistan) led Pakistan’s military high command to decide on the use of the same methods and launch a guerrilla war against India’s forces and sovereign presence in Kashmir: militant organisations were created and used their bases in Pakistan to infiltrate into Kashmir and to fight against India’s security forces throughout the 1990’s.

Although India threatened to launch a military campaign against Pakistan in light of its massive assistance to the militants (the tension between the two countries almost caused an armed conflict in the summer of 1990) Pakistan’s nuclear capability successfully deterred India from initiating a full scale war: a wide military conflict might provoke Pakistan into threatening a nuclear attack if its decision makers feared that the country’s existence was at risk, and in light of its Army’s inferiority vis-a-vis India’s armed forces. Furthermore, unlike the rounds of skirmish between the two countries until the end of the 1980’s, due to the nuclear dimension of any potential military conflict between the countries the international community hastily made efforts to ease the tension and indirectly served Pakistan’s objective by emasculating India’s military option. However, the attacks in Kashmir by militant groups did not brought the expected change in India’s position or diplomatic gains for Pakistan’s cause.

As a result, under its nuclear umbrella and what was perceived in Pakistan as India’s lack of military option to retaliate, the Army launched the ‘Kargil Operation’ in 1999 after Pakistan declared itself a nuclear state and conducted its first nuclear tests in May 1998. As part of this operation, the Pakistan Army sent regular forces (and not militant groups) into Indian-controlled Kashmir in order to achieve tactical gains which would pose a strategic threat to

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333 Pakistan: Between Mosque and Military, p. 212.
India’s hold on Kashmir. However, this time Pakistan faced international pressure, especially from the US, and was forced to withdraw its army units to their former positions.

The failure of the ‘Kargil Operation’ led to the expansion of the operational framework of militant attacks and included targets in India, beyond Kashmir. Two of the most distinctive terror attacks took place in the Indian Parliament in New Delhi in December 2001 and the Mumbai terror attack of November 2008 (‘26/11’). However, the hardened international perspective on terrorism as a result of the 9/11 terror attacks added constraints to Pakistan’s ability to use militant operations as a leverage on India. Launching terror attacks only increased the international criticism of Pakistan and the sympathy in western countries towards India. As mentioned, the current international restrictions on Pakistan also apply to initiating a limited military operation due to the nuclear dimension which would follow; while a full scale military conflict with India would be too risky due to Pakistan’s military inferiority. It seems that for now Pakistan is in a deadlock and incapable of forcing India by the use of its asymmetric means to succumb to Pakistan’s conditions for a solution to the conflict, not to mention the failure of the same means to narrow the power balance between the two countries.

Nevertheless, as exemplified above, the use of proxies was part of exploiting asymmetric means in the conflict with India both in nuclear proliferation and terror sponsorship. In light of the inferior position of Pakistan in the power imbalance with India, which is expected to persist in the foreseeable future, the tendency of Pakistan’s military to preserve the principle of using proxies for promoting its national agenda in all likelihood will continue.

3. The Notion of Proxies in Pakistan’s Historical Experience

The perception of promoting the primary objectives of national security through proxies is deeply rooted in Pakistan’s asymmetric efforts to challenge India both on the nuclear and terror fronts. Pakistan relied on third parties almost immediately after its independence: during the Indo-Pakistan War of 1947-1948 Pakistan was still chaotic following the labour pains of its creation: the armed forces were under the command of British officers who refused to allow the military to invade into Kashmir. As a result, Pakistan was assisted by Pashtu tribal warriors (called ‘Lashkars’) in its military campaign to capture the entire

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334 Seth G. Jones and C. Christine Fair, Counterinsurgency in Pakistan (Santa Monica, CA: RAND Corporation, 2010), p. 22.
Kashmir region. These irregular forces were instructed by Pakistan Army officers and were the leading forces in the conflict\textsuperscript{335}.

During the military regime of Field Marshal Ayub Khan (1958 - 1969) the idea of relying on proxies became an integral part of Pakistan’s national security. In this regard, according to a policy paper of a governmental think-tank from the time of Ayub’s regime, Pakistan should look beyond its alliance with the US when calculating its defence requirement and cultivate the option of irregular warfare\textsuperscript{336}. Prior to the Indo-Pakistani War of 1965 trained insurgents were used as infiltrators into the Indian-part of Kashmir. Their objective was to ignite a popular uprising against India’s control in the province and recruit the population to support the Pakistani invaders. However, the Kashmiris were reluctant to join Pakistan’s effort, and Pakistan’s ‘Operation Gibraltar’ of August 1965 failed\textsuperscript{337}.

In the crisis of 1971, which broke out following the results of the general elections of December 1970 and ended in the formation of Bangladesh in East Pakistan, the Army decided to rely on irregular forces in order to suppress the Bengali agitation. As a result, the Army decided to raise a volunteer force of tens of thousands of non-Bengali civilians settled in East Pakistan. Furthermore, religious parties received, from the Army, a role in East Pakistan and joined efforts with the security forces. Members of these parties formed peace committees throughout East Pakistan and functioned as the intelligence network of the Pakistan Army\textsuperscript{338}. The religious parties were also called to assist in forming two paramilitary counterinsurgency units and by September 1971 a force of fifty thousand volunteers had been raised: one for specialised operations and one for the protection of installations and vital points. The Army created a designated directorate for controlling the volunteer units\textsuperscript{339}.

The most successful outcome of Pakistan’s instrumental approach to proxies was its assistance to the Mujahedin who fought in Afghanistan against the Soviet presence (1979 - 1989). Pakistan’s covert operation in Afghanistan began in the 1960’s, before the Soviet occupation, in order to prevent the creation of an Afghan regime friendly towards India and Russia, and Pakistan concentrated on allying factions in Afghan politics\textsuperscript{340}. As part of the

\textsuperscript{335} Counterinsurgency in Pakistan, pp. 5, 7; Crossed Swords, pp. 48-49, 73; Pakistan: Between Mosque and Military, p. 28.

\textsuperscript{336} Pakistan: Between Mosque and Military, p. 46.

\textsuperscript{337} Ibid, p. 264.


\textsuperscript{339} Pakistan: Between Mosque and Military, p. 79.

\textsuperscript{340} Ibid, pp. 165-172.
resistance campaign against the Soviets, tens of thousands of militants were trained and armed in Pakistan, most of whom were Afghan refugees who had fled to Pakistan. Pakistan also provided the territory to construct the Mujahedin camps from which they could launch attacks against the Soviet forces in Afghanistan. The achievement of the Mujahedin to drive the Soviets out of Afghanistan convinced Pakistan that a similar strategy against India in Kashmir had the potential to succeed too.

In the late 1980’s, several militant organisations were formed and set up training camps and operational bases in Pakistan-held Kashmir (‘Azad Kashmir’) and began their operation in 1989 in the Indian-held part of Kashmir. As mentioned earlier, after a decade of concentrated attacks on India’s security forces and government installations in Kashmir, in the late 1990’s the militant organisations extended their scope of activities into the heartland of India. In Afghanistan, Pakistan’s defence establishment supported the Taliban as a proxy and assisted it in gaining control over most of the country until 2001. Following the 9/11 terror attacks Pakistan was forced to abandon, under heavy American pressure, its alliance with the Taliban regime in Afghanistan. However, subsequent to the US military operation ‘Enduring Freedom’ in October 2001 to eliminate the Taliban regime, Pakistan began to cultivate militant organisations that might be part of a future regime after the US/NATO military presence in Afghanistan ends. As a result, Pakistan helped the Taliban to recover its capabilities within Pakistan’s territory in order to use it as a key element in the future regime in Kabul. Furthermore, Pakistan assists militant groups in destabilising the current Afghan regime which is not committed to Pakistan’s interests. This assistance also enabled the militants to attack NATO forces in Afghanistan in light of their role as the main force behind the existence of the current regime in Kabul, and because the western forces are perceived by the militants as occupiers.341

Similar to the Army’s utilisation of terror organisations, in order to promote its objective to acquire military capabilities the Army used Pakistan’s nuclear entities as proxies for the development of nuclear capabilities and as it appear for providing nuclear assistance to foreign countries. Following the initial decision of the nation’s political and scientific leadership to pursue the route of nuclear weapons development in January 1972 (known as the ‘Multan Conference’) Pakistan Atomic Energy Commission (PAEC) established a

proliferation network for the clandestine import of nuclear materials and technologies. Later, in 1976, the new nuclear agency for developing the nuclear programme of uranium enrichment, the Engineering Research Laboratories (ERL, known later as Khan’s Research Laboratories - KRL), established a proliferation network for its own requirements. These kinds of networks for nuclear purchases were quite common among all states which aspired to develop nuclear capabilities.

In Pakistan’s case, the notion of using a proxy for promoting national security objectives in the nuclear sphere was further advanced. The necessity for a nuclear network served the policy decision of Pakistan’s defence establishment to develop its nuclear import network as a venture: Pakistan’s military used the nuclear network as its proxy in its presumed strategic decision to assist other countries in acquiring nuclear weapons. The Pakistan Army granted the head of ERL/KRL, Abdul Qadeer Khan (AQ Khan), the responsibility for the network in light of his vast successful experience in operating the network for acquisition of materials and equipment for Pakistan’s nuclear programme. AQ Khan argued that the network delivered or offered nuclear assistance to countries which were considered by the Pakistan Army as the most suitable ‘customers’ based on the parameters presented earlier.\(^\text{342}\)

It should be noted that apart from enlisting terror organisations and nuclear entities into the service of Pakistan’s national security agenda, the Army and intelligence community also used a similar approach with Pakistan’s political system. The defence establishment’s main proxies over the years have been the religious parties. According to Shuja Nawaz, the relations between the army/intelligence agencies and the religious parties can be characterised as “principle-client relations”.\(^\text{343}\) Due to the Islamic parties’ inherent conservatism regarding Pakistan’s national needs, their hostility towards India and their connections with radical Islamic militants, they became the Army’s preferred choice as allies in the political system. Furthermore, the religious parties increasingly expanded the number of their followers and sympathisers within the ranks of the armed forces and security agencies, mainly the ISI.\(^\text{344}\)

In light of their usually marginal power in the National Assembly (Pakistan’s lower house of parliament), religious parties were used by the Army in order to create a constant political threat to the government’s stability mainly through their organisational talent for recruiting


\(^{343}\) Crossed Swords, p. 373.

\(^{344}\) Pakistan: Between Mosque and Military, p. 24.
their supporters for mass protests and demonstrations. Pakistan’s religious parties and their connections with the Army warrant a separate discussion, but it can be determined that the Army relied on these parties and occasionally provided them with resources for public campaigns during and between general elections. During the martial rule of COAS General Zia ul-Haq, who had a stronger religious bent than most of his fellow generals, the Islamic parties and their clerics enjoyed greater influence in public administration and direct access to Zia himself and other heads of the military regime.

The Pakistan Army did not hesitate to use religious parties in order to limit the political support of the civilian leadership which had an agenda independent of the defence establishment. In this connection, Pakistan’s military used Islamic parties to weaken the political power of Prime Minister Zulfikar Ali Bhutto. Later, following the ISI influence on Bhutto to schedule general elections for March 1977 and the ensuing political crisis, the ISI encouraged the Islamic parties, which were Bhutto’s main political opposition, to destabilise the country and to set the conditions for another coup and martial regime. Bhutto’s daughter, Benazir Bhutto, was also considered a threat by the defence establishment. Bhutto was confronted too in the general elections of November 1988 by a religious party as a rival, the IJI, which received funds and support from the Army and intelligence services. Following the elections and Bhutto’s successful attempt to form a government IJI remained the most vocal opposition to her rule and after her overthrow by the President one of IJI prominent leaders, Nawaz Sharif, became Prime Minister.

Besides their role in the political system, the Islamic parties also participated in executing the Army’s agenda. The first Chief Martial Law Administrator (CMLA) Field-Marshal Ayub Khan cooperated with the religious parties in order to use their contacts in Arab countries to guarantee their backing of Pakistan’s position on Kashmir. In the internal crisis of 1971 with East Pakistan the Islamic parties assumed responsibility for recruiting support for the military regime’s position against the political aspirations of the Bengalis in the country’s eastern section. The religious parties formed a social network in East Pakistan which was in aid of Pakistan’s intelligence apparatus. Furthermore, the religious parties formed a

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348 Ibid, pp. 201-202, 205.
349 Ibid, p. 43.
volunteer force to support the army’s operations in East Pakistan. In 1993, General Musharraf as the Army’s senior officer responsible for operations and plans (and later the Army chief) also approached the Islamic parties for volunteers for his ‘Kashmir Operation’ plan.

4. The Nature of Pakistan’s System of Using Proxies for Nuclear Proliferation and Militant Insurgency

As discussed in the previous section, the idea of using proxies in order to promote national objectives is deeply inherent in Pakistan’s strategic thinking and historical experience. This section of the chapter will be devoted for illustrating how Pakistan has managed to operate its proxies as militant organisations and nuclear networks. The main focus of this section will be on the similar character of Pakistan’s approach to the different proxies and how it can explain the paradigm of Pakistan’s military involvement in nuclear exports.

4.1. Pakistan’s Control over Nuclear Proliferation and Terror Networks: The Organisational Dimension

The type of proxies in the service of Pakistan’s military agenda could be presented as a loose confederation of private companies and businessmen (in the case of the nuclear proliferation network) or as a flexible conglomerate of armed groups which were recruited to achieve Pakistan’s national security objectives. The clandestine nature of the nuclear and terror networks and their informal status influenced the nature of the state’s control mechanism: Pakistan’s defence establishment (mainly the Army and the ISI) avoided direct control over the operational side of these networks and provided them with a substantial degree of independence as long as they achieved the desired results. It could be said that the defence establishment was constantly aware of the activity of its nuclear and terror proxies. Nevertheless, it seems that this establishment could have been in the dark about specific nuclear shipments or terror attacks which might have occurred as a result of the self-interest of the proxies or out of inertia with their operation which was sanctioned by the state.

351 Pakistan: Between Mosque and Military, p. 79.
2) The city of Dubai in the United Arab Emirates (UAE). The proliferation network orchestrated, from Dubai, the transfer of shipments whose origins were usually outside
Pakistan. Following AQ Khan’s removal from KRL in March 2001, Dubai was designated as the main hub of the proliferation network.\textsuperscript{353}

From these two centres, the nuclear proliferation network contacted and operated around thirty companies in a wide geographical spread: from Switzerland to South Africa, Turkey and Malaysia.\textsuperscript{354}

As far as it is known, there was no involvement in the proliferation network by officials from other nuclear organisations. KRL and AQ Khan coordinated the activity of the proliferation network without any involvement from other nuclear organisations, like Pakistan’s Atomic Energy Commission (PAEC). KRL subordinate to the Army and to a designated directorate in the Army’s headquarters (GHQ), the Combat Development Directorate (CDD), which was established in 1993. Since 1999 KRL has been supervised by CDD’s successor, the Strategic Plans Division (SPD) which operates from the Joint Staff Headquarters (JSHQ) but reports directly to the Army chief.\textsuperscript{355}

Furthermore, the ISI too, through its Joint Intelligence Miscellaneous section (JIM, probably integrated in ISI’s ‘S Wing’) and its agents in Pakistan’s diplomatic missions was involved in assisting the network with the acquisition of items and equipment for Pakistan’s nuclear weapons programme. The ISI was responsible for guaranteeing the safety of Pakistani officials and scientists who were part of the nuclear proliferation network.\textsuperscript{356}

It seems that AQ Khan personally and his close associates were the focal point and main interlink between Pakistan’s defence establishment and private companies and middlemen who were part of the network. Apparently, AQ Khan was perceived by the establishment as an expert in locating the necessary equipment and technologies for the nuclear proliferation project. This image of Khan was based on his successful efforts to obtain and import the necessary items for Pakistan’s nuclear weapons programme, particularly during the 1970’s and 1980’s. Furthermore, AQ Khan had a list of potential suppliers in Europe, Asia, and North America which turned out to be very useful for importing related equipment for Pakistan’s nuclear programmes.


\textsuperscript{354} Ibid, pp. 75, 79-80.

\textsuperscript{355} Kaleem Omar, Army to Decide between Polish and PRC’s Tanks, The News (August 17th 1993), retrieved via the Federal Broadcast Information Service (FBIS).

\textsuperscript{356} Deception, pp. 4, 32, 43, 101, 249; Bahukutumbi Raman, Pakistan’s Inter-Services Intelligence (ISI), South Asia Analysis, paper no. 287 (August 1\textsuperscript{st} 2001). <http://www.southasiaanalysis.org/5Cpapers3%5Cpaper287.html> Accessed on November 27\textsuperscript{th} 2010.
As a consequence, AQ Khan enjoyed a free hand in dealing with the private section of his proliferation network and was assisted by his aides who served as the network’s middlemen in its contacts with private companies. Most of these middlemen already worked in the service of AQ Khan and KRL during the 1970’s and 1980’s to purchase equipment and technologies for Pakistan’s nuclear weapons programme. They were responsible for exploiting loopholes in the export control systems of foreign countries and approaching private companies for purchasing dual-use items. When the nuclear proliferation network expanded its operational framework, beyond importing components for Pakistan’s nuclear programme, and exported materials and technologies for the benefit of nuclear weapons programmes in foreign countries, the expertise and experience of the network’s middlemen were valuable for the success of the nuclear proliferation project.

Among the operators of the proliferation network was AQ Khan’s financial adviser, BSA Tahir, as head of SMB group which operated from Dubai. Tahir was involved in providing Iran with centrifuge designs and components for its uranium enrichment programme, and contacted a Malaysian company, Scomi, to manufacture specific centrifuge parts for Libya’s nuclear weapons programme. Another middleman was Gerhard Wisser who arranged, through his interlocutors in South Africa, the construction of a complex steel system to feed and withdraw uranium hexafluoride from centrifuge cascades. The loose organisation of the proliferation network and its layers of operation were intentionally used to conceal from significant numbers of apparently innocent companies the final destination of the dual-use equipment and its end use in nuclear weapons programmes.

4.1.2. The Organisational Arrangements for Controlling Militant Groups

Regarding control over Pakistan’s militant proxies it was more complex than that in the nuclear spectrum. There were several armed groups operating in Afghanistan and against India which were reluctant to be subordinate to one authority among the militants. Thus, a warlord equivalent to AQ Khan in the nuclear spectrum was not available to coordinate the militancy campaigns. The prominent Pakistani-based militant organisations which fought against India in Kashmir were Lashkar-e-Taiba, Jaish-e-Mohammad, Hizbul Mujahideen, and Harkat-ul-Mujahideen. The militant organisations varied in their ethnic and religious

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orientation, in their affiliation to one of the religious centres and to Pakistan’s Islamic political parties\textsuperscript{358}.

This situation was encouraged by the ISI which aspired for manoeuvring space between the different armed groups and to contain them with ‘divide and rule’ tactics\textsuperscript{359}. Apart from Pakistani-led militant organisations, there were also indigenous Kashmiri armed groups which Pakistan usually marginalised and occasionally suppressed in light of their agenda for the full independence of Kashmir (and not as a part of Pakistan). As a consequence, the ISI preferred to send militants who had battled against the Soviets in Afghanistan and were recruited from around the world to fight in Kashmir in the late 1980’s\textsuperscript{360}. Some of the armed organisations which have fought against India have also been involved in attacks against the US and NATO forces in Afghanistan since Operation Enduring Freedom in 2001\textsuperscript{361}.

There were other militant organisations which were involved solely in Afghanistan. During the Soviet occupation of Afghanistan in the 1980’s the ISI supported Mujahedeen groups which were based in Afghan refugee camps in Pakistan. These militant organisations recruited Afghan refugees, ethnic Pashtuns in Pakistan and Muslim fighters who joined the struggle as a result of their radical ideology. Pakistan’s religious parties like Jamaat e-Islami (JI) and Jamiat-e-Ulema Islami (JUI) aided the ISI and created several Mujahedeen groups\textsuperscript{362}. One prominent militant organisation, Hezb e-Islami, was the ISI’s most favoured armed group and its leader, Gulbuddin Hekmatyar, had already received the ISI’s assistance in the 1970’s. In the post-Soviet era of Afghanistan the ISI invested significant efforts to help Hezb e-Islami to seize control of Afghanistan but in vain\textsuperscript{363}.

In the early 1990’s, Pakistan shifted its support to the Taliban movement which began as a social movement and had already established itself in Afghan society and managed to control most of the country until 2001. Pakistan’s support for the Taliban was withdrawn for a short

\textsuperscript{358} \textit{Counterinsurgency in Pakistan}, pp. 23-24.


\textsuperscript{361} C. Christine Fair, \textit{Antecedents and Implications of the November 2008 Lashkar-e-Taiba Attack upon Mumbai}, Testimony presented before the House Homeland Security Committee, Subcommittee on Transportation Security and Infrastructure Protection (March 11\textsuperscript{th} 2009). \textless http://www.rand.org/pubs/testimonies/2009/RAND_CT320.pdf\textgreater Accessed on March 8\textsuperscript{th} 2012.

\textsuperscript{362} \textit{Counterinsurgency in Pakistan}, pp. 11-12.

\textsuperscript{363} US State Department, \textit{Developments in Afghanistan} (December 5\textsuperscript{th} 1994), Retrieved from US National Security Archive. \textless http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB227/1.pdf\textgreater Accessed on March 8\textsuperscript{th} 2012.
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period following the 9/11 terror attacks and Pakistan’s role in the US military operation in Afghanistan. However, after a short lull of a few years, the ISI re-embraced the Taliban as Pakistan’s contender for power in Afghanistan following NATO withdrawal from the country. As a result, immediately after operation ‘Enduring Freedom’ the ISI helped the Taliban to reorganise in Pakistan’s tribal areas next to the Afghan border and to continue assaulting the forces of the US-led military coalition. In this regard, the ISI spread its protection over the Taliban’s leadership, known as the ‘Shura Council’, and has allowed this group to settle in Pakistan’s tribal areas (FATA) and in urban areas of Karachi and Peshawar.\(^{364}\)

The ISI is the designated agency responsible for clandestine warfare including orchestrating militant operations. As a result, through its Joint Intelligence North (JIN), and later the ‘S Wing’, the ISI coordinated the operations of the militant organisations and was responsible for providing them with training infrastructure and delivering funds and weaponry.\(^{365}\) Occasionally, the ISI camouflaged its patronage of terror organisations and employed retired military officers as instructors for militants in their bases.\(^{366}\)

The lack of a unified command and control apparatus over the militants obliged the ISI to deal separately with each militant organisation in order to promote Pakistan’s national security interests. The ISI failed to create an acceptable authority among the different militant organisations even on a short term basis. Moreover, the ISI has been forced to deal with the tendency of militant networked groups to be dispersed and with flat hierarchy, although different strands of each militant group can communicate and coordinate their campaigns to some degree. In addition, individual armed groups may be hierarchically structured, but there is little or no overall command across the militant network.\(^{367}\)

The ISI’s links to militant groups were usually established when the armed organisation was created by the intelligence agency and hence owed its allegiance to the ISI. As a result, according to changes in circumstances, not always directly related to the militant group and its performance, the ISI could change the location of the militant organisation and the


\(^{366}\) *The Jihad Factory*, pp. 262-263.

financial assistance it received. Furthermore, the ISI constructed an administrative mechanism for channelling funds, weaponry and logistics to its terror proxies. In some instances, the ISI has also been involved in the recruitment stage of new fighters. Regarding the major militant organisations which fought against the Soviet presence in Afghanistan in the 1980’s and their power base was in Afghanistan, they held offices in the Baluchistan provincial capital, Quetta, and liaised with the ISI’s support mechanism. This system allocated resources for each militant group according to its operational effectiveness and its pro-Pakistani agenda. For important operations, the ISI tended to send supplies directly to field commanders in Afghanistan.

The planning of the overall militant operations was usually conducted in the Army’s HQ (GHQ) as part of comprehensive military planning regarding the military efforts to force India to release its grip on Kashmir and to elevate, in Afghanistan, an allied regime which would specifically prevent any Indian foothold on Pakistan’s Afghan border. As a result, the Military Operation Directorate and its director general (DGMO) were deeply involved in military plans which included the use of militants as proxies. The Army’s and specifically DGMO’s involvement were more apparent when militant organisations were used as an auxiliary force to the main military campaign. Furthermore, during the militant struggle against the Soviet presence in Afghanistan, army officers occasionally accompanied the Mujahedeen on their missions, mainly to instruct them on the proper use of their weapons systems which were supplied to them.

As evident from the control mechanisms over both kinds of proxies - in the nuclear and terror spectrums the nature of the control mechanisms was quite limited in connection areas and with no direct involvement of the national leadership or the military high command. In both cases, there was a designated agency responsible for the operational framework: CDD/SPD regarding nuclear proliferation, and the ISI regarding irregular warfare and terror attacks (the ISI was also a secondary player in the nuclear issue). Both heads of the ISI and CDD/SPD reported directly to the Chief of Army Staff (COAS), but usually there was no direct

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369 The Jihad factory, p. 279.
370 Pakistan: Between Mosque and Military, pp. 192, 273.
371 The Bear Trap: Afghanistan’s Untold Story, pp. 105-110.
373 Crossed Swords, p. 375.
connection between COAS or other Army generals and the proxies: militant organisations and KRL’s (headed by AQ Khan) private business partners.

+++ In the periods of civilian governments they did not have control over all the proxies and their instrumental role in empowering Pakistan’s national security was shaped and dictated by the military, and the government has been powerless to alter this policy\textsuperscript{374}. Mainly military rulers have attempted to ‘manage’ militant Islam, trying to exploit it so that it would serve its nation-building function\textsuperscript{375}. At best, the civilian national leadership was approached by the military for the authorisation of specific operational planning which involved militant proxies\textsuperscript{376}.

4.2. The Differences between the Nuclear Network and Terror Organisations as Proxies

Naturally, there are significant differences in the operation methods of militant groups and the nuclear proliferation network and there are different repercussions as a result of these distinctions for Pakistan’s contact and relations with the dissimilar proxies. Apart from the obvious contrast from the perspective of the state apparatus (between the characteristics of armed organisations and a proliferation network, based on scientists and businessmen), the most noteworthy difference is in the control mechanisms. As mentioned before, In the matter of militant organisations there is a need to control several entities. Regarding the nuclear proliferation project the state supervision is focused on a network which includes several private entities and individuals who are mandatory for its success.

Furthermore, due to the violent unyielding nature of the armed organisations it seems that the defence establishment found it more difficult to supervise all the activities of the militant organisations and their contacts with various radical Islamic elements within the country and beyond its borders. Some of Pakistan’s militant proxies, like the Taliban and Lashkar-e-Taiba, have maintained contacts with Al-Qaeda operatives and militant groups which have been fighting against Pakistan’s security forces. On the other hand, it was easier for the defence establishment to control the nuclear proliferation network which was directed by scientists and officials who are more disciplined and follow directives. Moreover, although AQ Khan

\textsuperscript{374} Deception, p. 229.
\textsuperscript{375} Pakistan: Between Mosque and Military, p. 2.
\textsuperscript{376} Crossed Swords, p. 515; Deception, pp. 240, 242-243.
enjoyed distinguished credentials and was perceived as a very powerful and influential figure in Pakistan’s domestic arena, his pivotal position in the network mainly required him to exercise authority and potentially simplified supervision of the network’s operation.

In addition, the characteristics of the nuclear proliferation project involved specific scientific and industrial knowledge about which sensitive items can be purchased and where and what can be discussed with foreign countries in order to offer them lucrative nuclear assistance designed for their needs. As a result, private entities and individuals who were part of the project worked together with the same objective. These entities were also most interested in the specific objective of increasing their financial revenue and this goal might occasionally disrupt the negotiation and initiation of a business agreement. However, the financial incentive was also a significant catalyst in promoting the nuclear proliferation project in light of its revenue potential. Furthermore, AQ Khan as head of KRL was the main point of contact between the network and the defence establishment and was entrusted with supervising and coordinating the activity of the proliferation network.

Regarding the use of terror groups as proxies, militant organisations usually have different agendas, and even contradictory ones, which could degenerate into violent rivalries. The military has to exercise its coercive power in order to bring this loose organisational conglomerate of militant groups, which perceive violent means to promote their interests as legitimate even among themselves, into a unified operational framework. As a consequence, Pakistan’s defence establishment has maintained direct contact with each terror organisation designated as proxy, normally through the ISI and its ‘S Wing’, and with no assigned point of contact like the position of AQ Khan and his control over the nuclear proxies in the proliferation network.

In addition, the nuclear proliferation network operated mainly outside Pakistan’s territory and its control centre was established in the city of Dubai under the directive of AQ Khan. The city’s location on important commercial sea and aerial routes, its proximity to Pakistan and its advanced modern infrastructures enabled the network’s command centre to better control and coordinate the nuclear proliferation efforts: as mentioned, a significant part of the nuclear exports were from sources outside Pakistan. Unlike the global spread of entities which were incorporated in the proliferation network and were located in Asia, Europe and Africa, most of Pakistan’s proxies for terror attacks have been located in Pakistan itself. Terror
organisations which operated in India and Afghanistan were usually stationed in the border areas and administered training camps and other facilities for their operations.

Another difference between the two kinds of proxies lies in the primary motivation for their initiatives. Regarding the terror proxies, although they enjoyed significant independence in their activities, and despite the fact that not all of them were sanctioned by the defence establishment, their operational framework was formulated by the defence establishment through Army GHQ and the ISI. These agencies determine the objectives and main arena of their accomplishments: occasionally Kashmir and Afghanistan depending on the strategic environment. For example, following the 9/11 terror attacks, and due to the considerable shift in the international circumstances, in order to prevent a backlash against Pakistan’s violent struggle in Kashmir, the ISI separated its entire framework of support for the militant organisation which fought against India from armed groups continuing to operate in Afghanistan.

On the other hand, it seems that in a substantial number of cases AQ Khan and his associates in the proliferation network were the ones who initiated the activity and defined its framework. For example, it appears that it was AQ Khan’s scheme to approach North Korea for assistance in developing long range missiles and he recruited the necessary military and civilian senior officials to promote this idea. The network was also the first to negotiate nuclear assistance with Libya in 1997 as a turn-key project, which later used Pakistan’s resources for setting the project in motion.

4.3. The Common Ground in Pakistan’s Control over its Proxies in the Nuclear and Terror Spectrums

As discussed in the first part of this chapter, the main consideration of Pakistan’s defence establishment (including its civilian agencies and the civilian national leadership) for the use of proxies to promote national objectives has been its own weaknesses in achieving these objectives with its own capabilities, and its feeble regional and international position. As a result, the nuclear proliferation network was used by the establishment to realise achievements as a first national priority such as securing US military and economic assistance, and sustaining Pakistan’s nuclear programmes both financially and technologically. Similar to the perception of using the nuclear network as a proxy, militant organisations operated in Afghanistan and India on behalf of Pakistan’s agenda in order to

377 The Jihad Factory, pp. 126-127.
undermine the internal stability in these countries and coerce them into containing the core of Pakistan’s demands and coalescing with its regional agenda.

Furthermore, in its approach to the different proxies Pakistan’s defence establishment strictly preserves its option to deny any involvement in its proxies’ operational framework which violates US and international norms. Preserving deniability was primarily vital for Pakistan’s national security in light of an expected severe international reaction to its policies of encouraging nuclear export and flourishing terror networks. Furthermore, these approaches have undermined continuous efforts specifically by the US, Pakistan’s main benefactor, to curb both nuclear proliferation and global terrorism orchestrated by Al-Qaeda and its affiliates. As a result, Pakistan’s official policy has argued that it has only provided moral support for terror organisations which operate against India and in Kashmir and has denied any military assistance to the Taliban. On the nuclear issue, Pakistan argued that the AQ Khan network was a private initiative of AQ Khan and his associates and the network operation was not sanctioned by the government.

The similarity in Pakistan’s evasive approach to the operation of both the proliferation network and the terror organisations was also illustrated in the arguments in which Pakistan officially claimed denial of complicity in their activities. When the insurgency in Kashmir was initiated by the Army and the ISI Pakistani diplomats and civilian officials claimed private individual and Islamist parties (like JI) were behind the support for Kashmiri militants. The government officially promised to close down training camps for Kashmiri militants set up by individuals and political parties and to halt “the training with outsiders, including Kashmiris”\textsuperscript{378}. A Similar attitude was publicly expressed by Pakistani spokesmen following the exposure of AQ Khan’s proliferation network: AQ Khan and his associates were driven by private initiative and had no support from any state agency in Pakistan. As with the international fighters who joined the insurgency in Kashmir, Pakistan’s government claimed that the nuclear proliferation network involved individuals from at least half a dozen countries; thus the network was also an international phenomenon and Pakistan’s share of the blame was equivalent to the other countries.

\textsuperscript{378} Pakistan: Between Mosque and Military. p. 294.
As a derivative of the desire of the defence establishment for deniability regarding its connections to terror, nuclear proxies and their activities, the latter enjoyed significant freedom of operation. It appears that the underlying principle of the establishment towards its proxies’ activities was that no questions were asked as long as the proxies achieved the desired results and effect. AQ Khan’s proliferation network served the goal of nuclear assistance to interested countries while operating freely outside Pakistan in the global market to acquire dual-use items and components for a nuclear weapons programme. As far as it is known, the defence establishment was not directly involved in orchestrating these acquisitions which were left for the discretion of AQ Khan and his associates in the network. A similar approach has probably been adopted by the defence establishment vis-a-vis terror organisations. Their goal was to force India to negotiate the issue of Kashmir in terms, agreeable to Pakistan, and to assist Pakistan in consolidating its influence in Afghanistan. Most of the attacks of the militant groups were probably their own initiative and they realised what was expected of them even without immediate instruction from the ISI or other factions of the defence establishment.

In order to preserve its denial capability, the defence establishment kept its connection as clandestine as possible, with both militant organisations and with the nuclear proliferation network. the ISI assumed the responsibility for orchestrating irregular warfare and terror attacks because of its secretive nature as a security agency (See in Chapter Two). Similarly, the supervision of KRL and subsequently of AQ Khan’s proliferation network was entrusted to CDD/SPD which was separate from the rest of GHQ and later became an independent directorate because of the sensitivity of its responsibilities.

5. Conclusion: Pakistan’s Approach towards Proxies and the Control System over the Nuclear Organisations

As demonstrated, since the first Indo-Pakistani war of 1947-1948, the utilisation of proxies is Pakistan’s eminent talent in order to achieve its strategic national security objectives: compensate for its inferiority in the power equation with India, align Afghanistan on its side, and attain in its global and regional aspirations forcing the US to support it both militarily and economically. Pakistan’s proxies empowered its position as a critical player in any scenario promoting regional stability in South Asia and prevailed over global terrorism and nuclear proliferation.
Pakistan’s dependence on its proxies in the nuclear spectrum poses a unique challenge to its control system over its nuclear organisations. As far as is known, the nuclear proliferation network was exposed and dismantled in late 2003, but it seems that Pakistan’s defence establishment keenly preserved the option to reactivate the network when necessary. In short, Pakistan’s strong inclination towards adopting proxies undermines any serious effort by it to seal the loopholes in its control system and improve it.

Currently, Pakistan’s nuclear apparatus and its military masters (particularly SPD) are promoting the expansion of Pakistan’s nuclear programme. It could be asserted that this new effort is accompanied by nuclear purchasing activities carried out by private entities to provide Pakistan’s need for components and technologies for its new nuclear venture. This clandestine activity could again become a basis for new proliferation activity, similar to the evolution of AQ Khan’s network from nuclear import to nuclear export operations. However, neutralising AQ Khan himself in 2004, a lack of his organisational and business virtues makes it harder for any future operation of a proliferation network to emerge.

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The similarities in the operation of the different proxies in the nuclear and terror spheres strongly raise the possibility that it was directed by a comparable institution with a clear and distinctive strategic thought. The magnitude and the pretentiousness of the nuclear proliferation together with AQ Khan himself between 1987 and 2003 and the nuclear proxies vast operational framework brought several countries significantly closer to a nuclear weapons programme (and offered similar assistance to several more) thus strongly suggesting that Pakistan’s control mechanism during that period contained the network’s operation. The control system has shared a similar rationale which has been behind supervising the operations of militant organisations in Afghanistan and in India/Kashmir: designated agency which controls the proxies but maintains the freedom of operation of these organisations in order to allow them to express their full strength and in parallel to present Pakistan as detached from the proxies’ forbidden business. CDD/SPD received the role in the nuclear sphere of supervising the relevant proxy (the proliferation network) while keeping its operation under the radar: in a scenario whereby the nuclear proliferation is exposed, Pakistan’s control system will be able to renounce it like the ISI’s role regarding irregular warfare and terrorism.

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It should be emphasised that even according to the official Pakistani position which denounced and exposed the proliferation network in 2004 the network still operated after the inauguration of the new control system in 1999. If SPD was not aware of AQ Khan’s activities, as the Army argues, then it showed appalling incompetence and complete irresponsibility by losing control over this proxy and enabled it to export sensitive nuclear technologies and materials out of Pakistan. However, strict military supervision over the nuclear complexes almost rules out this option.

Like some of the terror proxies which have flirted with terror organisations operating against Pakistan’s regime, there is a possibility that a few strands of the nuclear proliferation network were able to continue with their operation even without the consent of the defence establishment. Furthermore, it seems that retired officials and scientists who were part of the nuclear programmes can take an initiative while counting on the relaxed attitude of the security agencies towards their activities. These were the circumstances of the meeting, organised between Al Qaeda leader Osama bin-Laden, and retired nuclear scientists in August 2001 (see Chapter One): officials in the defence establishment knew about their deeds but avoided any action prior to US pressure to arrest them.

Furthermore, the freedom of operation and the relaxed supervision of the defence establishment over their activities open the door for cooperation between the two kinds of proxies. If Pakistan chooses to recreate another proliferation network, there is a possibility that private individuals within the proliferation network, motivated by greed or radical ideology, would decide to assist terror groups in Pakistan or global terror organisations like Al-Qaeda in developing WMD capability. The expansion of the militant phenomenon in Pakistan since the Soviet invasion of Afghanistan in 1979 increases the likelihood of an encounter between a potentially new nuclear proliferation network and some of the terror proxies, both of whom have the operational freedom to achieve results that was embodied in their character by the defence establishment itself.
Chapter Three: Glossary of Abbreviations

AQ Khan - Abdul Qadeer Khan
BSA Tahir - Bukhary Sayed Abu Tahir
CDD - Combat Development Directorate
CMLA - Chief Martial Law Administrator
COAS - Chief of Army Staff
DG ISI - Director General, Inter-Services Intelligence
DG KRL - Director General, Abdul Qadeer Khan’s Research Laboratories
DG SPD - Director General, Strategic Plans Division
DGMO - Director General of Military Operations
ERL - Engineering Research Laboratories
FATA - Federally Administered Tribal Areas
FBIS - Federal Broadcast Information Service
GHQ - General Headquarters
GTI - Gulf Technical Industries
HEI - Hezb-e-Islami
HM - Hizbul Mujahideen
HQ - Headquarters
HUM - Harkat-ul-Mujahideen
IJI - Islami Jamhoori Ittehad
ISI - Directorate of Inter-Services Intelligence
JEM - Jaish-e-Mohammed
JI - Jamaat-e-Islami
JIM - Joint Intelligence Miscellaneous
JIN - Joint Intelligence North
JUI - Jamiat Ulema-e-Islam
KRL - Abdul Qadeer Khan’s Research Laboratories
LET - Lashkar-e-Taiba
MOD - Ministry of Defence
NATO - North Atlantic Treaty Organisation
NCA - National Command Authority
PAEC - Pakistan Atomic Energy Commission
R&D - Research and Development
‘S’ Wing - Security/External Wing
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SPD - Strategic Plans Division
UAE - United Arab Emirates
US - United States of America
WMD - Weapons of Mass Destruction
Chapter Four: The Structure and Practices of Pakistan’s Control System over its Nuclear Organisations in comparison with Prominent Countries with Nuclear Programmes

1. Introduction

The close examination in previous chapters of the organisational nature of the Pakistan Army and its strategic thinking offered explanations for the phenomenon of nuclear export from Pakistan and for the existence of AQ Khan’s nuclear proliferation network. This chapter will broaden the discussion and will try to appraise Pakistan’s control system over nuclear organisations on an international comparative scale. The objective of this chapter is to evaluate Pakistan’s control system, examine the ability of the system to prevent proliferation, explain why it failed to do so and intimate whether nuclear proliferation from Pakistan may reoccur. This chapter will evaluate the export control practices of Pakistan in order to assess the efficiency of its national control system. Pakistan’s export controls will be scrutinised in the context of theoretical thinking on this issue and by comparing Pakistan’s export controls with other countries in order to expose the differences and perhaps the underlying problems in the Pakistani system.

In a broader sense, the efficiency of a national control system over nuclear programmes serves as the main indicator of a country’s readiness and ability to implement non-proliferation policy. The control system is an important instrument which the state uses in order to put its writ into effect, and it is a crucial component of national security. The control system comprises the practices, procedures and organisational culture of decision-making processes, division of responsibilities and mechanisms of exercising power over non-conventional assets: strategic capabilities, R&D institutes (both facilities and personnel), technologies, and materials. The national control system has several functions including those related to non-proliferation objectives, such as the safety and the security of non-conventional capabilities and countering any attempt by unauthorised individuals to gain non-conventional equipment for illegal purposes (crime and terrorism). In addition, the control system is a crucial element in emergencies necessitating the deployment or even operation of nuclear weapons. During these precarious periods the control system functions as a command and control apparatus over the nuclear forces with the ability to order the launch of a nuclear attack.
Export control mechanisms are usually a central function of the control system, and they are primarily designed to prevent a country’s loss of technological information. Nuclear-related equipment and dual-use items constitute an important component in any national aspiration for military superiority over other countries. Hence, export controls are considered a crucial tool in any non-proliferation efforts and in any attempt to evaluate them. Moreover, akin to nuclear command and control in wartime, in normal times the export control mechanisms are the main manifestation of the national control system in light of their comprehensiveness and the bureaucracy needed to support these mechanisms. As a result, this chapter will deal with the term control system mainly as it relates to the export control apparatus.

Unlike the broad literature and research regarding the operational complexity of deploying nuclear capabilities, and the knowledge of when these devastating capabilities are required, much less is said in academic debate about the subject of export controls. With the spread of knowledge and equipment essential for nuclear development, export control arrangements are also significant for assessing the possible use of nuclear weapons. Nevertheless, few publications exist describing the nature of export controls and especially their importance in non-proliferation efforts. Most of the existing literature which deals with export controls aims at assisting commercial exporters to understand the legal procedures and restrictions relevant to the export of defence and dual-use items: ways of obtaining an export licence, the applicable regulations, the legal documents needed for submission with the export application, etc. Thus, the majority of publications can be defined as sharing the ‘legal-commercial approach’ in light of their focus on the legal dimension of export control mechanisms. ‘The Export Control Law and Regulations Handbook’379 is an example of a comprehensive publication which covers the legal frameworks and procedures for export controls in several key countries.

Furthermore, the limited amount of literature in Security Studies dedicated to export control mechanisms and their contribution to non-proliferation objectives is focused on evaluating their efficiency from a procedural point of view. According to this ‘practices approach’,

efficient export control systems should include specific bureaucratic arrangements and administrative tools which curtail any eventuality of assistance to WMD programmes. Among other matters, this approach emphasises the importance of developed schemes of enforcement and penalties that should exist parallel to the export control mechanisms to ensure the success of non-proliferation efforts. In addition, one of the main practices stressed by this approach is the cooperation between a national export control system and international export control regimes as the main arrangement for exchanging information, for unified standards, and for cooperation between countries.

The method of the ‘practices approach’ for evaluating export controls is developed in ‘To Supply or to Deny: Comparing Export Controls in Five Key Countries’[^380]. In this publication, each of the selected countries is examined on specific administrative arrangements and legislations, and a comparison made between the arrangements of other selected countries. Apart from a comparative analysis between export controls in different countries, some publications focus on a specific national export control system and examine its practices. It should be emphasised that both the ‘legal-commercial’ and the ‘practices’ approaches give similar weight to legal and administrative arrangements, but the first approach tries to explain it for the benefit of potential exporters while the latter analyses the practices in order to strengthen non-proliferation objectives.

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This chapter will try to offer a newly self-developed approach, the ‘structural approach’, for evaluating export controls (and thus control systems in general), and scrutinises the bureaucratic aspects of export control mechanisms. Analysing Pakistan’s export controls according to the ‘structural approach’ is more appropriate than the other approaches mentioned earlier (the ‘legal-commercial’ and ‘practices’ approaches).

After establishing the method for assessing the subject of control systems, it is important to emphasise that the ‘structural approach’ can be used as a mean for comparative analysis, and does not apply solely to the case study of Pakistan. By comparing Pakistan’s export controls with export controls of other countries in accordance with the ‘structural approach’ it will be possible to illustrate the differences between Pakistan and other countries and the structural problems which facilitated nuclear assistance from Pakistan.

Hence, the discussion will first deal with the evolved export controls of western countries: the US, the UK and Germany. These countries have diverse and long experience in preventing WMD-related assistance which is a result of their strong commitment to non-proliferation norms. The goal of seeking common ground among western countries is to suggest a theoretical framework for the structural dimension of export control mechanisms based on these countries’ wide experience in operating a national control system.

Based on the new theoretical framework and the conclusions drawn about western export controls an evaluation will be made regarding the experience of export control mechanisms of non-western countries with considerable familiarity in directing nuclear programmes, and the export of military and dual-use technologies will be evaluated. The chosen countries for analysis are Russia and India which are both nuclear weapons countries and have a wide potential for defence and dual-use items export. The export controls of these countries evolved more slowly than in western countries mainly because of the limited involvement of the private sector in defence and dual-use export.

Finally, subsequent to formulating the structural principle of export controls and evaluating their implementation, Pakistan’s export control mechanisms will be examined in comparison with other national export controls. The comparative analysis is expected to emphasize the structural weak spots of Pakistan’s export controls and the missing organisational elements.

Each section of this chapter is devoted to a specific country and will focus on the character and responsibilities of export control agencies, and decision-making processes. In addition, the comparative analysis will also deal with export controls on defence items in general in light of the similarity between their export control process and that on dual-use items related to nuclear weapons. The supervision over state-owned defence industries resembles in its nature and goals the control system over agencies responsible for nuclear weapons development. In addition, in a broader sense, nuclear programmes are also considered as military programmes and there is a strong resemblance in the state’s attitude towards both kind of sensitive items - defence equipment and dual-use components and technologies.

Furthermore, each section will deal with various structural elements of the export control mechanism: the degree of involvement of the national leadership, the division of responsibilities between the different agencies, special export control processes for examining
the requests of state-owned entities and the fundamental narratives which guide the export control mechanisms.

2. The Framework of Export Controls

Export controls are comprehensively defined by the Institute for Science and International Security (ISIS) as a set of public measures for determining the order of foreign trade activities in respect of goods, information, work and services, results of intellectual activity, which can be used to develop WMD, their means of delivery, other weapons and military equipment. The purpose of export controls is to limit the ability of unauthorised users in obtaining unlawful commodities. Export control mechanisms are one of the key elements of policy designated to prevent proliferation of WMD-related items carried by sovereign states. As discussed earlier, export control mechanisms are also the standard expression of a national control system over nuclear organisations.

There are several elements which contribute to the complexity of export control systems: rapid technology evolution; the lack of internationally harmonised rules; the complexity of laws and regulations; and the limited government resources available to conduct the control. Export controls also have wide-ranging economic considerations and states can use liberal regulations in order to gain a trade advantage over their competitors.

Furthermore, another layer of export control arrangements exists above the national level and it is necessary for handling challenges which derive from globalisation processes in addition to combined inter-state efforts. Several international regimes of export controls were formed in order to consolidate unified international norms, standards, and control lists among major suppliers for the transfer of sensitive military and WMD-related items. These regimes’ guidelines are embodied, respectively, in international arms control treaties: the Nuclear Non-Proliferation Treaty (NPT), the Biological Weapons Convention (BWC) and the Chemical Weapons Convention (CWC). The four principal regimes are:

1) The Nuclear Suppliers Group (NSG) establishes guidelines and the control list for transfers of nuclear-related dual-use equipment, materials and technologies which could

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381 For better explanation of the concept of export controls, it is recommended to use the report on export controls of the Institute for Science and International Security (ISIS): Roadmap to Responsible Export Controls: Learning from the Past <http://www.exportcontrols.org/index.html>. This report is also referenced in this chapter when relevant.

382 Export Control Law and Regulations Handbook, p. 5.

383 Ibid.
make a significant contribution to an unsafeguarded nuclear fuel cycle or nuclear explosive.\(^\text{384}\)

2) The Australian Group (AG) strives to prevent any contribution to chemical and biological weapons programmes through the supply of chemical precursors, biological agents, and dual-use equipment. The participating governments in this regime agree to common guidelines and control lists for chemical and biological export licensing.\(^\text{385}\)

3) The Missile Technology Control Regime (MTCR) is an association of supplier states that aim to prevent the proliferation of unmanned delivery systems for WMD and to coordinate national export control licensing efforts. MTCR has two categories of controlled items: Category I includes complete systems and sub-systems (capable of carrying a payload of five-hundred kilograms over a range of at least three-hundred kilometres); and Category II includes missile-related components that could be used for production of Category I systems.\(^\text{386}\)

4) The Wassenaar Arrangement (WA) is also an informal agreement which was established to control transfers of conventional weapons and sensitive dual-use goods and technologies.\(^\text{387}\) WA includes agreed lists of items.

In addition, following the 9/11 terror attacks and the exposure of AQ Khan’s network of nuclear proliferation in April 2004 the United Nations Security Council adopted Resolution 1540. The resolution requires member states to implement internal legislation to prevent non-state organisations from manufacturing, acquiring, or transporting WMD within or from their territory.\(^\text{388}\)

Effective national export control mechanisms should combine efforts between governments and companies.\(^\text{389}\) Government agencies have prime responsibility for deciding whether to supply or to deny licensing requests. The private sector also influences export controls, since


\(^{385}\) See the AG official website <http://www.australiagroup.net/en/index.html>.

\(^{386}\) See the MTCR official website <http://www.mtcr.info/english/index.html>.

\(^{387}\) The official website of WA <http://www.wassenaar.org/introduction/index.html>.

\(^{388}\) The official website of the UNSCR 1540 committee <http://www.un.org/sc/1540>.

\(^{389}\) Another player in export control systems is the Non-Governmental Organisations (NGO’s) sector, which takes part through its outreach activities. NGO’s facilitate information exchanges between national government agencies and provide training through a network of experts. However, NGO’s only play a supportive role to government’s efforts, and usually do not share any responsibilities within the export control mechanism.
research and development (R&D), production, and marketing of advanced technology are not solely under state-owned enterprises. Industries in many countries implement an Internal Compliance Programme (ICP) to ensure compliance with the state’s export control regulations.\textsuperscript{390}

As discussed earlier, national export controls are characterised and formulated according to the country’s administrative arrangements and organisational culture. However, there are elements which are considered, by the widely held ‘practices approach,’ as obligatory requirements for effective export control mechanisms:

1) Bureaucratic process. An export control mechanism should consist of administrative institutions which are part of the national governmental system. These agencies have legal responsibility for reviewing and implementing export control policies. A legislative framework should determine the designated government organisations which are involved in implementing export regulations. In addition, there should be a mechanism for dispute resolution by higher authorities in the government.\textsuperscript{391}

2) Licensing system. The licensing system allows government authorities to regulate the transfer of sensitive items and technologies. The licensing system consists of all the legal frameworks, agencies and forms that appertain to export applications. The licensing system comprises officials that receive and decide on export applications and officials who participate in the decision-making processes regarding the application. The activity of the licensing system depends on the submission of an application that includes information about the potential export: the exporter’s identity, the technological and quantity specifications of the items, the destination and the customer’s details.\textsuperscript{392}

3) Regime adherence. This requirement is based on the country’s participation in export control regimes (such as the MTCR and NSG) which includes adopting a legal basis for adherence to the regime guidelines, and the designation of institutions to carry out the policy which derives from the regime’s instructions. Some countries are not members of an export control regime, but still adhere to its guidelines.\textsuperscript{393}

4) Control lists. These lists define items that are subject to licensing requirements. An effective export control mechanism should include separate lists for different dual-use and

\textsuperscript{390} To Supply or to Deny, p. 9.
\textsuperscript{391} Ibid, p. 17
\textsuperscript{392} Ibid, pp. 16-17.
\textsuperscript{393} Ibid, pp. 17-18.
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military items: nuclear, biological, chemical, missile and other means of delivery, and conventional weapons\(^{394}\).

5) Controlled list of countries. A ‘black list’ of countries exists to which exports are limited or prohibited. In most cases the list includes countries that are under suspicion of developing WMD programmes, or countries which are under UN sanctions. Occasionally, the list could also include countries that are considered irresponsible because they sponsor terrorism or as a result of a violation of copyright and industrial espionage activities. A country could also be on the control list due to internal or regional instability (civil war, military conflict, etc.)\(^{395}\).

6) Catch-all clause. A catch-all clause is the legal instrument that prohibits companies from any kind of assistance to WMD programmes. Usually the catch-all clause determines that companies should refrain from the export of items that they have “reason to believe” are part of an effort to develop WMD programmes. This provision is aimed at preventing companies from assisting WMD programmes, even if the items for export are not included in the control lists\(^{396}\).

7) Customs authority. The customs service is responsible for inspecting transfers and preventing the illicit export of WMD dual-use and military-related items\(^{397}\).

8) Information sharing. In order for export control systems to be effective, governments must explain their requirements to industry. A country can also share information with other countries and members of export control regimes\(^{398}\).

9) Verification. An export control mechanism should have agencies and procedures that will be responsible for confirming that the information included in the export application is accurate\(^{399}\).

10) Record keeping. Decrees that records of all licenses and transactions be properly maintained and made available to other agencies upon request\(^{400}\).

11) Penalties. Designated agencies review suspect exports and enforce penalties as determined by officials and experts. These penalties should include confiscation of items that are

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\(^{394}\) Ibid, p. 17.

\(^{395}\) Ibid.

\(^{396}\) Ibid.

\(^{397}\) Ibid.

\(^{398}\) Ibid, p. 18

\(^{399}\) Ibid.

\(^{400}\) Key Elements of an Effective Export Control System.
illegally exported, fines levied on convicted exporters, and prison sentences for state and industry officials who give assistance in bypassing export control regulations401.

12) Training. Officials in the export control mechanism should receive instruction as part of a non-proliferation training scheme402.

13) Transhipments. Items in transit through the country are subject to control laws and regulations403.

14) Public notification. Conveys the government’s responsibility to keep the public informed on all export control policies404.

3. Pakistan’s Export Control Mechanisms and their Evaluation according to the ‘Practices Approach’

Export controls were apparently already necessary in Pakistan during the 1980’s when Pakistan successfully developed nuclear and missile programmes. However, Pakistan’s export control mechanisms mainly evolved following its nuclear tests of May 1998 which officially ended Pakistan’s policy of nuclear opacity. Concretely, the reforms were supposed to be part of Pakistani efforts to remove international military and economic sanctions against it which were launched following its continuing nuclear activities. Another goal was to portray Pakistan as a responsible nuclear state with reliable command and control over its nuclear capabilities, which was fundamentally important in light of Pakistan’s potentially explosive conflict with another nuclear weapons country, India. The formulation of the export controls was further consolidated in 2004 following the exposure of AQ Khan’s nuclear proliferation network405.

It should be noted that Pakistan’s nuclear organisations have been under military supervision almost since the beginning of the development of nuclear weapons (see Chapter One). The reforms in the export control mechanism were mainly intended to consolidate the dominant role of the Pakistan military in the national control system by officially enshrining its de-facto status. This character of the supervision over the nuclear organisations in Pakistan is extensively elaborated upon throughout this thesis.

401 Ibid.
402 To Supply or to Deny, p. 18.
403 Key Elements of an Effective Export Control System.
404 Ibid.
As a result of the reforms, Pakistan adopted most of the administrative measures which are considered mandatory by the ‘practices approach’ as detailed earlier. Some of them were already in use under the Export Policy Order which is an annual update of the Import and Export (Control) Act of 1950. Following the exposure of AQ Khan’s proliferation network and the adoption of UNSC resolution 1540, Pakistan created, in 2004, an official legal framework with a new parliamentary act called ‘the Export Control on Goods, Technologies, Material and Equipment related to Nuclear and Biological Weapons and their Delivery Systems Act, 2004’.

Both above-mentioned legislations led to the formalisation of most of the administrative measures for export control required by the ‘practices approach’. Most of the internal procedures for export controls still remained opaque in these primary legislations and there are overlaps and contradictions in them. However, the focal elements of Pakistan’s export controls are encapsulated in the legal framework and they can be measured according to the standards of the ‘practices approach’.

The principle of bureaucratic process is manifested in the legislation in their determining the division of authority among the different government agencies. It also designated the Oversight Board of Export Control as the highest arbitrator when disagreement arises in inter-agency consultations on export of WMD-related equipment and dual-use items.

The licensing system for exporting WMD-related and dual-use items by the private sector is officially arranged and detailed in regulations called ‘Export Control Rules’, enacted in 2009,

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and which stem from the Export Control Act of 2004\textsuperscript{409}. The statutory regulations set the procedures for private exporters i.e. how to apply for a licence, the documents needed with the application, and what the process for granting an export license is. However, there is no information on the licensing process for exports on behalf of the Ministry of Defence and these export applications are exempt from both legislations\textsuperscript{410}. The exemption of the majority of the exports is most probably granted to state agencies. As other parts of this chapter will indicate, the exemption procedure is common in many countries which can export dual-use and WMD-related materials and defence equipment.

Regarding the principle of regime adherence, Pakistan is not a member of most arms control treaties (particularly the NPT) nor any of the export control regimes. However, Pakistan’s official non-proliferation policy corresponds to international norms in this sphere and adheres to the standards of the export control regimes\textsuperscript{411}. For example, Pakistan’s current control lists of supervised items are similar to the control lists of the relevant export control regimes.

The control lists mentioned above also endorse the principle of the ‘practices approach’. Following the Export Control Act of 2004, Pakistan published control lists of items which need to be scrutinised according to the export control regulations. There is a separate control list for each WMD programme: nuclear, biological, chemical, and their means of delivery\textsuperscript{412}. On the other hand, Pakistan avoided publishing a list of controlled items of conventional weaponry.

The Export Control Act of 2004 also endorses other elements of the ‘practices approach’. The act includes a catch-all clause which requires exporters to notify the pertinent authorities of any knowledge regarding the possibility of a diversion of the export in order to develop WMD capabilities\textsuperscript{413}. The act also determines punitive measures in the case of violations and

\textsuperscript{409} Government of Pakistan/Ministry of Foreign Affairs, \textit{Export Control (Licensing and Enforcement) Rules, SRO 450(I)/2009 (May 29th 2009).} The SRO is available on SECDIV website \texttt{<http://www.mofa.gov.pk/SECDIV/Export%20Control%20(Licensing%20and%20Enforcement)%20Rules%202009.pdf> \textsuperscript{Accessed on March 14th 2012.}}

\textsuperscript{410} See: \textit{Export Policy Order, paragraph 4(2) (C).}

\textsuperscript{411} \textit{Strategic Export Controls: Case Study of Pakistan, pp. 11-13.}

\textsuperscript{412} Government of Pakistan/Ministry of Foreign Affairs, \textit{Control Lists of Goods, Technologies, Materials and Equipment related to Nuclear and Biological Weapons and their Delivery Systems, SRO 1078(I)/2005, Gazette of Pakistan} (October 22\textsuperscript{nd} 2005). The order was published by the IAEA in INFCIRC 669 \texttt{<http://www.iaea.org/Publications/Documents/Infcircs/2006/infcirc669.pdf> \textsuperscript{Accessed on December 29th 2011.}}

\textsuperscript{413} See: \textit{Paragraph 5(3) of the Export Control Act, 2004.}
unauthorised export\textsuperscript{414}, sets the procedures for record keeping\textsuperscript{415}, and also applies to export through transhipment\textsuperscript{416}.

In addition, the assignments of the customs authority and verification of the ‘practices approach’ are also classified in Pakistan’s export control system: the customs authority is defined in the legal framework and in the institutional arrangements in terms of its ability and that of other relevant authorities to verify the authenticity and reliability of every application for export licence\textsuperscript{417}. The verification principle is also expressed in the regulation implementing the Export Control Act of 2004\textsuperscript{418}.

Pakistan’s export control system lacks three elements of the ‘practices approach’. The first is transmitting the export control policies and procedures into the public domain. Although, since 2004, Pakistan’s government has published essential information about export control mechanisms there are still considerable gaps in transparency, particularly about the decision-making process and the considerations for evaluating an export application.

The second element is training of personnel recruited for implementing the export control process which probably takes place but about which little is known. However, Pakistan received external assistance from the US in improving the awareness of export control mechanisms in its officials\textsuperscript{419}.

The third element is a ‘black list’ of countries for which the export control system should exercise higher vigilance when considering export of dual-use items to an end-user located in one of these restricted countries. Pakistan’s control system never officially presented any such list, but its authorities probably compiled this kind of list and demonstrated more care in examining any connection which might undermine foreign policy objectives.

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In conclusion, from the above analysis of Pakistan’s export control mechanisms according to the ‘practices approach’ it is clearly shown that this approach is not useful in identifying the bureaucratic problems in Pakistan’s export controls. Although some elements are missing and others only partially exist, their combination is still far from indicating a significant loophole

\textsuperscript{414}See: Paragraphs 7-10 of the Export Control Act, 2004.
\textsuperscript{417}Strategic Export Controls: Case Study of Pakistan, p. 9; Pakistan’s Export Control Measures.
\textsuperscript{418}For details, see: The Export Control (Licensing and Enforcement) Rules.
\textsuperscript{419}US Department of State, Country Report on Terrorism, Chapter Five, Section 5.1 (A) (August 18\textsuperscript{th} 2010). \texttt{http://www.state.gov/s/ct/rls/crt/2010/170262.htm} Accessed on December 31\textsuperscript{st} 2011.
in the export control mechanisms that might explain the extensive nuclear proliferation from Pakistan.

The Export Control Act of 2004 and its regulations were indeed enacted after the exposure of AQ Khan’s nuclear proliferation network. However, as evident from the Export Policy Order and from statutory regulations which were in place before the exposure of the proliferation network, export controls already existed in Pakistan including a licensing system and bureaucratic process which were under the preview of MOD and its subsidiaries. In addition, trading with nuclear materials was supervised by Pakistan Nuclear Regulatory Authority (PNRA)\(^420\). As far as can be determined, AQ Khan’s nuclear proliferation would still be possible even after the reforms in Pakistan’s export controls which were initiated after the nuclear tests of May 1998: officially, AQ Khan Research Laboratories (KRL) and all the other nuclear organisations continue to be exempt from export control mechanisms\(^421\). Nuclear proliferation occurred by exploiting fundamental structural weaknesses in the export control mechanisms. The parameters of these weaknesses will be elaborated upon later in this chapter.

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4. The ‘Structural Approach’ for Export Controls and its Pillars

As apparent from the above analysis of Pakistan’s export controls, evaluation of the efficiency of these mechanisms only by examining the administrative elements of the system fails to explain the broader picture: they could be manipulated in accordance with the will and interests of the officials responsible for their operation. In order to assess the ability of a national control system to achieve non-proliferation goals through export control mechanisms one must examine the relations between the agencies which have responsibilities for export controls and the power structure behind them. It is essential to understand how decision making takes place and which organisations have influence over the process. Similar to the ‘practices approach’, the ‘structural approach’ also includes several elements to evaluate the efficiency and resilience of export control mechanisms.

\(^420\) Several statutory orders (SROs) addressed the export of defence items and nuclear goods in the 1980’s and 1990’s. PNRA Ordinance of 2001 gave it the responsibility for issuing NOC for all nuclear exports. See: Strategic Export Controls: Case Study of Pakistan, p. 6.

The first procedural parameter of the ‘structural approach’ is the involvement of the national leadership in the export control process. This involvement is an indicator of the importance placed by the government on the control over WMD-related entities both in the public and private sectors. The national leadership is expected to be more sensitive to the political and international implications of sensitive defence and dual-use exports. Additionally, the political leadership can integrate the different considerations when evaluating strategic export; thus the national leadership will possibly exercise more caution than specific agencies (and R&D entities) with a narrower perspective before authorising the export of WMD-related items.

The national leadership could potentially be involved in many aspects of supervision over nuclear organisations, the defence industry and private exporters of dual-use items: the leadership can steer discussions towards the desirable objectives of the development of nuclear programmes, decide on the division of responsibilities among the various export control agencies, and determine the legal framework of the export control mechanism through legislation and the enactment of regulations. Regarding decision making on export applications, usually the involvement of the political leadership is quite limited: most responsibilities for issuing export licences are delegated to the professional mandarins and to mid-level officials. The leadership at ministerial level normally participates in the evaluation of export applications with particular importance: either they are defined as sensitive as a result of their destination to problematic countries/end users or because of the nature of the transferred equipment; or the export has a high financial value.

The second procedural element of the ‘structural approach’ is extensive inter-agency mechanisms. At every level of decision making within the export control framework it is essential that the final verdict should be agreed upon by several agencies which participate in the discussions and can express their independent position. Inter-agency mechanisms can neutralise the promotion of the narrower interests of a specific agency, and strengthen the possibility that the conclusion reached on an export application will be sound after considering a wide spectrum of factors.

There are two organisational elements in the ‘structural approach’: an influential Foreign Ministry and a designated agency for export controls. Both of these elements are essential for the efficiency of the control system in securing non-proliferation objectives. The diplomatic corps in the foreign ministry is the most sensitive in the national bureaucracy to international norms and to foreign relations with other countries. Hence, a dominant foreign
ministry involved in export control mechanisms and with working relations with the nuclear organisations can be the best guardian against any decision on export of sensitive and dual-use items. This task is crucial in light of the limited time the national leadership (usually also aware of the international dimension) can attend to export control issues and normally only decides on extremely delicate export applications.

As for a designated export control agency, its existence guarantees that within the export control system there is a government body which is dedicated to monitoring the proceedings, and this agency is usually responsible for their implementation. It is preferable that this agency is administratively connected to ministries which also have an interest in adequate supervision of exports: either the Ministry of Commerce or the Ministry of Foreign Affairs.

Moreover, it can generally be said that export control mechanisms dominated by civilian agencies will be more conscious of non-proliferation objectives. Normally, the defence establishment, and particularly the armed forces, assign a lower priority to decision making encompassing international considerations. The military prefers to promote national security objectives by adopting more aggressive measures. In addition, the defence establishment and the military are more receptive to the interests and economic situation of the defence industry which usually serves the armed forces with its R&D. Hence, though the defence establishment is aware of the potential risks to national security when exporting advanced technologies, the defence establishment is expected to be inclined towards authorising sensitive exports. The extent of influence of civilian agencies, and particularly the Foreign Ministry, over export controls is one of the methods for the evaluation of export control mechanisms.

There are two legal elements of the ‘structural approach’ important for the operation of export control mechanisms in preventing proliferation: that it will apply to all exporters, including state-owned corporations and R&D institutes for defence and non-conventional equipment, and that potential exporters are excluded from the decision-making processes of export control mechanisms. For obvious reasons, national governments are reluctant to implement export control regulations on their own agreements with other countries on defence cooperation and in sensitive areas. However, the exemption of state-owned entities is a potential loophole in the supervision which might be exploited by state corporations which are eager to increase their revenue. It is also quite clear that a conflict of interests is inherent by the participation of R&D organisations of WMD in decision making on exports beyond an
advisory capacity on professional and technical issues. Naturally, these organisations have a vested interest in promoting a relaxed attitude towards export controls and in approving their own export applications.

The last parameter of the ‘structural approach’ is shared with the ‘practices approach’ and includes a **comprehensive legal framework and regulations**. As mentioned earlier, every efficient export control system should not just be organised properly according to the above principles, but it can also exercise its writ through a variety of administrative tools and verify that its decisions are implemented and that exporters do not abuse the licensing process.

After discussing the ‘structural approach’ and its elements, the next part of the chapter will examine, in accordance with this approach, the organisational dimension of export control mechanisms in various countries and what can be learned from their experience.

### 5. Western Model of Export Control

The experience of western countries is the most comprehensive in the international community. Western countries have had the most time to improve their control mechanisms, to close loopholes and to assimilate an organisational culture which is highly aware of the importance of preventing proliferation. Export control mechanisms in Europe and North America are far from being flawless; occasionally they are breached and equipment related to nuclear programmes is transferred contrary to export regulations and in defiance of non-proliferation norms. However, export control mechanisms in western countries are better planned and equipped than other countries to prevent proliferation the extent of which has shown a decline from western destinations. Even non-western countries (such as Russia and China) have conducted reforms in their export controls adopting the principles of western countries and their organisational arrangements.

Hence, the western experience in export control mechanisms will be considered in this thesis as the parameter for comparison. In addition, the structural and organisational arrangements of the export control apparatus in western countries should be the preferred objective of any country which aspires to an effective national control system for preventing proliferation. The point of analysing the organisational dimension of western export controls should be to use them as a litmus test for evaluating export mechanisms. Not surprisingly, there is a close
similarity between the western model and the theoretical framework for export control mechanisms which was outlined at the beginning of this chapter.

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The western model for export controls (as a manifestation of the national control system) is based on three pillars: general guiding principles, formal regulations, and division of responsibility between government ministries and agencies. These pillars lay the foundation for decision-making processes regarding export controls and their combination defines the nature of the control system.

In this part of the chapter, the export control mechanisms of three leading western countries - the US, the UK, and Germany - will be discussed in order to show the execution of the above theoretical definitions of export controls. The main objective is to analyse the organisational dimension of the export control mechanisms in these countries in order to compare their different practices and to illustrate the structural principles of the western export controls. This model will be used later in this chapter to examine the export controls of non-western countries, and of Pakistan as the primary test case of this thesis. Hence, in this part of the chapter the organisational structure of each country will be presented and then broader insights will be concluded, including a model for export controls.

5.1. The US Export Control Mechanisms

The US export control mechanisms are more developed and comprehensive than those of any other country, and the volume and scope of US sensitive exports are the world’s largest\footnote{To Supply or to Deny, p.38.}. The US government has long and extensive experience in export control and in the non-proliferation field. Furthermore, the US has championed non-proliferation goals for several decades. It has initiated, acceded to or signed almost all major non-proliferation treaties and conventions, including export control regimes (NSG, AG, MTCR, and WA). US interest in export controls stems from its military and economic capabilities\footnote{Ibid, p. 26.}.

Historically, the US government aspired to find the correct balance between national security and foreign policy interests (on the one hand), and commercial and industrial interests (on the other hand). This goal led to some complex policy conflicts: between maintaining military superiority and achieving military interoperability with allied countries; and between...
participating in world economic trends of outsourcing and globalisation and the need to preserve the national defence industrial base\textsuperscript{424}.

The US divides its legal framework for export controls into two main structures, one for military items and one for dual-use items: The Export Administration Act (EAA) regulates exports of dual-use items, and the Arms Export Control Act (AECA) for the export of defence items, including WMD-related items\textsuperscript{425}. In addition, there is other legislation for specific fields: the National Defence Authorisation Act (NDAA) for missiles and satellite-related items; the Nuclear Non-Proliferation Act and the Atomic Energy Act for nuclear dual-use items; and the Chemical Weapons Convention Implementation Act for the chemical field\textsuperscript{426}.

Government agencies which are part of the export control mechanisms were given a variety of administrative tools in order to assist them in preventing illicit proliferation or smuggling of illegal arms and defence products. Most of these bureaucratic procedures are under the Export Administration Regulations (EAR) which comprises the legal basis for the supervision of overall US exports by the federal government.

The central administrative tool is the US control lists. These lists correspond directly with the lists maintained by the various international export control regimes. Exporters must generally submit a license request to the appropriate agency for any item on one of these three lists:

1) US Munitions List (USML). USML is a list of defence items, services and related technical data. USML is divided into twenty-one categories of defence equipment, ranging from firearms to nuclear weapons. USML is part of the International Traffic and Arms Regulations (ITAR) which implements the AECA for defence items’ export\textsuperscript{427}.

2) Commerce Control List (CCL). CCL is set to be the primary and obligatory regulation with regard to exporting dual-use materials and equipment which relates to advanced weapon systems, WMD-related R&D programmes and their means of delivery. In addition to corresponding with lists of international export control regimes, CCL includes items controlled in furtherance of US foreign policy and other objectives, including anti-terrorism, crime control, regional stability, Firearms Convention, UN sanctions, and short

\textsuperscript{424} Export Control Laws and Regulations Handbook, p. 343.
\textsuperscript{426} To Supply or to Deny, p. 29.
\textsuperscript{427} Ibid, p. 45.
supply reasons. CCL also contains ‘black lists’ of unlisted items destined for sensitive end-uses or dubious end-users.\textsuperscript{428}

3) Militarily Critical Technologies List (MCTL). MCTL represents a working assumption as to what technologies and equipment must be protected from unauthorised export. MCTL itself, however, is not an export control list, but provides guidance in the development of such lists. MCTL is revised each year to reflect changes in technologies and the world environment. The technologies included in MCTL are perceived as providing the key to maintaining US military superiority.\textsuperscript{429}

The US export controls also rely on catch-all controls to ensure that problematic dual-use exports - which are not otherwise subject to export controls - are capable of being tracked or even refused as an export transaction.\textsuperscript{430} Furthermore, the export control mechanisms include designated lists to evaluate the identity of the end-user and their right to an export license, such as Non-Proliferation Lists (persons and entities that were reprimanded under various non-proliferation executive orders),\textsuperscript{431} Entity List (foreign end users who pose a risk of diverting US exports for the development of WMD),\textsuperscript{432} and a List of States Sponsoring Terrorism.\textsuperscript{433}

5.1.1. The Structure and Framework of the US Export Control Mechanisms

The US export controls are the most complicated among countries with advanced WMD programmes and a defence industry, and both its structure and decision-making processes include several players and administrative procedures: almost every technological category related to WMD and military capabilities (e.g. nuclear weapons development) has a designated export control process. The responsibilities within the sphere of export of WMD dual-use and related items and of military technologies are divided among a significant number of agencies. Hence, the system heavily relies on mechanisms of inter-agency consultations and on coordination between the different administrative entities.

As a consequence, there is no specific agency which is designated for export control issues. The main government export control bureaucracy is the Directorate of Defence Trade

\textsuperscript{428} Ibid, p. 46.
\textsuperscript{430} Ibid.
\textsuperscript{431} Export Control Laws and Regulations Handbook, p. 358.
\textsuperscript{432} Ibid, p. 359.
\textsuperscript{433} Ibid, p. 360.
Controls (DDTC) of the Department of State (DOS)\textsuperscript{434}. DDTC is responsible for the export control mechanisms for defence items (as included in AECA and ITAR). Moreover, DDTC (with the Department of Defence - DOD) determines whether an item should be considered a defence item and thus under its licensing jurisdiction\textsuperscript{435}. However, for carrying out its export control responsibilities DDTC relies on inter-agency processes and the support of other federal ministries and organisations, such as the US Customs and Border Protection (CBP), and the intelligence community\textsuperscript{436}. The agency responsible for administering and enforcing export controls on dual-use items is The Bureau of Industry and Security (BIS) of the Department of Commerce (DOC)\textsuperscript{437}.

Regarding the export of nuclear-related items, the National Nuclear Security Administration (NNSA) of the Department of Energy (DOE) takes part in the licensing process of nuclear dual-use items. According to export control regulations, DOE, has the prerogative to review any export application submitted (to DOC/BIS) for export of a dual-use item\textsuperscript{438}. When commercial enterprises apply for export licenses, NNSA assesses the proliferation risk associated with the proposed transfer\textsuperscript{439}. Another state entity involved in export control of nuclear items is the Nuclear Regulatory Commission (NRC)\textsuperscript{440}. NRC authority extends to nuclear reactors, fuel cycle facilities and equipment, nuclear material, and radioactive waste. NRC obtains the views and recommendations of other governmental agencies and departments in its pre-licensing reviews, and makes its standpoint and recommendations to DOE and DOC on nuclear-related export authorisations under their jurisdiction\textsuperscript{441}.

The Office of Foreign Assets Control (OFAC) of the Department of Treasury (DOT) is the main enforcement export control agency at ministerial level. OFAC administers and enforces economic and trade sanctions against targeted foreign countries, terrorism sponsoring

\textsuperscript{434} Ibid.
\textsuperscript{437} To Supply of to Deny, p. 39.
\textsuperscript{439} See: NNSA website \texttt{<http://nnsa.energy.gov>}. 
\textsuperscript{440} Export Control Law and Regulations Handbook, p. 383.
organisations and international narcotics traffickers in line with US foreign policy and national security goals\textsuperscript{442}.

Apart from the government agencies that participate in the export control mechanism, the private sector is also aware of the non-proliferation dimension. Most of the nuclear, aerospace, military, and other research and development (R&D) institutions and enterprises also have their own export control bureaucracy. Similarly, hundreds of US companies have their own export control administration\textsuperscript{443}.

Unlike the control system of Pakistan and other countries which will be discussed in this thesis (Russia and China), the US armed forces have a secondary role in export control mechanisms, and in an advisory capacity: the armed forces are asked to provide their views on the implications of a technology export from the US to maintain their military superiority and to safeguard broader national security interests. Contrary to the situation in the above-mentioned countries and even in some western countries, the armed forces are not involved in the control over R&D organisations of WMD and the defence industry which is managed by private enterprises and not by state-owned corporations. As a result, the US export control mechanisms are directed completely by civilian agencies. The only exception is the personal participation of the Chairman of Joint Chiefs of Staff (CJCS) at the highest level of appeal regarding a decision on exporting dual-use items.

The defence establishment is mainly represented in the export control mechanism by the Department of Defence (DOD) which is also a civilian agency dedicated among other things to supervising the military services. The Defence Technology Security Administration (DTSA) of DOD provides the stewardship for technology security policies and programmes of DOD: DTSA does not issue export licenses, but primarily guarantees in its recommendations (to DOS on the export of defence items and to DOC on dual-use items) that critical US military technological advantages are preserved and that transfers which could prove detrimental to US security interests are controlled and limited\textsuperscript{444}.

\textsuperscript{442} See: OFAC website \url{http://www.treasury.gov/about/organizational-structure/offices/Pages/Office-of-Foreign-Assets-Control.aspx} Accessed on March 12\textsuperscript{th} 2012.

\textsuperscript{443} To Supply or to Deny, p 44.

\textsuperscript{444} Ibid, p. 40.
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5.1.2. US Decision Making on Export Controls

The export licensing process is more complicated than the one described in this sub-section: unlike in other countries, the US export control mechanism consists of several types of licenses and several different procedures. They are determined based on the character of the export application, such as the item’s technological specifications, its destination, its sensitivity etc. This sub-section will only deal with the relevant applications of the export
control process for the comparative analysis between the US export controls and that of other countries, and specifically of Pakistan’s export control mechanism.

As mentioned earlier, inter-agency involvement is a fundamental principle in US export controls which is exceptionally diversified: apart from the federal agencies specified above, there are other organisations which participate in the export control process, such as R&D institutions, divisions in other departments, and independent directorates. There are two main rules which rationalise the US export control mechanisms: all the views of all relevant government bodies should be considered, and several agencies or senior officials must reach a consensus for licensing a specific export application.

The export control process is comprised of two separate routes, based on the character of the export item: a defence related item (as defined in USML) or a dual-use one (as mentioned in CCL). DDTC (of DOS), under DOC’s recommendation, determines through the Commodity Jurisdiction (CJ) process the adequate export control process in cases where an item can be attributed both as defence and dual-use item.\(^{446}\)

For export of defence items, DDTC manages the licensing process, and all exporters of defence-related equipment must be registered with it prior to any export application.\(^{447}\) An export application for nuclear reactors and nuclear safety items is submitted to NRC.\(^{448}\) The information submitted by registrants is reviewed by DOT to ensure there are no outstanding law enforcement concerns from an economic perspective.

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\(^{446}\) To Supply of to Deny, p. 46; Ian N. Fergusson and Paul K. Kerr, The US Export Control System and the President’s Reform Initiative (February 16th, 2012), Congressional Research Service (CRS) report for US Congress, p. 11.

\(^{447}\) Getting Started with Defence Trade.

\(^{448}\) To Supply or to Deny, p. 43.
Figure 11: Main Decision-Making Processes in the US Export Control Mechanism

Export of Defence Items which are included in USML under ITAR/AECA

- CJ Process
- Registration of the Exporter and Submission of the Export Application
- Inter-Agency Review
- Control Lists Review
- End-Use/End User Clarifications
- Congress Notification (For Important Defence Export)

Export of Dual-Use Items which are included in CCL and under EAA

- CJ Process
- Registration of the Exporter and Submission of the Export Application
- BIS Internal Review
- Inter-Agency Review
- Congress Notification (For Important Defence Export)

Abbreviations:
- AECF - Advisory Committee on Export Policy
- AECA - Arms Export Control Act
- BIS - Bureau of Industry and Security
- CCL - Commerce Control List
- CIC - Chief of the Joint Chiefs of Staff
- DDT/DF - Directorate of Defense Trade Controls
- DJ - Division J - Director General of the Central Intelligence Agency
- DOJ - Department of Justice
- DOC - Department of Commerce
- DOS - Department of State
- DOT - Department of Transportation
- EEA - Export Encryption Act
- EARB - Export Administration Review Board
- EAA - Export Administration Act
- DOE - Department of Energy
- NNSA - National Nuclear Security Administration
- DOE - Department of Energy
- NRC - Nuclear Regulatory Commission
- OFAC - Office of Foreign Assets Control
- PMA - Bureau of Political-Military Affairs
- SNEC - Subgroup for Nuclear Export Control
- USML - United States Munitions List

- ITAR - International Traffic in Arms Regulations
- MTEC - Missile Technology Export Control Group
- NASA - National Aeronautics and Space Administration
- NNSA - National Nuclear Security Administration
- NRC - Nuclear Regulatory Commission
- OC - Operating Committee
- OFAC - Office of Foreign Assets Control
- PMA - Bureau of Political-Military Affairs
- SNEC - Subgroup for Nuclear Export Control
- USML - United States Munitions List

Government Department (equivalent to a ministry), with its Designated Agency in the Export Control Process

An Administrative Stage in the Export Control Process

Designated Organisational Responsibilities/Participation

Designated Organisational Participation in Export Controls on Nuclear Facilities and Materials

Appeal Mechanism
DDTC refers a significant number of applications to DOD for comment and recommendations. In relation to the export of items included in USML, applications are also referred for review to other government agencies which possess relevant technical knowledge, such as other DOS divisions, DOE, and the National Aeronautics and Space Administration (NASA). Each participating agency can refuse or add conditions for granting an export licence. For specific WMD-related items, DDTC also refers applications to designated inter-agency working groups directed by DOS Bureau of Political-Military Affairs (PMA): the Missile Technology Export Control Group (MTEC) for missile items, the SHIELD committee for chemical and biological weapons and the Subgroup for Nuclear Export Controls (SNEC) for nuclear items\(^{451}\).

If the export application is authorised through the above inter-agency processes, DDTC conducts several clearances before granting the export license: reviews the application’s information against relevant control lists of entities (‘Black Lists’), and establishes the end-use and end-user of the defence export. The US Congress must also be notified prior to the approval of applications that involve exports of substantial defence equipment\(^{452}\). If Congress has no objection, DDTC can approve the export application\(^{453}\).

Regarding the export of dual-use items, as mentioned, BIS of DOC is the designated agency which manages the export control process: It is at BIS discretion to decide if an inter-agency consultation is necessary or whether BIS can decide to approve the export application\(^{454}\). However, due to the different factors which need to be considered in order to approve the export of dual-use items, most applications are discussed in inter-agency forums.

Normally, BIS asks for the views of the three prominent federal ministries in the export control system: DOS, DOD, and DOE, and each of these ministries can also review any export application submitted to BIS. Usually these three ministries are more interested in export applications which include equipment relevant to the development of WMD-related programmes or which might have ramifications for national security. Other agencies and

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\(^{451}\) Ibid, p. 39.

\(^{452}\) As defined in the Export Control Act, Congress approval is mandatory for any item of significant military equipment on the USML having a non-recurring research and development cost of more than $50,000,000 or a total production cost of more than $200,000,000.


\(^{454}\) Executive Order 12981 (December 5\(^{th}\) 1995), Section 3-6.
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authorities can be invited to the inter-agency process, depending on the specific character of the export application.

Without a consensus in the inter-agency process, a mechanism of appeal is initiated with an option for the participants in the inter-agency consultation to seek a higher authority. The resolution process begins with the Operating Committee (OC) which is the lowest level for appeal, and has four members, representatives of MOC (which also chairs the committee), DOS, DOD, and DOE. For federal departments represented in OC, the second tier of appeal is the Advisory Committee on Export Policy (ACEP), chaired by the Secretary of Commerce (equivalent to a Minister) and agency members at the level of Assistant Secretary also participate in OC.

For ACEP members, the Export Administration Review Board (EARB) is the third tier of appeal at a ministerial level and is chaired by the Secretary of Commerce. The Secretaries of DOC, DOS, DOD and DOE are members in addition to CJCS and the Director General of CIA who are non-voting members. Other heads of federal agencies might also be invited to the present their views. Any permanent member of EARB can appeal to the President as the highest arbitrator.

5.2. The UK Export Control Mechanisms

The UK export control experience was largely acquired after World War Two. The UK tried to retain its increasingly fragile military role in world politics in part through military sales, and arms sales were used to cement political ties with certain states (especially those in the Middle East with oil resources) and to support the cost of retaining an ‘independent’ defence industry base.

The British export control mechanism suffered from several structural problems, and government thinking on the regulation of arms transfers has been dominated by somewhat contradictory economic, security and political motives. UK export control mechanisms are opaque in nature and leave significant room for the officials and agencies involved in the export control apparatus to use their discretion: there is still a strong tendency to adopt a ‘case

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456 Ibid.
by case’ approach when dealing with export applications\textsuperscript{459}. At least until 2003, there was no single set of integrated guidelines covering exports, licensing and customs procedures\textsuperscript{460}. Each department with a responsibility for export controls has its own set of internal guidelines\textsuperscript{461}. These internal departmental guidelines were traditionally the only source of criteria for deciding on individual licence applications.

The export control mechanisms are designated mainly for the private sector. Exports from the defence industry under a scheme of government-to-government transfer are exempt from the export control process. In addition, commercial companies acting on behalf of the government can also claim exemption\textsuperscript{462}.

In spite of the above tendencies, Britain’s export controls were arranged in a clear legal framework which leaves little room for misunderstanding. The main export control legislation is the Export Control Act of 2002 which sets the legal basis for export controls and the licensing process. The main export control regulations for defence items are the Export of Goods (Control) Orders (EGCO) of 1994\textsuperscript{463}. Britain’s membership of several international export control arrangements helps determine the composition of EGCO. As for supervision over the export of dual-use items it is based on ‘The Dual-Use and Related Goods (Export Control) Regulations (DUEC)’ which correspond with the regulations of the European Commission (EC)\textsuperscript{464}.

There are two control lists of goods and technologies. Defence items are controlled under the Military List (also known as the Munitions List) which is part of EGCO. The list covers military and security goods and related material. The Military List is based on the control list of the Wassenaar Arrangement, and it also includes restrictions on military exports to

\begin{thebibliography}{99}
\bibitem{459} Ian Davis, \textit{The Regulation of Arms and Dual-Use Exports: Germany, Sweden, and the UK} (Oxford: Oxford University Press, 2002), p. 129.
\bibitem{460} According to the information on the website of the Department for Business Innovation and Skills (BIS). The site includes export control guidance, lists of controlled goods, the texts of OGE\textsuperscript{L}s and latest news updates. \texttt{<http://www.berr.gov.uk/export.control>}
\bibitem{461} \textit{The Regulation of Arms and Dual-Use Exports}, p. 130.
\bibitem{464} \textit{The Regulation of Arms and Dual-Use Exports}, p. 127; \textit{United Kingdom Strategic Export Controls Annual Report 2010}, p. 5.
\end{thebibliography}
particular countries and for specific kinds of equipment\textsuperscript{465}. Britain’s export control mechanisms use the control lists of dual-use items in accordance with EC regulations. Apart from the main list of goods, a second list covers very sensitive items which are still subject to intra-EU licensing\textsuperscript{466}. Furthermore, the relevant agencies of the export control bureaucracy compiled ‘black lists’ of countries and entities for their internal use\textsuperscript{467}.

Britain’s export control licensing system delegates the responsibility from government bureaucracy to the export company and its reliability is a key factor in the success of non-proliferation efforts\textsuperscript{468}. The system includes three types of permanent export licences: Standard Individual Export Licence (SIEL) for a single consignee, Open Individual Export Licence (OIEL) for a specific individual exporter of non-sensitive items who can demonstrate that the company has effective internal compliance procedures in line with export control regulations, and Open General Export Licence (OGEL) which completely removes the need for an exporter to apply for a specific licence. Exporters with OGEL are periodically scrutinised on their adherence to export control regulations\textsuperscript{469}. There are different OGELs covering different items. Most major exports of defence items tend to require an SIEL, while exporters of dual-use goods and certain types of military equipment only need to register for an OGEL\textsuperscript{470}.

5.2.1. The Structure and Framework of Britain’s Export Control Mechanisms

Britain’s national leadership is actively involved in the sphere of export control. At Cabinet level, the National Security Council (NSC, which received the responsibilities from the defunct Cabinet Committee for Defence and Overseas Policy) lays down formal guidelines covering political and strategic issues.

Similar to the state of affairs in the US discussed previously, in the UK too the principle of inter-agency agreement is fundamental in export control mechanisms, although it is not as well organised as in the US. Furthermore, the responsibilities for the export control system are

\textsuperscript{465} United Kingdom Strategic Export Controls Annual Report 2010, p. 5.
\textsuperscript{467} The Regulation of Arms and Dual-Use Exports, p. 129.
\textsuperscript{468} Ibid, p. 136.
\textsuperscript{469} United Kingdom Strategic Export Controls Annual Report 2010, p. 7.
\textsuperscript{470} Introduction to the Export Control Organisation and to the Export Control, pp. 8-9.
divided among different agencies which normally have to reach a decision together on an export application.

Figure 12: Main Agencies in Britain’s Export Control Mechanisms and their Main Working Connections

The inter-agency forum for export policy review is the inter-departmental Strategic Exports Working Party (SXWP). Reporting to the Cabinet Office, SXWP has representatives from the
Department (equivalent to a ministry) of Business Innovation and Skills (BIS), Ministry of Defence (MOD), and the Foreign and Commonwealth Office (FCO).

The export control apparatus relies completely on civilian agencies. MOD is the main agency responsible for the policy on arms export by private entities. MOD usually considers what the impact of selling the specific equipment would be on a regional balance of power, whether it would be a threat to British or allied forces, what level of technology should be released, and whether there is a risk of the equipment being diverted.

Within MOD there is no designated division for export control issues and they are usually handled by several units which are principally in charge of information security and intelligence. In order to avoid a conflict of interests, the responsibility for defence export promotion was transferred from MOD to the Defence Export Service Organisation (DSO) under the Trade and Investment Organisation (UKTI) - an agency under the shared responsibility of FCO and BIS.

The formulation of export control policy is under the joint responsibility of MOD and FCO. FCO’s Counter-Proliferation Department is part of the export control system. Other departments and units of the ministry (regional and functional departments; and diplomatic missions) are consulted. FCO considers the political and foreign policy impact of a proposed arms export, but also the potential commercial benefits resulting from the sale of defence items and advanced technologies. The Export Control Organisation (ECO) of BIS is the designated agency for the export licensing process and the main contact between the government and the defence and dual-use exporters. In this regard, ECO is responsible for the adherence of private exporters to the regulations and procedures.

Apart from the above agencies, the intelligence services play an important role in assisting specific export licensing matters. The Ministry of Economics and Finance (known as the

476 Ibid, pp. 139-142.
477 The Regulation of Arms and Dual-Use Exports, p. 130; United Kingdom Strategic Export Controls Annual Report 2010, p. 4. MOD’s Office of Export Policy and Assurance (EPA) is a point of contact for private exporters.
479 The Regulation of Arms and Dual-Use Exports, p. 130; United Kingdom Strategic Export Controls Annual Report 2010, p. 4.
481 Davina Miller, Export or Die: Britain’s Defence Trade with Iran and Iraq (London: Cassell, 1996), pp. 54-55.
482 The Regulation of Arms and Dual-Use Exports, p. 130; United Kingdom Strategic Export Controls Annual Report 2010, pp. 3-4.
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Treasury) is responsible for customs services (Her Majesty’s Revenue and Customs - HMRC) which are the main enforcement agency of the export control apparatus. In addition, the Treasury also sometimes applies its own ratings for the prospective customer’s creditworthiness. The Department for International Development (DFID), which is equivalent to a ministry, also participates in inter-agency consultations with FCO and MOD on export authorisation. DFID is mainly interested in exports to a destination in a developing country.

5.2.2. Britain’s Decision Making on Export Controls

Prior to submitting a formal export application and launching the export control process it is possible for the exporter to initiate an informal consultation through UKTI-DSO in order to establish at the outset whether the goods or technology are licensable. UKTI-DSO seeks prior clearance for the potential export by convening the Arms Working Party (AWP) which is an inter-departmental committee of representatives of BIS, MOD, FCO and the Treasury. As mentioned, the export control process is only relevant for exporters who are not exempt from the process - either they export defence items as part of governmental transactions or they obtained an export licence (OGEL) which does not require authorisation. Export applications for individual export licences for military and dual-use goods (equipment listed in the annexes of EGCO and DUEC) are first assessed by ECO. ECO decides whether it is necessary to consult other departments about the application.

If the export license is for a defence item (included in the Military List of EGCO), or a component listed in the MTCR Annex, or is for a destination on the ‘black list’, ECO chairs an inter-agency consultation together with MOD and FCO. Regarding the export of dual-use items (included in DUEC control List), ECO has a degree of discretion about the necessity for an inter-agency mechanism and it asks the views of MOD, FCO, and when appropriate also DFID.

Where conflicting advice emerges from MOD and FCO they create an inter-agency mechanism to reach a decision. Normally, a decision is made through a further review by the

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483 The Regulation of Arms and Dual-Use Exports, p. 143.
486 Transfer of Mod Form 680 to Spire.
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Release of Military Information Policy Committee (RMIPC) which is an internal MOD committee of senior officials, with a representative of FCO. Another procedure for settling conflicting advice is through ad-hoc meetings of senior officials or even pertinent ministers.\(^{488}\)

Another inter-agency mechanism for export control discussion in a wider forum is the Restricted Enforcement Unit (REU). REU is an interdepartmental committee aimed at information exchange through colleagues, but not intended for decision making. REU chaired by the head of ECO includes officials from BIS, MOD, and FCO, the intelligence services, and HMRC.\(^{489}\)

Sensitive export of defence and dual-use items will normally be discussed at cabinet level: by NSC or even by the full Cabinet and/or the Prime Minister. REU can also be the venue for discussing sensitive export applications.\(^{490}\)

\(^{488}\) The Regulation of Arms and Dual-Use Exports, p. 139.

\(^{489}\) Ibid, p. 141.

\(^{490}\) Ibid.
Figure 13: Main Decision-Making Processes in Britain’s Export Control Mechanisms
5.3. Germany's Export Control Mechanisms

Unlike other countries discussed in this chapter Germany is not a nuclear weapons country but it has developed a large nuclear industry that can potentially assist foreign nuclear weapons programmes. In addition, Germany is a useful model of a specific country that drastically improved its national export control laws in a relatively short period of time. Prior to the unification of Germany at the end of the Cold War, West Germany was inclined towards the principle of free trade rather than security considerations and proliferation prevention. On the other hand, in light of Germany’s problematic history in the twentieth century and its responsibility for two world wars, it enforced tough restrictions regarding military operations and military cooperation. However, these restrictions were ambiguous and were poorly enforced\textsuperscript{491}. Since the 1990’s Germany has severely tightened its export control policies and enforcement procedures\textsuperscript{492}.

The legal framework of Germany’s export controls is based on two laws: The Weapons of War Control Act (in German - KWKG) which regulates exports of defence and WMD-related items\textsuperscript{493}; and The Foreign Trade and Payments Act (in German - AWG) which regulates dual-use technology and armaments. Although AWG focus is on dual-use goods, it also extends to weaponry, and in effect subjects the export of weapons to a dual licensing requirement.

The regulations for the implementation of the AWG can be found primarily in the Foreign Trade Statutory Order (in German - AWV) which stipulates which goods, technologies, software and services are subject to export restrictions. AWV includes Export List (in German - AL), based on agreements concluded within international export control regimes and on an EC control list of dual-use equipment\textsuperscript{494}. KWKG includes a control list which covers WMD-related systems, materials and production facilities, and conventional weapon systems.

As part of the Germany’s export control mechanisms (and similar to the British licensing system), there are three main types of export licences: individual export licence for export of equipment to one recipient, collective export licence for export to several specific recipients and general licence for which no application by the exporter is necessary.

\textsuperscript{491} Harald Müller, Germany and WMD Proliferation Nonproliferation Review, 10:2 (Summer 2003), pp. 1-3.
\textsuperscript{494} Export Control Law and Regulations Handbook, pp. 163-164.
5.3.1. The Structure and Framework of Germany’s Export Control Mechanisms

On the ministerial level, the Federal Security Council (in German - BSR) is the highest level of decision making which gives political instructions on national security issues, including export control matters. BSR is a Cabinet committee chaired by the head of the federal government (the Chancellor) and is made up of ministers for defence, economics and technologies (in German - BMWi), foreign affairs, finance, and the interior.

Furthermore, an inter-agency mechanism, the Foreign Trade Group (FTG), was established and is chaired by BMWi. FTG was created for the ongoing review of non-proliferation issues and for the preparation of legal and regulatory amendments. It includes representatives from the foreign, defence and finance ministries, the Office of the Chancellor, and the intelligence services.\textsuperscript{495}

Normally BMWi would decide whether or not to grant a licence for a specific weapon sale,\textsuperscript{496} and it is the main player within the export control mechanism. In this regard, it exercises its authority through a designated agency for export control issues, the Federal Office for Economics and Export Control (in German - BAFA). BAFA is in charge of export licensing, both for dual-use and defence items.\textsuperscript{497} BAFA has sole responsibility for export licensing. BMWi is also the leading agency for managing the export control lists although any proposed amendments are discussed with the Ministry of Foreign Affairs (MFA).\textsuperscript{498}

Compliance and enforcement procedures are mainly structured around the work of the Customs Criminal Investigation Service (in German - ZKA) subordinate to the Ministry of Finance. Both the customs authorities and BAFA carry out company audits which include the supervision of export matters.\textsuperscript{499}

\textsuperscript{495} Harald Müller, From Black Sheep to White Angel? The New German Export Control Policy, PRIF Report no. 32 (Frankfurt: Peace Research Institute Frankfurt, 1994), p. 47.
\textsuperscript{496} The Federal Republic of Germany, pp. 78-79.
\textsuperscript{497} Export Control Laws and Regulations Handbook, p. 172.
\textsuperscript{498} The Regulation of Arms and Dual-Use Exports, p. 168.
\textsuperscript{499} Ibid, pp. 178-179.
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**Figure 14:** Main Agencies in Germany’s Export Control Process and their Main Working Connections

![Diagram showing the main agencies involved in Germany’s export control process and their working connections](image)

**Abbreviations:**
- BSR - Ministry of Security Council
- BMWi - Federal Office for Economics and Export Control
- BAFA - Federal Trade Group
- MOF - Ministry of Finance
- MFA - Ministry of Foreign Affairs
- MOI - Ministry of Interior
- MOD - Ministry of Defence
- ZKA - Criminal Investigation Service

**Key:**
- Solid line: Subordinate
- Dashed line: Participation in inter-Agency Forums/Working Connection
- Dotted line: Working Connection as Part of Licensing Application Check prior to the Export Control Process

- Government Ministry/Position and its Designated Agency in the Export Control Process
- External organisations to the Export Control Process
- Decision-Making/Inter-Agency Forum
- Government Agency with its Designated Export Control Unit
5.3.2. Germany’s Decision Making on Export Controls

Prior to the formal legal application for an export licence it is common practice in respect of weapon transfers for an informal consultation process to take place between industry and MFA. MFA usually consults BMWi and MOD before reaching a decision. Occasionally, such pre-application requests are forwarded directly to BSR for a decision. The resulting pre-application ‘advice’ then forms the basis of the negotiations between the exporting company and the customer. When the formal application is eventually filed, in practice the legally required decision is more or less a formality\textsuperscript{500}.

A distinction is drawn between applications for export of weapons of war in accordance with KWKG and dual-use and other military-related exports under AWG. Authority for licensing under KWKG rests with BMWi, while authority for licensing under AWG lies with BAFA.

For the export of defence items under KWKG permission for an export licence must be obtained from BAFA or BMWi (depending on the nature of the specific equipment). MFA and MOD are consulted: If none of the three ministries objects, the export licence is granted. If disagreement exists or if it is a sensitive export the case is referred to BSR for a decision.

Applications for export of dual-use goods and other military equipment under AWG are normally considered only by BAFA. Export applications for nuclear items and items included in Category One of MTCR’s control list are sent to BMWi for consultation\textsuperscript{501}. Sensitive export applications are referred to BMWi for consultation with MFA. Particularly sensitive cases are decided by FTG.

\textsuperscript{500} Ibid, pp. 169-170.
\textsuperscript{501} Export Control Laws and Regulations Handbook, p. 174.
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**Figure 15: Main Decision-Making Processes in Germany’s Export Control Process**

![Diagram of Main Decision-Making Processes in Germany’s Export Control Process]

**Legend:**
- Government Ministry/Position and its Designated Agency in the Export Control Process
- Decision-Making/Inter-Agency Forum
- A Stage in the Export Control Process
- Agencies’ Responsibility
- Export Control Processes
- Administrative Activity prior to the Export Control Process
- Category of Export Licence
- Demarcation Line between Different Export Control Processes

**Abbreviations:**
- AL - Export List
- AWG - Foreign Trade and Payments Act
- AWV - Foreign Trade statutory Order
- BAFA - Federal Office for Economics and Export Control
- BMWi - Ministry of Economics and Technology
- BSR - Federal Security Council
- FTG - Foreign Trade Group
- KWKG - Weapons of War Control Act
- MFA - Ministry of Foreign Affairs
- MOD - Ministry of Defence

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5.4. The Structural and Organisational Dimension of Export Controls of Western Countries

As discussed earlier, the US, Britain, and Germany have export control mechanisms which evolved under distinct historical circumstances in relation to their organisational culture and the nature of their state bureaucracy. Each country restructured its control system over private sector organisations which develop WMD-related technologies and defence industry in accordance with the different connections and power balance between government agencies and between the state apparatus and R&D entities. These countries were forced to confront the tension between strengthening export control capabilities and expanding external trade by a lenient export licensing process.

An examination of the structure of the different export control mechanisms and their efficiency in preventing proliferation will be based on the parameters of the ‘structural approach’ which were elaborated upon at the beginning of this chapter. The following table (table 1) summarises the main organisational parameters for evaluating the structure of a control system and how western export controls abide by them:

<table>
<thead>
<tr>
<th>Country</th>
<th>Comprehensive Legislation and Control Lists</th>
<th>Influential Foreign Ministry</th>
<th>Designated Civilian Export Control Agency</th>
<th>Involvement of the National Leadership</th>
<th>Extensive Inter-Agency Mechanisms</th>
<th>Non-Exemption from the Export Control Procedures</th>
<th>Exclusion of R&amp;D Organisations of WMD from Decision Making (beyond professional assessments)</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>✓</td>
<td>✓</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Britain</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>Germany</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
</tbody>
</table>

The first parameter is the involvement of the national leadership in the export control process. As elaborated upon at the beginning of this chapter, the participation of the political leadership can potentially contribute to non-proliferation efforts. In all three countries, the ministerial level and above (President/Prime Minister) is actively involved in the export control mechanisms, particularly in decision making on sensitive exports and in formulating guidelines and policies. In Britain and Germany a senior forum equivalent to the national
security council determines the general principles for export controls and decides on complicated export applications.

The structure of the control system and its orientation strengthen its nature as a non-proliferation apparatus. The export control bureaucracies in all the three countries of the analysis are dominated by civilian agencies. The interests of the defence establishment are mainly represented by Defence Ministries which are strong civilian agencies dedicated to supervising the armed forces and which prevent national security being undermined by the export of advanced technologies: these ministries act as more than just administrative umbrellas which cater to the needs of the military. The military high command and the defence corporations which can potentially advocate the export of technologies related to defence industries and nuclear programmes have a secondary role in the control mechanisms, mainly as advisors.

In western countries, the defence industry and its export subsidiaries are part of the private sector and not directly subordinate to the Defence Ministry. Export corporations of defence equipment have to apply for an export license to the pertinent authorities like other private entities which deal with dual-use goods. However, the defence corporations are considered to have intimate affiliation to the defence establishment, and they also have connections to the armed forces.

The export control mechanisms are mainly run by MFA (ECO in the UK) and the Commerce Ministries (BIS in Britain, and BMWi in Germany). MFA is a leading agency in all export control processes and has both the largest capability and interest in preventing nuclear exports. The Commerce Ministries play a significant role in light of their responsibility for promoting external trade and its relevant regulations. In the UK and Germany there is also a designated export control agency which is responsible for export controls both from state-owned and private entities.

The principle of Inter-Agency collaboration at almost every stage of decision making is well rooted in all three countries, and it helps to curb any one agency which might perceive the transfer of dual-use goods and advanced technologies as in its own interest. Apart from the core export control agencies, other ministries and R&D organisations are called upon to participate in the licensing process and present their professional opinion. In the US, the licensing of nuclear-related and dual-use goods has a separate process like other categories of
WMD items. Furthermore, as already mentioned, in all these three countries the political leadership is involved in inter-agency consultations when sensitive export is concerned.

As a consequence of the above discussion, a model of export control system over R&D organisations of WMD evolving from western experience is illustrated in the following figure:

Figure 16: Export Control System emanating from Western Experience
The western model for export controls is not flawless and has inherent problems. Most of the export control agencies have a wider agenda which is to promote export and to increase national revenue. This argument mainly reflects on MOC: its prime objective is to promote commercial transactions. MOD too is usually eager to promote defence exports as part of expanding military cooperation. MFA is the agency most dedicated to international obligations, but it also considers the expansion of trade as a vital ingredient in promoting foreign policy goals.

Furthermore, the defence industry has considerable influence on some of the agencies of the export control mechanisms and usually on the defence and commerce ministries. Defence exports are considered an important factor in overall external trade, as a contribution to the national economy, and as a substantial means of promoting foreign policy objectives. As a consequence, the financial consideration will always be an important factor of the export control mechanisms when it is deliberating the export of defence equipment, including technologies related to WMD programmes (such as nuclear reactors, satellites vehicles, etc.).

In light of the magnitude of the private sector in western countries and its involvement in the export of dual-use and advanced technologies, the export control apparatus delegate some responsibilities for non-proliferation to companies through guiding the companies to create an internal compliance system. Private companies in Britain and Germany with a clean record, i.e. with no violations of export control regulations, can receive a permanent export licence and be exempt from the export control process. Furthermore, in Britain export entities are exempt from export control mechanisms if their contract is part of official cooperation with foreign countries. Both of the above-mentioned procedures have the potential to undermine non-proliferation objectives.

6. Non-Western Experience in Export Control Mechanisms

Apart from western countries with adequate export controls there are also other countries which successfully developed nuclear weapons programmes and maintain an advanced defence industry. Akin to western countries, non-western countries were also forced to deal with the dilemma of defence exports versus the potential hazards to national security inherent in transferring advanced technologies and nuclear-related items. In addition, these countries had to enable their national control system to convert to a command and control apparatus for directing their strategic capabilities in an emergency situation.
The two non-western countries chosen as test cases for the analysis are Russia and India. They were chosen in view of their status as nuclear weapons countries (Russia since 1949, and India since 1974), and their extensive defence industry which includes R&D organisations of WMD. The magnitude of their industrial defence complex poses a challenge to their respective national control systems, and the experience obtained from supervising this industry and state-owned export corporations is expected to draw an alternative paradigm to the western model of export controls over R&D organisations of WMD. Furthermore, both countries have held reservations regarding global non-proliferation arrangements aspired to by western countries, and they refused to be dictated to on how to orchestrate their export control mechanisms.

Additionally, the experience of Russia and India in operating export control processes is relevant to analysing the test case of Pakistan’s export controls in light of the resemblance in circumstances which shaped the supervision of nuclear agencies in all three countries. India has a similar bureaucracy to Pakistan as both of their administrations originated in the colonial period of British India and the two countries also share similar practices and organisational structures. As for Russia, it shares with Pakistan a traditionally influential defence establishment and totally controlled defence industry: in both countries all the R&D institutes are under state control.

Another country, China, bears even more resemblance to Pakistan’s export controls and the factors which determined its nature. Hence, the next chapter will be devoted to a comparative analysis of the export control mechanisms of the two countries with emphasis on modifications in the Chinese processes and whether they are applicable to Pakistan.

The export controls over R&D organisations of WMD of Russia and India will be analysed in a similar pattern to the examination of western export control mechanisms and their main agencies, decision-making processes, and licensing procedures will be discussed. Following the analysis the discussion will focus on the salient features of export controls which are shared by both countries.
6.1. Russia’s Export Control Mechanisms

Russia is an important actor on the export control scene because of its developed military R&D programmes and its possession of a vast number of nuclear materials, and dual-use technologies. Russia has made significant progress in reorganising the previously existing bureaucracy and establishing a comprehensive framework for non-proliferation export controls, and it was able to draw upon the technical expertise and experience of the Soviet state apparatus, although the Soviet Union did not have a comprehensive export control law\(^{502}\). It should be emphasised that defence export is one of Russia’s main routes to gain international influence and substantial income, together with its energy resources.

Russia’s export control apparatus has known substantial modifications since the collapse of the USSR. These reforms were introduced mainly as a result of leadership changes that reflect the power structure: the shift of power in 1999 from former Presidents Boris Yeltsin to Vladimir Putin, and Putin’s new position as Prime Minister following the 2008 presidential elections. Furthermore, the US and western countries’ concern about nuclear proliferation and armament smuggling from Russia led to the establishment of bureaucratic mechanisms for export control which adopted international standards.

Regarding export of defence items the legal framework of the export control mechanisms codifies the priority for state-owned corporations which are also defence exporters: ‘The Federal Law on Military-Technical Cooperation with Foreign States’ of 1998 determines that only “national negotiators” authorised by the government can export defence items\(^{503}\). As for the export of dual-use technologies by entities in the private sector, ‘The Federal Law on Export Control’ of 1999 sets Russia’s policy\(^{504}\). These export control laws include export control lists for all the materials and equipment relevant to WMD programmes, and for dual-use items\(^{505}\).

6.1.1. The Structure and Framework of Russia’s Export Control Mechanisms

Russia’s bureaucratic structure has undergone numerous changes and continues to remain in flux. In the area of export control, bureaucratic restructuring has been a major obstacle to the

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\(^{502}\) Ibid, p. 264.

\(^{503}\) Ibid, pp. 268-269.

\(^{504}\) Ibid, 273-274.

implementation of a coherent policy, as agencies are renamed, reconfigured, or dismantled\textsuperscript{506}. As part of the consolidation process of the state authority in economic and commercial activities, the export control mechanisms also experienced a centralisation of authorities under the defence establishment.

The President of Russia has an active role in the export control mechanisms and he defines the basic guidelines of Russia's export control policy. Furthermore, he ensures coordination between various government agencies responsible for conducting export control. The President also approves lists of controlled goods and technologies\textsuperscript{507}. The President is also the chairman of the Ministerial Committee for Military-Technical Cooperation with Foreign Countries (MTC). The committee formulates the guidelines for defence cooperation and sets the long-term plans in this field. However, it appears that the committee is not a forum for export control decision making as it usually discusses and approves specific defence contracts.

At ministerial level, the Prime Minister and the Cabinet are responsible for implementing export control policy, including compliance with international export control regimes of which Russia is a member (NSG and MTCR). Furthermore, the cabinet determines the principles of procedures for conducting foreign trade of controlled items. The high ranking official who is currently responsible for Russia’s export control mechanisms is the Deputy Prime Minister for the Military-Industrial Complex. He exercises his power as the chairman of two intra-agency committees that supervise the entire defence industry and the export of any advanced technology or dual-use items by the private sector:

1) The Military-Industrial Committee (MIC) is the most important national Decision-making body on export controls. MIC is an inter-agency forum at ministerial level which supervises all the activities of the military-industrial complex. MIC includes the ministers for defence, foreign affairs, and industry and trade as well as senior officials from the military, federal agencies, and R&D organisations. However, it is not clear what the definitions are for the submission of a defence export application to MIC as part of the export control process. Moreover, the director general of Rosteknology, the state

\textsuperscript{506} To Supply or to Deny, p. 101.
monopoly over defence exports, is a member of MIC although his enterprise is under the supervision of this committee.

2) The Federal Export Control Commission (ECC) coordinates all the relevant issues of export controls at ministerial level such as improving Russia's export controls and resolving disputes within the export control apparatus\(^{508}\). ECC is an inter-agency mechanism which includes senior representatives from various state entities such as the ministries for defence and foreign affairs, the intelligence services, the military and federal agencies.

As mentioned, the export control mechanisms are under the dominant influence of the defence establishment: most of the administrative authority over export controls is centralised in two agencies which were established under the preview of the Ministry of Defence (MOD)\(^{509}\). These agencies are directly subordinate to the Executive Office of the President\(^{510}\):

1) The Federal Service for Military-Technology Cooperation (FSMTC)\(^{511}\) controls and supervises governmental authorities and entities which are part of the military-industrial complex and are involved in defence export. FSMTC has two main somewhat contradictory functions: granting export licences for the export corporations of the military-industrial complex in accordance with international norms; and commercially promoting defence export. FSMTC also determines whether an export application should be reviewed as a dual-use or defence item and if its review process should fall in the preview of MOD or the Ministry of Economy Development and Trade (MEDT)\(^{512}\).

2) The Federal Service for Technical and Export Control (FSTEC) was designated as the executive secretariat of ECC which decides on export applications from the private sector. Unlike FSMTC, FSTEC only administrates the licensing process for exporting dual-use

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\(^{511}\) The agency also known in Russian as FSVTS.

equipment by commercial entities from the private sector and it is not a decision-making agency.\footnote{Elina Kirichenko, *New Licensing Agency Created in Russia*, *NIS Export Control Observer* (August 2004), p.2. \url{http://cns.miis.edu/observer/pdfs/ob_0408e.pdf} Accessed on March 12th 2012.}

Figure 17: Main Agencies in Russia’s Export Control Mechanisms and their Main Working Connections
Apart from the above agencies, MOD is the leading competent ministry for export control issues. MOD mainly focuses on supervising defence export and military cooperation with foreign states. The Ministry of Industry and Trade\(^{514}\) (MIT) was established in 2008 as the responsible federal ministry for the civil and defence industry sectors. MIT is also responsible for implementing state regulations for foreign trade activities through its Department of State Regulation of Foreign Affairs (DSRFA). In addition, MIT is responsible for the supervision of exports of biological and chemical materials that can be used for military purposes\(^{515}\). The ministry has representatives in MIC and ECC.

Regarding export controls on nuclear materials and technologies, The Federal Service for Ecological, Technological and Nuclear Supervision (FSETNS)\(^{516}\) evaluates all contracts and agreements signed by the nuclear industry sector. FSETNS decides on the export of nuclear products and technologies, and reviews the export license for certain nuclear items\(^{517}\).

The Ministry of Foreign Affairs (MFA) supervises the international aspects of export control policy in order to monitor compliance with international obligations and promote national security interests. However, MFA does not have a representative in MIC which decides on export from the defence industry complex. The primary body of MFA responsible for export control issues is the Export Control and Conversion Directorate which is part of the Department for Security and Disarmament Affairs (DSDA)\(^{518}\).

Regarding enforcement and customs, they are under the responsibility of the Federal Customs Service (FCS) which deals with export controls under the preview of the Ministry of Economic Development and Trade (MEDT). In addition, the intelligence and security agencies also take part in the export control mechanism: The Foreign Intelligence Service (in Russian - SVR) and The Federal Security Service (in Russian - FSB) analyse the end-use of exports, and are in charge of gathering intelligence and investigating domestic exporters and foreign entities\(^{519}\).

\(^{514}\) In Russian the ministry called Mintroporg.


\(^{516}\) In Russian called Gosnadzor.


\(^{519}\) Ibid, p. 46.
Furthermore, there are state enterprises for R&D that participate in the decision-making processes on export control in light of their technological and scientific expertise: the State Atomic Energy Corporation (ROSATOM) which is responsible for both the nuclear industry and the nuclear weapons development complex; the Federal Space Agency (ROSCOSMOS); and the Academy of Sciences (RAS) which is the supreme scientific organisation in Russia.

6.1.2. Russia’s Decision Making on Export Controls

Russia’s evaluation process of export applications for both defence and dual-use items are structured according to the affiliation of the exporter: if it is a private company or an export corporation of the military-industrial complex, owned by the government. Currently, only two state enterprises, Rosobornexport and Rostekhnology, have authorisation to export defence products.

When approving an export application of a state-owned corporation, formally the foreign customer (and not the Russian corporation) directly applies to FSMTC that decides which defence industry will receive the contract. Most probably in practice the foreign entity submits the export request after concluding the commercial negotiation with its Russian counterpart. FSMTC formulates its position and issues an export licence. When the export application includes sensitive defence exports of advanced technologies or problematic destinations, only the President can approve it\(^\text{520}\).

When approving an export application from a private company, FSTEC registers the export application and submits it to ECC for its consideration. ECC usually forms a group of experts which consists of representatives of federal executive authorities with technological expertise (like ROSATOM for nuclear-related items). On the recommendation of ECC, FSTEC and MOD examine the export application and FSTEC issues the export license to the exporter\(^\text{521}\).

\(^{520}\) Ibid.

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**Figure 18: Main Decision-Making Processes in Russia’s Export Control Mechanisms**

![Diagram of decision-making processes in Russia's export control mechanisms](image)

- **Government** Ministry/Position and its Designated Agency in the Export Control Process
- **Decision-Making/Inter-Agency Forum**
- **A Stage in the Export Control Process**
- **A Government Agency**

**Abbreviations:**
- DSDA - Department of Security and Disarmament Affairs
- DSRFA - Department of State Regulation of Foreign Affairs
- ECC - Federal Export Control Commission
- FCS - Federal Customs Service
- FSETNS - Federal Service for Ecological, Technological and Nuclear Supervision
- FSMTC - Federal Service for Military-Technology Cooperation
- FSTECS - Federal Service for Technical and Export Control
- FSTC - Federal Service for Technical and Export Control
- MIT - Ministry of Foreign Affairs
- MIC - Military-Industries Committee
- MIT - Ministry of Industry and Trade
- MOD - Ministry of Defence
- MEDT - Ministry for Economy Development and Trade
- ROSATOM - State Atomic Energy Corporation
- ROSCOSMOS - Federal Space Agency

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6.2. India's Export Control Mechanisms

India’s experience in developing nuclear programmes is different from the above-mentioned countries: unlike western countries and Russia, India was an ardent opponent to international export controls which intentionally deprived developing countries from free access to advanced technologies which might be relevant to the R&D of nuclear weapons and other strategic capabilities. Furthermore, India has developed nuclear weapons programmes and undermined, under the NPT, the international consensus of the nuclear non-proliferation principle. As a result, India’s export controls were consolidated with little reference to the advanced practices of export control stipulated by international export control regimes and their member countries.

Only in the 1990’s, as part of its economic reforms and its transition from a government controlled economy to a much more privatised market, India began to facilitate modern export control mechanisms. These procedures became increasingly critical both to India and to the global non-proliferation effort parallel to India’s growing export of dual-use items and technologies522.

However, the Indian government has maintained control over the development and manufacture of almost all defence related items. The same applies to the R&D of missile-related technologies and most of the development entities are under direct government control (although they are also open to the participation of the private sector)523. Regarding strategic trade in nuclear items, a very limited number of private companies, and also government agencies, are involved in the export of nuclear dual-use substances524.

India’s main legal framework for export controls is the Export-Import Policy Regulations (EXIM) which emanate from The Foreign Trade Development and Regulation Act of 1992 (FTDR)525. India’s unified export control law is the WMD and their Delivery Systems Act of 2005. This act provides the legal basis necessary for supervising transfer of nuclear, chemical,
biological, and missile-related equipment and technologies. Furthermore, an export control policy has been exercised through designated laws governing nuclear, chemical and biological related items.

It should be emphasised that according to the Foreign Trade Order (under FTDR) the export of dual-use goods by a government authority is exempt from the export control process. However, the provisions of the WMD act of 2005 also applies to persons in the service of the government. Regarding exporting defence items, India lacks the relevant contemporary laws and it still relies on legislation from the 1950’s and 1960’s.

Regarding control lists, dual-use items related to WMD programmes, and other sensitive items have been consolidated in the Special Chemicals, Organisms, Materials, Equipment and Technologies List (SCOMET). The SCOMET list is similar to the control lists of international export control regimes and to the EU and the US control lists. As for the control list of military items, India’s EXIM policy permits free exports of certain listed military stores that are low tech in nature. All other military items are included in a control list which is part of the trade regulations.

6.2.1. The Structure and Framework of India’s Export Controls

Unlike in other countries with an advanced defence industry and WMD programmes, there is no direct involvement of India’s national leadership in the export control process. The only exception is export licenses involving trade with ‘countries of concern’ that could be sent to the Prime Minister for approval. However, there are no legal procedures that demand the Prime Minister’s participation.

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530 Export Control Law and Regulations Handbook, pp. 187-188.
531 This is listed as Schedule II, Appendix 3 of the ITC (HS), - the Indian Tariff Classification (Harmonised System) which assigns items a classification number and includes conditions that govern each item’s import and export. The ITC (HS) is published by the DGFT, Ministry of Commerce.
532 Export Control Law and Regulations Handbook, p. 186
533 This list is specified in Appendix I to Schedule II of the ITC (HS), Classifications of Export and Import Items.
534 Schedule I, chapter 93 of the ITC (HS).
535 To Supply or to Deny, p. 155.
The ‘Higher-Level Committee (HLC)’ for export control issues is the highest national level of decision making. The committee is chaired by the Director General of Foreign Trade (DGFT) from the Ministry of Commerce and Industry (MOCI). HLC has policy-level representation from core agencies: the Ministry of External Affairs (MEA), the Department of Atomic Energy (DAE), and the Defence Research and Development Organisation (DRDO) which is responsible for most of the defence industry. HLC meets whenever there is a need to review or establish policy-level procedures, and not necessarily to decide on a specific export licence\textsuperscript{536}. The Inter-Ministry Working Group (IMWG) reaches a consensus on export applications. IMWG is also headed by an official from DGFT and is composed of representatives from various ministries and government agencies. Representatives from other technological departments, such as the Department of Science and Technology or the Department of Information Technologies, are invited if their input is requested\textsuperscript{537}.

The Director General of Foreign Trade (DGFT) of MOCI is India’s main export control agency. License applications for exports of WMD-related items (except nuclear-related items) are submitted to DGFT, which issues export licences\textsuperscript{538}. DGFT’s main responsibilities are much wider, and it deals with many issues besides license applications for dual-use items. DGFT is responsible for implementing Foreign Trade Policy with the main objective of promoting India’s exports\textsuperscript{539}. Within the Ministry of External Affairs (MEA), the Disarmament and International Security Affairs Division (D&ISA) is the main section involved in export controls. Similar to other ministries of foreign affairs, MEA is mainly responsible in inter-agency mechanisms for preventing exports which might contradict India’s international adherence to export control regimes\textsuperscript{540}. The Ministry of Defence (MOD) has two responsibilities regarding export control mechanisms. Its Department of Defence Production (DODP) is the designated agency for the issue of No Objection Certificate (NOC) for the export of military equipment already stored (excluding items which are non-lethal in nature as specified by DGFT)\textsuperscript{541}. Another agency of MOD, DRDO, participates in inter-agency consultations regarding export applications for dual-use items.

\textsuperscript{536} Nonproliferation Export Controls in India, p.22-23
\textsuperscript{537} Ibid p. 23
\textsuperscript{538} Ibid p. 22
\textsuperscript{540} Nonproliferation Export Controls in India, p.23
\textsuperscript{541} India’s Ministry of Defence website: \texttt{http://mod.nic.in/product&supp/welcome.html} Accessed on March 13\textsuperscript{th} 2012.
6.2.2. India’s Decision Making on Export Controls

Given that India’s exports of dual-use technologies are growing, the licensing process is adequately defined and involves all relevant agencies. These agencies coordinate their licensing activities formally through the licensing process, as well as informally through
exchanges of information via a small group of officials working across agencies.\footnote{Nonproliferation Export Controls in India, p. 23-24.}

Figure 20: Main Decision-Making Processes in India’s Export Control Mechanisms

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**Abbreviations:**
- CBEC - Central Board of Excise and Customs
- D&ISA - Disarmament and International Security Affairs Division
- DAE - Department of Atomic Energy
- DGFT - Director General of Foreign Trade
- DODP - Department of Defence Production
- DRDO - Defence Research and Development Organisation
- EXIM - Export-Import Policy Regulations
- HLC - High Level Committee
- IMWG - Inter-Ministry Working Group
- MFA - Ministry of Foreign Affairs
- MOCI - Ministry of Commerce and Industry
- MOD - Ministry of Defence
- SCOMET - Special Chemicals, Organisms, Materials, Equipment and Technologies List

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Export applications for dual-use items under the SCOMET list (except for nuclear-related items which are evaluated in a separate process detailed below) are submitted to DGFT. During the review of export applications, DGFT consults the relevant government agencies, such as DAE, MOD, and MEA. Export applications regarding nuclear-related items (‘Category 0’ of the SCOMET list) are processed differently: the applications are submitted directly to DAE which issues the NOC and the export license.

DGFT conducts a technical assessment with technological agencies to secure NOC. Technical assessment can include the participation of R&D organisations, MEA, intelligence agencies, and the customs service (Central Board of Excise and Customs- CBEC)\textsuperscript{543}. If NOC is granted, DGFT forwards the application to IMWG. Export licenses involving trade with ‘countries of concern’ receive special scrutiny from MEA and the intelligence agencies’ representative in IMWG. The decision of IMWG is arrived at by consensus and conveyed to DGFT, which in turn notifies the exporter\textsuperscript{544}. In the event that the IMWG is unable to agree on a licensing decision, the matter is referred to HLC for resolution\textsuperscript{545}.

Regarding the export of defence items, it is restricted to authorised entities, both government and private\textsuperscript{546}. As mentioned, the export of military items is permitted subject to NOC from the DODP of MOD. MOD examines each export application and usually conducts inter-agency consultations\textsuperscript{547}.

\textbf{6.3. Experience of Non-Western Countries: Examining their Export Controls According to the ‘Structural Approach’}

The export control mechanisms of Russia and India are different in their nature from the export controls of western countries. As evident, the export control practices are more centralised and less transparent than the equivalent systems in western countries. Furthermore, it appears that the defence establishment and the scientific and technological cadre have more influence on the process than the official involvement of their colleagues in western countries. The differing character of the export control mechanisms appears to influence the evaluation of Russia’s and India’s export control according to the ‘structural approach’ which is summarised in the following table:

\textsuperscript{543} Ibid, p. 22.
\textsuperscript{544} Export Control Law and Regulations Handbook, p 203; India’s Export Controls, p.23.
\textsuperscript{545} Nonproliferation Export Controls in India, p. 20.
\textsuperscript{546} Export Control Law and Regulations Handbook, p. 197-198.
\textsuperscript{547} Defence Minister’s reply to the lower house of parliament (September 15\textsuperscript{th} 2003), \texttt{<http://mod.nic.in/samachar/sep15-03/html/ch11.htm> Accessed on March 13\textsuperscript{rd} 2012.}
Table 2: Main Structural Characters of the Export Controls of Russia and India

<table>
<thead>
<tr>
<th>Country</th>
<th>Comprehensive Legislation and Control Lists</th>
<th>Influential Foreign Ministry</th>
<th>Designated and Independent Export Control Agency</th>
<th>Involvement of the National Leadership</th>
<th>Extensive Inter-Agency Mechanisms</th>
<th>Non-Exemption from the Export Control Procedures</th>
<th>Exclusion of R&amp;D Organisations of WMD from Decision Making (beyond professional assessments)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>India</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
</tr>
</tbody>
</table>

As can be seen in the above table, the export controls of both countries lack fundamental elements of the ‘structural approach’. They indeed adopted a legal framework for export controls and routinely use Decision-making procedures, but almost half of the elements (three out of four) are partial in one of these countries.

The dominant position of the defence establishment in Russia and the secondary national priority of export controls in India are the main factors behind the missing elements. In Russia, the defence establishment directs the entire export control process: the two export control agencies are part of MOD and thus entirely serve its interests; the national leadership evolved and is tightly bound to this establishment; and the state-owned export corporations are part of the defence establishment and have a separate route controlled by MOD for approving their export applications (both defence and dual-use items). As a result, Russia’s MFA is powerless to halt problematic exports promoted by the defence establishment. Although inter-agency consultations are assimilated into the export control mechanisms, the agencies which are not part of the defence establishment have little influence over the final decision: representatives from the defence establishment enjoy a dominant position in these forums.

As for India, the missing parameters are a result of the business-like approach of the federal government towards export controls. Unlike in Russia, India’s defence establishment cannot force its interests, but the national leadership is not involved in decision making on export applications and a designated export control agency is absent. Moreover, India’s government apparently perceives export controls as mainly intended to supervise the private sector and the government exempted from the export control process the state-owned defence entities which are the main players behind defence export.
On the other hand, the centralisation of Russia’s and India’s export controls and the *de-facto* domination of state-owned corporations over the export market of defence and WMD-related goods minimise the possibility of unauthorised export to a private entity. It appears that although incidents of private initiative of proliferation might occur, significant proliferation of non-conventional technologies can primarily take place only if the state-owned defence industry and R&D institutes receive an official directive to grant assistance to WMD programmes of foreign countries. Export control mechanisms according to non-western experience are illustrated in figure 21:

**Figure 21:** Export Control Apparatus over WMD Organisations emanating from Non-Western Experience
7. Final Analysis: Evaluating Pakistan’s Export Controls according to the ‘Structural Approach’ in comparison with Western and Non-Western Countries.

As discussed in this chapter in order for Pakistan’s export control mechanisms to be effective it needs to be organised according to parameters which strengthen its efficiency in preventing proliferation of nuclear-related items. As analysed at the beginning of this chapter, in recent years Pakistan has adopted most of the practices needed to conform to the ‘practices approach’ for competent export controls to prevent proliferation. Nevertheless, the structure of the system and decision-making processes raise questions as to whether the system is indeed ready to deal with countering assistance to nuclear programmes of foreign countries and their other R&D efforts for military purposes.

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As illustrated in figure 22 (see p. 225), Pakistan has unique export control mechanisms principally managed by the defence establishment and particularly the military. Pakistan has the only export control mechanisms among nuclear weapons countries (and other countries with advanced military oriented R&D programmes) where the military has sole responsibility for the nuclear organisations. In the above mentioned countries the assignment of armed forces to the control mechanisms is mainly to deploy and operate nuclear weapons and other strategic capabilities\(^548\). Unlike in most countries (but with a resemblance to export controls in India and Russia), Pakistan’s export controls are neither divided according to the type of exported item (military goods and dual-use goods) nor by its destination or the record of the exporter: the division highlights whether the exporter is a state-owned organisation.

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The unique nature of Pakistan’s export controls is evident from the direct subordination of all WMD-related organisations, known officially in Pakistan as ‘strategic organisations’, to a military directorate, the Strategic Plans Division (SPD). Furthermore, the military is heavily represented in the National Command Authority (NCA) which is the highest decision-making forum on issues concerning the nuclear programmes. The chiefs of the armed forces are NCA members and they constitute almost half of the entire forum. Hence, it is clear that the parameter of involvement of national leadership in the ‘structural approach’ is undermined.

\(^{548}\) The deployment of Pakistan’s nuclear capabilities is done by the Strategic Forces Command (SFC) in each of the armed forces.
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and the ability of the national leadership to seize full control of the nuclear programmes is limited: although NCA includes a notable representation of the national leadership (the Prime Minister, and the Ministers for Foreign Affairs, Defence, Interior, and Finance), it is shared with the military command. In addition, the secretariat of NCA, the SPD, is a military entity which is the only official source of information about the nuclear organisations.

Moreover, the Development Control Committee (DCC), which is the relevant committee of NCA responsible for supervising the functioning of the nuclear organisations, is totally comprised of NCA’s military members with the Prime Minister as its chairman. Although not officially declared, the DCC appears as the designated forum for export control issues with the minimal weight of the national leadership. In addition, NCA and its committees convene on specific occasions, and in practice routine supervision and decision making on nuclear issues are made by the Army chief and the head of SPD reports directly to him.

One of the main characteristics of Pakistan’s export controls is the sweeping exemption of all state agencies from the process which is a considerable deviation from one of the elements of the ‘structural approach’. This situation is even more critical as government agencies, such as nuclear organisations, hold almost all nuclear R&D, and are practically the sole potential nuclear exporters. As a consequence, in practice, Pakistan’s legal framework is unable to prevent nuclear proliferation since it only applies to private companies which are incapable of exporting nuclear equipment.

As discussed in this chapter, exemption from export controls is also a common practice in Britain and India. However, in none of these countries is the exemption as widespread as in Pakistan. In the UK and India all export entities, including state-owned (in Britain also private

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550 The second known committee of NCA, the Employment Control Committee (ECC), is responsible for the operational dimension of Pakistan’s non-conventional capabilities and is responsible for decisions on the deployment of the nuclear forces and for nuclear doctrine. See: Mark Fitzpatrick (ed.), Nuclear Black Markets: Pakistan, A.Q. Khan, and the Rise of Nuclear Proliferation Networks, a Net Assessment (London: The International institute for Strategic Studies, 2007), p. 111.
552 Nuclear Black Markets, p.115.
companies with an open license) are liable to export control laws, including penalties for assisting WMD programmes, and the exemption of state corporations is mainly in government-to-government contracts. Furthermore, as for Russia, the state-owned defence export corporations enjoy a separate export control process which is dominated by the defence establishment, but they are not exempt from the mechanisms which include the evaluation of an inter-agency forum.

In Pakistan, the export policy order, which is a main pillar of the legal framework of export controls, determines that the export laws will not apply to “...any goods... exported under an export authorisation issued by any officer authorised by the Ministry of Defence on its behalf”553. As a consequence, any agency affiliated to MOD or authorised by him is completely exempt from the export control mechanisms, and all the nuclear organisations are considered as affiliated to MOD554. Moreover, the Export Control Act of 2004 and the regulations and procedures stem from the act, which supervises the export of WMD-related and dual-use items, is legally subordinated to the Export Policy Order; thus, the Export Control Act does not apply to agencies granted MOD authorisation or affiliated to it555.

The principle of inter-agency mechanisms is also undermined in Pakistan’s control system. As mentioned above, it is not clear if DCC is indeed an inter-agency forum at ministerial level also for export control issues. In addition, export controls over the nuclear organisations are opaque, and SPD is the only institution responsible for supervising these organisations556. There is no updated information which might suggest that SPD needs to share the decision-making process with civilian agencies and the legal framework does not include any such


554 The nuclear organisations are subordinate to SPD. SPD is administratively part of JSHQ which is officially under the administrative control of MOD. See: Defence Division Yearbook 2004-2005 (Rawalpindi: Pakistan’s Ministry of Defence, 2005), pp. 37-38, 113.

555 Clause 14 of the Export Policy Order clearly states that all restrictions and conditions made under the Export Control Act of 2004 (and also other legislations), will be subordinate to the order; hence the exemption of MOD affiliated agencies. In addition, Clause 11 of the Export Control Act of 2004 states that the provisions of the act are in addition to the other legislations already in force - such as the Export Policy Order which is an annual update of the Imports and Exports Act of 1950.

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obligation\textsuperscript{557}. It seems that SPD operates export control mechanisms in accordance with internal military procedures and with the consent of the Army chief.

In parallel, the new legal framework for export control, which has developed since the exposure of AQ Khan’s network, contains inter-agency mechanisms when evaluating export applications, mainly from the private sector. According to the statutory regulations of 2009 mentioned earlier in this chapter (‘Export Control Rules\textsuperscript{558}’), The Strategic Export Control Division (SECDIV), which was established as an export control agency (under the Ministry of Foreign Affairs - MOFA), initiates an inter-agency review with representatives of MOFA, the Ministry of Defence (MOD), the Ministry of Commerce (MOC), and other relevant ministries. The inter-agency process follows SECDIV’s own review and takes place before SECDIV formulates its final decision about export applications. In the case of disagreement the Oversight Board of Export Control (which was created according to the Export Control Act of 2004) makes the final decision. This board is also an inter-agency forum headed by the Foreign Secretary (equivalent to director general) and includes high level officials from MOFA, MOD, MOC, SPD, and other agencies\textsuperscript{559}.

Regarding the influence of the Foreign Ministry, it seems that MOFA does not carry significant weight in the export control mechanisms regarding export applications of the nuclear organisations. According to SPD’s internal guidelines of 2000 MOFA had to provide clearance for their export applications, but it is not clear if this procedure is still in force. The Foreign Minister is a member of NCA, but not of DCC which is potentially the highest forum for export control issues. On the other hand, MOFA has a significant role in the export control mechanisms of the private sector. SECDIV, the designated export control agency for dual-use exports, is positioned administratively under MOFA. The Oversight Board of Export Control which supervises SECDIV’s decisions is chaired by the Foreign Secretary and includes another senior official of MOFA\textsuperscript{560}.

\textsuperscript{557} According to SPD’s internal guidelines of 2000 for the nuclear organisations, MOFA had to give clearance to their export applications. It is not clear if this internal procedure is still valid and how it is being implemented in light of the development in the last decade of the legislative framework. About the internal guidelines see: Kenneth N. Luongo and Brig. Gen. (Ret.) Naeem Salik, Building Confidence in Pakistan’s Nuclear Security, Arms Control Today, Vol. 37 (December 2007) <http://www.armscontrol.org/act/2007_12/Luongo> Accessed on March 13\textsuperscript{th} 2012.

\textsuperscript{558} Export Control (Licensing and Enforcement) Rules, SRO 450(I)/2009.

\textsuperscript{559} See: Ministry of Foreign Affairs/Government of Pakistan, Oversight Board of Export Control Act [SRO 693(I)/2007], Gazette of Pakistan (July 13\textsuperscript{th} 2007). The regulations were published as INFCIRC No. 712 on IAEA website <http://www.iaea.org/Publications/Documents/Infcircs/2007/infcirc712.pdf> Accessed on January 4\textsuperscript{th} 2012.

\textsuperscript{560} See: Oversight Board of Export Control Act, clause (3).
Furthermore, the principle of a designated export control agency is also partly implemented in the Pakistani export control mechanisms. SECDIV was established as such an agency, but it lacks authority on defence exports which are handled by the Ministry of Defence Production (MODP), the ministry responsible for the defence industry. MODP is also responsible for granting a NOC to private exporters who wish to trade in missile components, in addition to evaluating such an export application by SECDIV. As mentioned, in light of state control over most of the nuclear field, and SECDIV’s main authority as an export control agency for the private sector, it has a very limited role in preventing nuclear proliferation.

SPD serves as the export control agency of the nuclear organisations, but this responsibility contradicts the agency’s other duties deriving from its overall management of the nuclear programmes, such as the financial interests of R&D organisations. Hence, SPD, as the critical non-proliferation agency in Pakistan, has a broader mandate which might prevent the enforcement of export controls.

As discussed earlier in this chapter, the element of a comprehensive legal framework is inherent in Pakistan’s export controls. The assimilation of the new procedures was the result of a reform process in the control system over the nuclear organisations which began after Pakistan’s nuclear tests of 1998, and the enhancement of the overall legislation following the exposure of AQ Khan’s proliferation network. Regarding the participation of nuclear organisations in forums and decision making on export controls, it is known that DCC of NCA includes representatives of the nuclear establishment, though it is not clear if DCC is indeed an export control forum.

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562 As part of the reforms in the control system, Pakistan also established in 2001 a Nuclear Regulatory Authority (PNRA) which according to the Export Control Policy of 2009 (clause 1 of serial no. 14 of schedule II) is also involved in authorising nuclear export by non-exempted entities.
As manifest from the above analysis of Pakistan’s export controls, it is missing significant elements in comparison to western and non-western countries, which were discussed in this chapter. Western export control mechanisms include most of the elements of the 'structural
approach’ and in particular extensive inter-agency mechanisms, an influential Foreign Ministry and involvement of the national leadership in assessing sensitive export applications. Even when comparing Pakistan’s export controls with non-western equivalent mechanisms the latter contain more elements which could compensate for the omitted components: Russia combines the involvement of the national leadership with inter-agency mechanisms, while India merges an influential Foreign Ministry with comprehensive inter-agency consultations.

<table>
<thead>
<tr>
<th>Country</th>
<th>Comprehensive Legislation and Control Lists</th>
<th>Influential Foreign Ministry</th>
<th>Designated and Independent Export Control Agency</th>
<th>Involvement of the National Leadership</th>
<th>Extensive Inter-Agency Mechanisms</th>
<th>Non-Exemption from the Export Control Procedures</th>
<th>Exclusion of R&amp;D Organisations of WMD from Decision Making (beyond professional assessments)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
<td>✓</td>
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<td>×</td>
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<td>×</td>
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</tbody>
</table>

Pakistan’s export controls over nuclear organisations are in practice under the responsibility of a single agency, SPD, which regularly answers to the Army chief. This chapter exemplifies a paradox when evaluating the efficiency of export control mechanisms over nuclear organisations in preventing proliferation. On the surface, centralised export controls might be perceived as an advantage in simplifying the process, and subordinating the duties of export control to militaries which are a disciplined and hierarchical organisation. However, without the necessary checks and balances which exist in other countries, Pakistan’s military has the option to abuse its dominant authority and initiate nuclear assistance to promote its agenda and perceptions about national security. The military character of the export controls was even more obvious before the reforms which commenced in the late 1990’s. The ‘practices approach’ is unable to expose this inherent problem in such a striking way, unlike analysis conducted according to the ‘structural approach’ which also compares Pakistan’s and other countries’ export controls.

It seems that the above-mentioned situation in Pakistan’s export control mechanisms and its military nature are significant reasons for the existence of the conditions which enabled AQ Khan and his associates from the nuclear organisation of KRL to initiate a nuclear
proliferation network. As apparent from the analysis of Pakistan’s export controls according to the ‘structural approach’, if AQ Khan and his associates in KRL were indeed almost likely unable to orchestrate a nuclear export project in a wide scale and for a long period without any awareness of the authorities (as discussed in Chapter One) nuclear proliferation from Pakistan could only occur with military consent and knowledge, if not on the latter’s initiative.

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Chapter Four: Glossary of Abbreviations

ACEP - Advisory Committee on Export Policy
AECA - Arms Export Control Act
AG - Australian Group
AL (German) - Export List
AQ Khan - Abdul Qadeer Khan
AWG (German) - Foreign Trade and Payment Act
AWP - Arms Working Party
AWV (German) - Foreign Trade Statutory Order
BAFA (German) - Federal Office for Economics and Export Control
BIS - Bureau of Industry and Security (of the United States)
- Department of Business, innovation, and Skills (of the United Kingdom)
BMWi (German) - Ministry of Economics and Technology
BSR (German) - Federal Security Council
BWC - Biological Weapons Convention
CAS - Chief of Air Force Staff
CBEC - Central Board of Excise and Customs
CBP - Customs and Border Protection
CCL - Commerce Control List
CIA - Central Intelligence Agency
CJ - Commodity Jurisdiction
CJCS - Chairman Joint Chiefs of Staff
CJCSC - Chairman of Joint Chiefs of Staff Committee
CNS - Chief of Navy Staff
COAS - Chief of Army Staff
CRS - Congressional Research Service
CWC - Chemical Weapons Convention
D&ISA - Disarmament and International Security Affairs Division
DAE - Department of Atomic Energy
DCC - Development Control Committee
DDTC - Directorate of Defence Trade Control
DFID - Department for International Development
DGFT - Director General of Foreign Trade
DHS - Department of Homeland Security
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DOC - Department of Commerce
DOD - Department of Defence
DODP - Department of Defence Production
DOE - Department of Energy
DOPC - Cabinet Defence and Overseas Policy Committee
DOS - Department of Space (of India)
    - Department of State (of the United States)
DOT - Department of Treasury
DPSU - Defence Public Sector Undertakings
DRDO - Defence Research and Development Organisation
DSDA - Department for Security and Disarmament Affairs
DSO - Defence Export Service Organisation
DSRFA - Department of State Regulations of Foreign Affairs
DTSA - Defence Technology Security Administration
DUEC - Dual-Use and Related Goods (Export Control) Regulations
EAA - Export Administration Act
EAR - Export Administration Regulations
EARB - Export Administration Review Board
EC - European Commission
ECC - Employment Control Committee (of Pakistan)
    - Federal Export Control Committee (of Russia)
ECO - Export Control Organisation
EGCO - Export of Goods (Control) Order, 1994
ELT - Export Licensing Team
EPA - Export Policy and Assurance
EU - European Union
EXIM - Export-Import Policy Regulations
FAS - Federation of American Scientists
FCO - Foreign and Commonwealth Office
FCS - Federal Customs Service
FSB (Russian) - Federal Security Service
FSETNS - Federal Service for Ecological Technological and Nuclear Supervision
FSMTC - Federal Service for Military-Technology Cooperation
FSTEC - Federal Service for Technical and Export Control
FTDR - Foreign Trade Development and Regulation Act, 1992
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FTG - Foreign Trade Group
GAO - General Accounting Office
HLC - High Level Committee
HMRC - Her Majesty’s Revenue and Customs
IAEA - International Atomic Energy Agency
ICP - Internal Compliance Programme
IMWG - Inter-Ministry Working Group
INFCIRC - Information Circular
ISI - Directorate of Inter-Services Intelligence
ISIS - Institute for Science and International Security
ITAR - International Traffic and Arms Regulations
ITC (HS) - India’s Tariff Classification (Harmonised System)
JSHQ - Joint Staff Headquarters
KRL - Abdul Qadeer Khan’s Research Laboratories
KWKG (German) - Weapons of War Control Act
MCTL - Military Critical Technologies List
MEA - Ministry of External Affairs
MEDT - Ministry of Economy Development and Trade
MFA - Ministry of Foreign Affairs
MIC - Military Industrial Committee
MIT - Ministry of Industry and Trade
MOC - Ministry of Commerce
MOCI - Ministry of Commerce and Industry
MOD - Ministry of Defence
MODP - Ministry of Defence Production
MOF - Ministry of Finance
MOFA - Ministry of Foreign Affairs
MOI - Ministry of the Interior
MTC - Ministerial Committee for Military-Technical Cooperation with Foreign Countries
MTCR - Missile Technology Control Regime
MTEC - Missile Technology Export Control Group
NASA - National Aeronautics and Space Administration
NCA - National Command Authority
NDAA - National Defence Authorisation Act
NGO - Non-Government Organisation
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NIS - New Independent State
NNCA - National Nuclear Security Administration
NOC - Non-Objection Certificate
NRC - Nuclear Regulatory Commission
NPT - Nuclear Non-Proliferation Treaty
NSC - National Security Council
NSG - Nuclear Suppliers Group
OC - Operating Committee
OFAC - Office of Foreign Assets Control
OGEL - Open General Export Licence
OIEL - Open Individual Export Licence
PM - Prime Minister
PMA - Bureau of Political-Military Affairs
PNRA - Pakistan Nuclear Regulatory Authority
PRIF - Peace Research Institute Frankfurt
R&D - Research and Development
RAS - Russia Academy of Sciences
REU - Restricted Enforcement Unit
RMIPC - Release of Military Information Policy Committee
ROSATOM (Russian) - State Atomic Energy Corporation
ROSCOSMOS (Russian) - Federal Space Agency
RUSI - Royal United Services Institute
SARS - Severe Acute Respiratory Syndrome
SASSI - South Asia Strategic Stability Institute
SCOMET - Special Chemicals, Organisms, Materials, Equipment and Technologies List
SECDIV - Strategic Export Control Division
SFC - Strategic Forces Command
SIEL - Standard Individual Export License
SIPRI - Stockholm International Peace Research Institute
SNEC - Subgroup for Nuclear Export Control
SPD - Strategic Plans Division
SRO - Statutory Regulatory Order
SVR (Russian) - Foreign Intelligence Service
SXWP - Strategic Exports Working Party
UK - United Kingdom of Great Britain and Northern Ireland
UKTI - United Kingdom Trade and Investment Organisation
UN - United Nations
UNSC - United Nations Security Council
UNSCR 1540 - United Nations Security Council Resolution 1540
US - United States of America
USML - United States Munitions List
USSR - United of Soviet Socialist Republics
WA - Wassenaar Arrangement
WMD - Weapons of Mass Destruction
ZKA (German) - Criminal Investigation Service
Chapter Five: Comparative Analysis between China’s and Pakistan’s Experience in Export Controls with Emphasis on the Military Involvement

1. Introduction

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In the previous chapter (Chapter Four) Pakistan’s export control over nuclear organisations were examined by comparing export controls of other countries from a structural perspective (by using the ‘structural approach’). In the final analysis, it was clearly noticed that Pakistan’s export controls lack important elements, essential for an efficient control system, which can offer an explanation for the unprecedented nuclear proliferation from Pakistan. In this chapter the analysis will try to reaffirm the insights of Chapter Four by presenting the evolution of China’s export control system and its organisation in comparison with Pakistan’s. As will be exemplified in this chapter, in these nuclear weapons countries the military played a dominant role in controlling the R&D agencies which are responsible for the nuclear programmes. Hence, it is anticipated that a comparative analysis between the two cases be useful in tracking the malfunctions of Pakistan’s control system as a result of being militarised.

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The objective of this chapter is to suggest insights into Pakistan’s export control system by comparing its status with the export control system over R&D organisations of WMD and the private sector in the People’s Republic of China (PRC). The comparison with China’s export control system is not obvious: the two countries have different historical experience; there are cultural differences between them which influence their perception when operating government apparatus; and they have their own perspectives on international affairs and on their strategic situation. However, China and Pakistan are the only nuclear weapons countries which have experienced a significant military involvement in their export control systems. While in western countries the supervision over R&D organisations related to nuclear programmes was left to civilian agencies, the military in China and Pakistan were not only involved in export control mechanisms, they also shaped the entire national framework for the prevention of nuclear proliferation from these countries, and both countries’ arms control policy.
In light of the militarised nature of the export control systems in China and Pakistan, the first part of this chapter will present the main features and compare the armies of both countries. These armed forces will be the focus of the analysis regarding their involvement in the control systems over nuclear organisations. The similarities and differences between the two armies will be explored in order to reaffirm the rationale for the comparison between PRC’s and Pakistan’s export control systems. Following the discussion about the armed forces of both countries, the export control systems will be evaluated from a structural perspective. First, Pakistan’s export control system will be compared to China’s system before it was reformed in the late 1990’s in order to emphasise the similarities between their structure and procedures. Then, Pakistan’s export control system will be evaluated in comparison with China’s contemporary export control system with an emphasis on the factors which improved its competence in preventing proliferation. The conclusion of this chapter will focus on the missing elements of Pakistan’s export control system as evident from the comparative analysis and the significance for possible nuclear proliferation from Pakistan.

2. The Pakistan Army and the Ground Forces Branch of the People’s Liberation Army (PLA) of China: Similarities and Differences

In this section, the origin and nature of the above-mentioned armed forces will be presented in order to allow a better assessment of their role in national control systems over nuclear organisations. The two armies were created and shaped as part of the historical context of their respective countries. The Pakistan Army and the PLA’s Ground Forces565 were both developed and organised as state armed forces in the second half of the twentieth century. However, both armed forces had a dominant role as internal players before the formation of their respective country/regime. The PLA was constructed in 1927 as one of the pillars of the Communist Party of China (CCP). Its top command consisted of CCP’s leaders, and it was used by the party as a tool for gaining power - and ultimately to create a communist regime in China. The PLA was the armed force which guaranteed the establishment of PRC in 1949 after a lengthy civil war with China’s ruling party (the national party of China - the Kuomintang), and a military conflict with Japan566. As a result, the PLA’s generals secured their position and influence within the national leadership.

565 In the benefit of a maintaining a clear and simple style any reference to the PLA is to the PLA’s Ground Forces, unless specified otherwise.
The constitution of the Pakistan Army also existed before Pakistan’s independence on the basis of the old British Indian Army. The cadre of Muslim officers in the military of the British Raj, whose Muslim personnel mainly comprised Punjabis, became the backbone in the creation of the Pakistan Army. Moreover, the Army’s structure and concept of operation were adopted as a result of the experience of the British Army, and this is reflected in the British Indian Army, particularly as the first Commanders in Chief (C-in-C) of the Pakistan Army were British officers. Immediately following Pakistan’s independence in 1947 the Army became an important player in the country’s internal political struggles. In 1958, only a decade after Pakistan’s independence, the military seized power and established the first of four martial regimes the country has experienced so far (in the years: 1958-1969, 1969-1971, 1977-1988, and 1999-2007).

In addition, both armies have played a significant role in their countries’ internal arena. The PLA was one of Mao’s staunchest supporters in his reform initiatives, such as the Cultural Revolution. The economic reforms since the 1980’s and after Mao’s era were initiated by his successor, Deng Xiaoping, who secured the PLA support for his leadership. The PLA has remained an integral part of CCP until today, and the generals hold influential positions in the party’s establishment. The Pakistan Army too has an active role in national political developments: as mentioned for more than half of the period since Pakistan’s independence in 1947 the country was under martial regime. During the remaining period Pakistan was ruled by civilian governments but with restrictions dictated by the Army and after accepting the Army’s dominance over national security issues.

Furthermore, similar to other armed forces in the international community the armies of China and Pakistan consider themselves as the protectors of the nation. Both armies see themselves as responsible for preserving their countries’ integration and national identity. They are strongly committed to their countries’ national vision; hence, the two armies value public trust in their organisation and they make efforts to gain consensual support for their operations and for their policies. The Pakistan Army and the PLA are part of developing countries which tend to suffer from the low performance of their administration. These two armies routinely interact with civilian bureaucracy and are forced to handle widespread negative phenomena in

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568 Ibid. The two British officers which were C-in-C of the Pakistan Army: General Sir Frank Messervy (August 1947 - February 1948) and General Sir Douglas Gracey (February 1948 - January 1951).
570 China’s Evolving Civil-Military Relations, p. 235.
public service, such as corruption, nepotism, and incompetence. Hence, a significant part of the attention of the PLA and the Pakistan Army is dedicated to minimising the effect of the public sector on the soldiery of officer rank.

The PLA and the Pakistan Army have both been involved in operating economic ventures in their countries. These economic ventures were initiated in order to improve the welfare of their manpower, or to sustain the militaries’ self sufficiency due to severe economic situations and a lack of government financial resources. One of the ramifications of the armies’ involvement in the private sector has been a vested interest in avoiding economic reforms which might jeopardise the character of the economic market and the revenues for both armies. As a result, both armed forces have consistently increased their internal influence and aspired to play a dominant role in civilian matters, such as industry, public funding, and infrastructure. Although the PLA still controls private companies, since the second half of the 1990’s it has given away most of its economic empire and the PLA’s ventures were divided among several federal and provincial authorities.

There are also significant differences between the two armies. In this regard, the pattern the two armed forces took to consolidate their internal position was quite different. Since its formation, the PLA has been an armed organisation committed to CCP. The PLA was also an important link between the party and the masses: its notion of guerrilla warfare and the importance of popular support for its success led to the creation of units for armed civilian groups under the PLA command. The PLA was designed as a large conventional force consisting of millions of soldiers, in addition to militia forces and local civil defence groups. Regarding the Pakistan Army, its notion was of a professional force whose senior command is comprised of elite groups, and most of its officers are from the middle and upper classes.


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The Pakistan Army also has a different perspective from the PLA on military-civilian relations. The Pakistan Army addresses civilian authorities as instruments subordinate to the stratagem of its national security objectives. The Pakistan Army uses various measures to manipulate the political system while holding its grip over the civilian bureaucracy. The Army refrains from loyalty to the national leadership as evident from the occasional military coups in Pakistan’s short history. On the other hand, the PLA in China was far from enjoying the relaxed supervision of the civilian authorities and CCP leadership. The PLA was under the constant weight of CCP political masters: CCP’s formidable leader, Mao Zedong, emphasised that “Political power grows out of the barrel of a gun” and thus the PLA must always stay under party control576. Although the party leaders did not hold a military rank, the first generations of CCP leaders were deeply admired in the military for their involvement in military planning and operations during the civil war and guerrilla warfare of the 1930’s and 1940’s against imperial Japan. This pattern of relationship in PRC between the military command and the national leadership is still viable despite the shift in the collective character of CCP leadership in recent decades: most of them do not have any experience in military affairs and they rose to seniority as party technocrats, usually because of their economic experience and their social affiliation to the party’s elite group577.

Both armies also differ in their position in their country’s defence establishment. The Pakistan Army is the main state agency which sets national security directives. The military expects the other state agencies to follow them and join military efforts in their implementation. In China, the PLA can influence the strategy on defence issues, and it is fully integrated in the decision-making process. However, the strategy itself is determined by the civilian leadership of CCP which also directs the party’s Central Military Commission (CMC).

Despite the differences in nature in some aspects, the shared character of the PLA and the Pakistan Army can explain their approach towards the control system over R&D of non-conventional capabilities and advanced weaponry. These technological capabilities are considered valuable assets for national security. Both armies consider themselves as the

nation protectors and thus aspire to gain dominant control in the sphere of nuclear capabilities. Moreover, both armed forces have a lack of confidence that civilian agencies will perform their duties in the export control system over non-conventional organisations any better than the civilian problematic performance in other areas of responsibility. Furthermore, both armies have wide influence through their structural position both in decision making and in their responsibility for executing the major part of national security policies. The above argument applies more to Pakistan which has a dominant Army, but the PLA too has the power to determine defence policies.

As will be discussed, the two armed forces are important players in their respective countries in the formation of the export control system. Prior to the discussion about the nature of the control mechanisms on a comparative scale, there is a need to present the fundamental aspects in the structural/organisational position of the PLA and the Pakistan Army that contribute to the understanding of their involvement in the control systems.

2.1. The Structural Arrangements which Manifest the Power of the Army Institutions in PRC and Pakistan

As mentioned, both in China and in Pakistan the Army has an important role in decision making regarding national security issues. The PLA has a majority among CMC members, the highest official forum which deals with PRC’s national security. CMC is the only state entity responsible for all armed forces: Army (the PLA Ground Forces), Navy (the PLAN) and Air Force (the PLAAF). Moreover, the different staff divisions of the PLA, such as the General Political Department (GPD), and the General Logistics Department (GLD) are directly subordinate to CMC. The PLA’s General Staff is also a department (the General Staff Department/Headquarter - GSD) under CMC578. There is no joint staff command at the level of senior military command and CMC directly controls military regional commands579. CMC also controls (jointly with the Ministry of Public Security) the People’s Armed Police (PAP)

which is a paramilitary force responsible for maintaining public order and confronting riots and public unrest\(^{580}\).

The Pakistan Army has more influence over national decision making than the PLA in China. Within the armed forces, the Pakistan Army has a dominant role that overshadows the other military forces (see Chapter Two). The Chief of the Army Staff (COAS) is the most influential position in Pakistan’s military. The Army chief is also a prominent player in Pakistan’s internal power struggles: in several instances in Pakistan’s history he initiated a coup and became head of state parallel to preserving his military position. The key forum in Pakistan for national security issues is the Corps Commanders’ Conference (CCC) of the Army, and the forum usually convenes every month. CCC includes all the senior officers in the Pakistan Army\(^{581}\). Nominally, the Cabinet Committee for Defence (DCC) which is chaired by the Prime Minister as chief executive has a senior status over the commanders’ conference; however (as discussed in Chapter Two), it seems that DCC does not carry significant weight in the decision making over national security issues which are perceived as the Army’s prerogative\(^{582}\). In short, the Pakistan Army has full autonomy over its internal affairs and a powerful position to influence national security policies while the PLA is a strong and influential institution in decision making, but with strict supervision of the civilian leadership.

Furthermore, the PLA has a unique command structure which limits its autonomy on military affairs: instead of joint staff mechanisms (such as an HQ and a coordination forum of the chiefs of the armed forces), it has several divisions all answerable to CMC which is the CCP civil-military forum for national security issues. On the other hand, Pakistan’s armed forces have full autonomy over cooperation between the different military services. A designated HQ was created for military coordination, the Joint Staff Headquarters (JSHQ), and also an official forum for routine briefings with the armed forces’ chiefs, the Joint Chiefs of Staff Committee (JCSC). Both of these organisational arrangements are under the control of a military general (usually from the Army), the Chairman of JCSC (CJCSC). Unlike the political participation in China’s CMC, in Pakistan there is no involvement at the political level in military inter-services’ procedures.

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\(^{580}\) Ibid, p. 18.


There were initiatives by Pakistan’s martial heads of state, such as Generals Pervez Musharraf and Zia ul-Haq, to establish a National Security Council (NSC) which would be somewhat equivalent to CMC in China, but dominated by the military generals. NSC was designated to discuss all aspects of Pakistan’s national security, including the social and economic situation, and to comprise members of the military, the government and the political system (such as the speaker of the National Assembly). However, due to fierce objections from the political system, which feared institutional military involvement in all national spheres, NSC never played a role in defence issues. Once the civilian regime was restored, NSC was instantly marginalised.

Furthermore, the subordination of the Pakistan Army to civilian authorities is partial. According to the constitution, Pakistan’s President is head of state and thus also controls the armed forces. The Prime Minister who is the chief executive and responsible for the operation of the government does not have authority over the armed forces. Furthermore, there is no strict civilian control over the Army: the main official contact between the civilian leadership and the military chiefs is based on occasional briefings about defence issues.

Apart from direct contacts between the national leadership and the military command, in China and in Pakistan there is partial supervision over the armed forces. The Ministry of Defence (MOD) in Pakistan and the parallel organisation in China (the Ministry for National Defence - MND) are not part of the chain of command: the military service chiefs do not answer to the Defence Ministers. In China, the Minister for National Defence is a member of CMC, but MND mainly administers military cooperation with foreign countries, and facilitates the work of China’s military attachés around the world. In Pakistan, MOD has similar objectives. The Defence Minister is a member of DCC and is also in the National Command Authority (NCA) which is the highest forum responsible for the nuclear programmes. However, COAS and the other military chiefs are not directly subordinate to MOD. Pakistan’s MOD deals with administrative work which is related to the operation of nuclear programmes.

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584 According to recent constitutional reforms which gained the approval of the parliament, the President will remain as a figure head without any real authority over the military. See: Griff Witte, Pakistan Parliament Passes Reforms to Curb Presidential Authority, Washington Post (April 8th 2010). <http://www.washingtonpost.com/wp-dyn/content/article/2010/04/08/AR2010040803442.html> Accessed on May 8th 2010.

585 The Chinese Army Today, p. 31.
the armed forces, such as the allocation of the defence budget, promotions procedures, and several logistic works.586

Another issue regarding civil-military relations is the control over the state security agencies and the intelligence apparatus in light of their influence on national security and on decision making. China’s intelligence apparatus is based on both civilian and military intelligence agencies, and on research institutes affiliated to these agencies and to government ministries. The civilian Ministry of State Security (MSS) is the central intelligence agency of PRC, and it is responsible for information collection and operations. There are also intelligence organisations operating under the State Council (China’s government), the Ministry of Foreign Affairs, and other government authorities. These organisations are responsible for managing different intelligence missions for the analysis and collection of information. The responsibility for analysing military threats and China’s strategic situation lies with the different military intelligence units which work under the PLA General Staff Department (GSD). These units have their own intelligence collection resources and direct access to all senior national forums: CMC, CCP leading group, and the State Council. There are also designated intelligent analysis units in the Navy and Air Force.587

As discussed in Chapter Two, in Pakistan’s military intelligence agencies have a dominant role over the civilian ones. Pakistan’s central intelligence agency is the Inter-Services Intelligence Directorate (ISI) which is responsible for coordination within the intelligence community, and for all the important intelligence arenas: internal stability, strategic situation assessment, military and terror threats. The ISI also has capabilities in covert operations. The agency is known for its wide ranging contacts with armed groups in Pakistan, in Afghanistan and in the Indian-controlled part of the Kashmir region.588 Officially, the ISI Director General (DG ISI) reports directly to the President and to the Prime Minister and the agency has civilian personnel among its ranks. Nevertheless, DG ISI is usually an Army general subordinate to COAS. The ISI is an independent military directorate with its own HQ, and it is well integrated in the military apparatus and most of its personnel are from the armed forces.589

In addition to the ISI, a Military Intelligence directorate (MI) operates in the Army HQ (GHQ). MI has a broad framework for activity that partially overlaps with the responsibilities of the ISI. Apart from collecting and analysing information on military issues and threat assessment regarding the possibility of war breaking out, MI also has connections to the political system and it focuses its concern on internal and external threats to Pakistan’s internal stability. The third intelligent agency is the Intelligence Bureau (IB) and it is a civilian intelligence agency under the Ministry of Interior which answers directly to the Prime Minister. Its main responsibilities relate to internal security matters.

In short, both armies of PRC and Pakistan have the capability to project significant influence within their countries’ establishments, and their position is secure in all issues pertaining to defence and national security. However, as evident from the above presentation, the Pakistan Army holds much more power than the PLA in China and usually manages the entire planning and decision making on strategic issues - from relations with India and the US to matters related to the nuclear programme development and to operating militant groups in Afghanistan. After discussing the nature of both armies and their position in their respective defence establishments and in decision making, their role in the national control systems will be explored. There will be two comparative analyses to illustrate the nature of both export control systems: between Pakistan’s export control system and China’s former and contemporary export control systems. In each analysis the role of the two armies will be emphasised versus the position of the civilian leadership and bureaucracy.

3. China’s Export Control System and the PLA’s Role before the Reforms: Comparison with Pakistan’s Contemporary Export Controls

3.1. The Principles of the Chinese Control System until 1997 and its Structure

Non-proliferation export controls are relatively new practices in PRC in comparison with western countries. The main factor behind PRC’s reluctance to adopt a non-proliferation
policy was its perspective that non-proliferation norms are a pretext for the US and western countries to preserve their monopoly over advanced technology and WMD capabilities. As a result, PRC did not establish export control mechanisms until the 1990’s in a less ideological era. China gradually began to formalise and institutionalise its export control policy by formulating and publicising legally based regulations governing the export of sensitive goods controlled by various non-proliferation treaties and agreements. The changes in the Chinese export control system were closely connected to shifts in US-China political relations, and efforts by the Chinese government to improve its international status.

Until the mid-1990’s, China's controls on exports of WMD-related goods and technologies were either nonexistent or were based on opaque internal procedures. There was no formal licensing system based on government laws and regulations. At that time, these internal controls could only loosely be called a system. The government used the old framework of administrative controls, which contrasts with the system of ‘legally based’ export controls. Such administrative controls remained from the legacy of CCP’s planned economy. The framework of administrative controls had several features. First, all control manifestations were internal executive decrees, not grounded in Chinese law. It was never clear which equipment, materials, and technologies were included in these internal lists, or if the control lists even existed. One of the most glaring gaps in these control lists was the apparent lack of comprehensive coverage of dual-use goods. A final failing of such administrative controls was the absence of clear policy standards to judge whether to export sensitive items to certain countries.

Second, under this framework of administrative controls the State Council had designated certain State-Owned Enterprises (SOEs) as the only entities permitted to export sensitive items, and particularly nuclear, missile, and conventional military items. This monopoly of trading rights provided the government with a degree of control over entities which exported

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594 Fu Cong (Department of Arms Control and Disarmament, Ministry of Foreign Affairs of China), An Introduction of China’s Export Control System, statement at Workshop on Non-Proliferation Export Control Regimes, Tokyo (December 11th-12th 1997).
595 Only in 1995 did China publish its first export control list on Chemical dual-use items.
596 In 1994, China adopted a general and comprehensive Foreign Trade Law, which outlined, for the first time, the legal parameters of all foreign trade in China - including general export controls. In 1987, China adopted its first Customs Law, which empowered the Customs Agency to participate in vetting exports. However, it was still unclear what the parameters for China’s defence exports are or which dual-use items are under the export control process.
sensitive items\textsuperscript{597}. Financial incentives appeared to be the strongest motivation in decision making about their export, and it was not until the early 1990’s that China began seriously to consider the impact of these sales on its international position. Furthermore, there were also extensive problems with this framework, given the penchant for companies to ignore or circumvent these stipulations due to the Chinese government's broader political agenda of promoting economic development and trade. A third attribute of the framework of administrative controls was the centralised control of export decisions within one industrial bureaucracy like in the nuclear industry: for many years, there was little, if any, inter-ministerial coordination or vetting process\textsuperscript{598}.

This system of monopolistic administrative export control authority was modified in the late 1980's and early 1990's. Key industrial firms in the nuclear and aerospace industries began to consult about pending sales with the Ministry of Foreign Affairs (MFA) which provided an impact assessment on foreign policy\textsuperscript{599}. The export control mechanisms also included another civilian agency, the Ministry of Foreign Trade and Economic Cooperation (MOFTEC). MOFTEC only assumed a nominal role which included participation in inter-agency consultation, and the issue of export licences for WMD related-items (but not for defence exports)\textsuperscript{600}.

The main export control entities in China were under the heavy military influence of the PLA. CMC gained responsibility for formulating export control policy, and for supervising the defence industries and R&D organisations of WMD. Officially, the State Council was also involved, but in light of the central role in the regime of CCP apparatus, considerably more than the official government, it seems most likely that CMC (as part of CCP) set the framework for defence exports which was included in its overall responsibility for national security. It should be noted that although the chairman of CMC was a civilian figure and regularly CCP’s General Secretary, military generals exercised wide influence within CMC and comprised a majority in this forum\textsuperscript{601}.


\textsuperscript{601} China's Evolving Civil-Military Relations, p. 229.
Under CMC operated a Military Products Export Leading Small Group as a decision-making forum for sensitive defence and WMD-related exports (such as uranium enrichment technologies and missile systems). This high-level group was also under the influence of the PLA and was comprised of very senior members from CMC, the PLA, MFA, defence industries, and the Commission for Science, Technology, and Industry for National Defence (COSTIND) - a state agency for administrative control over the entire defence industry complex (both conventional and non-conventional R&D).602

The PLA had actual control over the industry-defence complex, and particularly the nuclear and aerospace industries through COSTIND. Furthermore, COSTIND was the designated agency to authorise defence exports of conventional weaponry and of missile related-items. All the management positions in COSTIND were manned by military officers (although COSTIND had civilian personnel too), and it was subordinate to CMC. Only nominally, COSTIND was also subordinate to the State Council.603

In addition, the State Authority Committee for Military Product Trade (SACMPT) was established in 1989604 as an inter-agency forum. SACMPT supervised and administered the export control process for all defence and dual-use items, and issued export licences through the State Bureau of Military Product Trade (SBMPT).605 SBMPT authorised export applications following an inter-agency consultation with MFA and other agencies. SACMPT authorised large scale military contracts with the approval of CMC and the State Council.606 Although SACMPT was a civilian agency, it was under the PLA influence: alongside representatives from MFA, MOFTEC, and other relevant agencies, there were also representatives from COSTIND and the PLA’s GSD (under the authority of CMC). Furthermore, SACMPT was subordinate to CMC as well as to the State Council.607

602 Some U.S. experts argue that the SACMPT was the same organisation as the Military Products Export Leading Small Group; yet, Chinese scholars and officials insist that there were two different bodies. See: Chinese Arms Exports, pp. 54, 69 (no. 50).
603 Export Controls in the People’s Republic of China, p. 21.
605 Regarding issuing export licenses for conventional military products, it is not clear what the division of responsibility between COSTIND and SACMPT was.
606 Chinese Arms Exports, pp. 53-54.
607 Ibid, p. 35.

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Figure 23: China’s Export Control System until the late 1990’s in Comparison with Pakistan’s Export Control System - Main Agencies

Abbreviations:
- CMC - Central Military Commission
- COAS - Chief of Army Staff
- COSTIND - Commission of Science, Technology, and Industry for National Defence
- DCC - Deployment Control Committee
- GLD - General Logistics Department
- GSD - General Staff Department
- JSHQ - Joint Staff Headquarters
- ISI - Directorate of Inter Services Intelligence
- MFA - Ministry of Foreign Affairs (PRC)
- MOC - Ministry of Commerce
- MOD - Ministry of Defence
- MODP - Ministry of Defence Production
- MOFA - Ministry of Foreign Affairs (Pakistan)
- MOFTEC - Ministry of Foreign Trade and Economic Cooperation
- NCA - National Command Authority
- NCA - National Command Authority
- SACMPT - State Authority Committee for Military Product Trade
- SBMPT - State Bureau of Military Product Trade
- SPD - Strategic Plans Division
- SECDIV - Strategic Export Control Division
- SPDM - Strategic Plans Division
- SMD - State-Owned Enterprise

Inter-Agency Forum/Organisation
Military Organisation
Inter-Agency Forum/Organisation with Military Dominance
Government Ministry
Government Agency in the Export Control System
Export Entities
Regarding the control over R&D organisations, as mentioned, the PLA controlled the entire defence and WMD-related industries through its dominant role in COSTIND and in CMC. The defence industry complex was consistently centralised under government agencies: in 1993 the defence industry complex was organised into five corporations, each one responsible for a different defence R&D: nuclear, aerospace, aviation, maritime, and military ordnance. In addition, via GLD, the PLA owned and managed defence export corporations that sold military items and equipment from the PLA’s inventory.

3.2. The Similarities between the Past Chinese Export Control System and Pakistan’s Contemporary Export Controls

As evident, PRC’s export control system in its pre-reform period (until 1997) has, in principle, a similar nature like Pakistan’s control mechanism. The two systems are alike in three main dimensions of control mechanisms: structure, procedures and practices. In all of these dimensions, the military in both countries played a leading role in formulating the policy for export control, setting the institutional activities and exercising them. In both countries, the civilian agencies played a marginal role in export controls in the national security sphere.

Both China and Pakistan were reluctant about transparency in their export controls. Pakistan did publish a legal framework for its export control mechanisms and its regulations for considering license applications from private companies, but not for its defence industry or nuclear organisations. China chose a similar modus operandi until the end of the 1990’s: it was reluctant to formulate export control lists or to pin-point the competent authorities and their division of responsibility, both for the military and the civilian sectors.

On the national decision-making level, the military had a dominant role in both countries. The military high command (with a solid majority of Army generals) had a significant number of representatives around the decision-making table of the national security forums: Even nowadays, four out of ten members of NCA in Pakistan are military generals, and in China,

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except for the chairman of CMC, almost all the other members are usually military generals. Furthermore, Pakistan’s designated export control forum at ministerial level (the Development Control Committee of NCA) is comprised mainly of military generals or representatives from nuclear organisations which are subordinate to the military. As mentioned earlier, in China the situation was quite similar: the CMC Military Products Export Leading Small Group was also under the heavy influence of the PLA.

Furthermore, both in Pakistan and in China the military is involved in the activity of the main civilian export control agency. In Pakistan, the Oversight Board for Export Control has military representatives from the Strategic Plans Division (SPD) while the Strategic Export Control Division (SECDIV) is administratively under the Ministry of Foreign Affairs (MOFA). In China, the situation was very similar: the PLA had representatives in SACMPT, and SBMPT, although its administrative body apparently did not include military personnel.

The supervision over the defence industries and R&D organisations of WMD was similar in both countries. SPD in Pakistan and COSTIND in China received control over the entire defence industry complex. In both countries there was a tendency to subordinate military R&D institutions under umbrella organisations (such as NESCOM in Pakistan) in order to centralise state supervision over them. It should be mentioned that there were differences in the nature of the two agencies: SPD has a much more dominant role than COSTIND in the control system and has more responsibilities regarding the supervision over nuclear organisations. Furthermore, SPD is a military directorate connected to the Joint Staff Headquarters (JSHQ) while COSTIND was nominally a civilian agency with military personnel under the joint control of CMC and the State Council. On the other hand, unlike COSTIND, SPD does not have direct control over the defence industry sector of conventional weapons (under the supervision of Pakistan’s Ministry of Defence Production - MODP), although COSTIND did not control military corporations which trade in military items from the PLA inventory.

Regarding civilian agencies, both in Pakistan and in China these agencies played a marginal role in export control mechanisms. MOFA in Pakistan (excluding SECDIV), and MFA in China did not have official responsibilities within the export licensing processes, and both

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610 A new directorate for conventional and open programmes was established in the SPD, presumably to be involved in defence industry issues, but there was no announcement regarding the government agency which is responsible for this sector - the Ministry for Defence Production (MODP).

611 In Pakistan, the Ministry of Foreign Affairs (MOFA) only participated in the decision-making process on export applications for dual-use items from the private sector. However, as was mentioned in Chapter Three,
of them were disconnected from the defence industry complex: Almost all responsibilities were under agencies affiliated to the military. Furthermore, both in Pakistan and in China the ministries of commerce (MOC and MOFTEC, respectively) only fulfilled administrative responsibilities in the export licensing process: issuing export licenses and updating the export control regulations.

3.3. The Differences between the Former Chinese Export Control System and the Current System of Pakistan

Despite the similarities in character of PRC’s control system before initiating the reforms of 1997, and Pakistan's export control system, the overall structural environment which facilitated their establishment was different. In China, the PLA was integrated within the regime through its massive participation in CCP’s institutions and by its complete obedience to the party leadership. On the other hand, the Pakistan Army exists as a separate bureaucratic system with some extensions into the state administration, and only nominally subordinate to the civilian governments. Furthermore, the Pakistan Army conducted coups and took control over the country while the PLA avoided taking this extreme measure, even during a national crisis. The PLA did not withhold itself from political involvement in the CCP power struggle. However, the PLA did not perceive its relations with the civilian authority as a ‘them and us’ situation in the same way as the organisational thinking of the Pakistan Army towards the civilian government.

Hence, the main organisational difference between China’s and Pakistan’s control systems was the scale of involvement of the militaries of both countries. While the PLA in China had significant influence (an informal one in some instances) over the export control mechanisms and the defence industry complex, the Pakistan Army supervises the entire process and exercised strict control over the nuclear organisations. In Contrast, in spite of its influence and involvement, the PLA was never considered the internal player in China determining the rules and framework.

These differences are exemplified in SPD’s role in Pakistan. SPD is a military directorate under the direct control of Army chief, authorised by the national leadership (through NCA) to supervise the nuclear organisations. SPD jurisdiction is wider than the combined authority

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it is not clear what the capability of the private sector is to manufacture a significant number of advanced dual-use items, and this sector apparently does not have R&D capabilities in the nuclear field.
of COSTIND and SACMPT in China, and as presented the latter agencies are not military organisations or part of the PLA.

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Hence, China and Pakistan had a comparable export control system which shared the principle that the export controls are, to a large extent, a military responsibility. However, PRC reformed its export control system and the reform limited the PLA’s role in export control mechanisms. Pakistan is still determined to preserve its military-centred export control system over its nuclear organisations.

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4. China's Export Control System and the PLA Role after the Reforms: Comparison with Pakistan’s Export Controls

4.1. The Reforms and the New Structure of China’s Export Control System

The comprehensive reforms in China’s export control system were an outcome of the reorganisation of the defence industry. These reforms were initiated in 1998, during the 9th Meeting of the National People’s Congress (China’s lower house of parliament) as part of significant downsizing and a restructuring process of the state bureaucracy. PRC moved from an administratively based and largely ad-hoc export control system to a system based on the rule of law.

Moreover, one of the main goals of the reforms in the defence industry was to distance the PLA from financial businesses, including the defence enterprises. These economic operations were considered both in CCP and in the PLA as holding a negative influence on the officers’ corps by degenerating and corrupting a significant number of its members. In turn, it undermined the PLA professionalism and combat readiness.

The consolidation of China’s export controls was also as a result of the concern of the US government regarding PRC’s proliferation track record. Since the 1980’s, and parallel to the decline in state subsidies and funding for SOEs, Chinese enterprises have begun to allocate

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614 Military Culture and Chinese Export Controls, p. 488.
615 China’s Evolving Civil-Military Relations, pp. 234-235.
other sources of revenue. They gradually expanded their assistance to WMD programmes in other countries, namely in the Middle East and South Asia\textsuperscript{616}.

The US placed a high priority on non-proliferation issues in its bilateral relations with China, and on several occasions Washington pressurised Beijing to formalise its non-proliferation commitments in specific export control regulations. At varying times in US-China relations, the US made a linkage between upgrading China’s export controls and improving relations with China\textsuperscript{617}. The result was numerous improvements in China’s export control mechanisms\textsuperscript{618}.

In response to international concerns, and long before the structural changes in the defence industry complex, China began to take steps in order to prevent American pressure and to improve its international status. As a result, during the 1980’s and 1990’s China joined the main arms control treaties: the Nuclear Non-Proliferation Treaty (NPT), the Biological Weapons Convention (BWC), and the Chemical Weapons Convention (CWC)\textsuperscript{619}.

Furthermore, although PRC held reservations about the concept of export control regimes, in 1997 it joined the Zanger Committee (the export control regime of NPT), and in 2004 it also became a member of the Nuclear Suppliers Group (NSG). In addition, China announced on several occasions its adherence to other international export control regimes: the Missile Technology Control Regime (MTCR), and the Australian Group (AG) in the biological and chemical field. As a consequence, China’s export control lists were formalised to correspond with the lists of the above international regimes\textsuperscript{620}.

US pressure combined with China’s eagerness to become a respected global power led China to adopt international norms regarding export control systems\textsuperscript{621}. As mentioned, PRC based its export control lists upon existing lists of different international export control regimes. Furthermore, China assimilated in its internal export control regulations legal tools that are

\textsuperscript{616} Export Controls in the People’s Republic of China, pp. 5-7.
\textsuperscript{617} There are several examples of these linkages. In 1997, China’s promulgation of nuclear-specific export regulations was a specific precondition of the United States to move forward with the implementation of a dormant nuclear cooperation agreement from 1985. Furthermore, China’s relative unwillingness for years to issue missile-related export control regulations was closely tied to Chinese opposition to US arms sales to Taiwan.
\textsuperscript{618} Chasing the Dragon, p. 17.
\textsuperscript{619} Export Controls in the People’s Republic of China, pp. 7-8, 28.
\textsuperscript{620} Ibid, pp. 51-56.
\textsuperscript{621} Chasing the Dragon, pp. 18-19.
mandatory in order for its control system to be considered effective according to international standards and concretely by the US and western countries.\footnote{Export Controls in the People’s Republic of China, pp. 20-21, 28.}

Moreover, the most noteworthy outcome of the reforms was the principle of transparency of the new control system. China published its entire export control regulations, control lists and the designated authorities. From the information which was released by PRC’s government one is able to learn about its official export control decision-making processes and about the responsibilities of each state agency in this apparatus.\footnote{In light of the limited space of the discussion, China’s legal framework and licensing processes of export controls will not be systematically analysed here. Chasing the Dragon (of RAND Corporation) and Export Controls in the People’s Republic of China (of the Centre of International Trade and Security) provide a clear and extensive characterisation of the subject.} However, the criteria for evaluating export control applications were not made public. For example, the parameters for transferring an application for the final decision of a higher body are not clear nor the extent of the export control agencies’ judgement regarding their obligation to consult other agencies (like MFA).

From an administrative point of view the main reorganisation in 1998 was the reconstruction of COSTIND as a civilian ministry under the State Council. COSTIND was officially disconnected from the PLA and CMC. In 2008 COSTIND was reorganised again and was merged as the State Administration of Science, Technology, and Industry (SASTIND) into the new Ministry of Industry and Information (MII).\footnote{Tai Ming Cheung, Dragon on the Horizon: China’s Defence Industrial Renaissance, Journal of strategic Studies, 32:1 (February 2009), p. 37.}

SASTIND has responsibility for most of the defence industry complex and its export enterprises.\footnote{At the heart of the reforms, the entire defence industry complex was reorganised in order to generate competition among its defence conglomerates and with foreign defence industries which potentially can also cater to the PLA’s needs. As a result, the defence industries were reorganised into nine enterprises. Some of the defence conglomerates run export corporations which are the only ones authorised by the state to export military and dual-use items. The following defence SOEs are under SASTIND supervision (see also footnote no. 626):}

1) In the nuclear sector, China National Nuclear Corporation (CNNC) is responsible both for military and civilian nuclear programmes. CNNC controls an authorised entity for nuclear export: China Nuclear Import Export Corporation (CNIEC). Another entity, China Nuclear Engineering Construction Corporation (CNEC), is mainly involved in construction of nuclear reactors and defence-related nuclear facilities.

2) In the aerospace sector, China Aerospace Science and Technology Corporation (CASC) has expertise in the production of launching vehicles, manned spacecraft and satellites, and strategic and tactical missiles. CASC controls the China Precision Machinery Import Export Corporation (CPMIEC) for the exportation of its products. China Aerospace Science and Industry Corporation (CASIC) specialises in guided missiles, air defence, and cruise missiles systems.
items. These export corporations represent SOEs of the defence industries, and most of them are under SASTIND control\(^6\). However, in contrast to its jurisdiction until 1998 COSTIND/SASTIND is no longer involved in the direct management of defence industry corporations\(^7\). Furthermore, since its merger with MII, SASTIND has no responsibility for China Atomic Energy Authority (CAEA) which is the main administrative agency of the nuclear industry\(^8\).

According to the new export control regulations which were published between 1997 and 2003, SASTIND nowadays is the primary agency responsible for reviewing export applications for military items and aerospace systems and technologies. It also serves as the licensing administrator for exports in the above-mentioned fields\(^9\). Furthermore, SASTIND is one of the agencies which participate in consultations regarding the export of dual-use items in the missile and nuclear fields. SASTIND is the designated agency for reviewing requests to export nuclear materials, mentioned in the control list. SASTIND also gives

3) **In the aviation sector**, Aviation Industries Corporation of China (AVIC) is responsible for the development and production of combat aircraft, transport aircraft, helicopters and civilian products. AVIC manages China National Aero-Technology Import Export Corporation (CATIC) as its export corporation.

4) **In the military ordnance sector**, China North Industries Corporation (NORINCO) mainly manufactures tanks, armoured vehicles and munitions supplies. NORINCO has its own export corporation, China Ordnance Equipment Corporation, which mainly manufactures civilian vehicles.

5) **In the maritime sector**, China State Shipbuilding Corporation (CSSC) is the principle supplier to the PLA Navy. CSSC manufactures missile destroyers, frigates, and submarines. CSSC runs China Shipbuilding Trading Corporation (CSTC) as its export corporation.

6) **In the electronic sector**, China Electronics Technology Group Corporation is the main enterprise. It runs China Electronics Import Export Corporation (CEIEC) as its commercial subsidiary. Regarding the export corporations, some of them (like CPMIEC and NORINCO) are also part of the China New Era Group (also known as Xinshidai) which is an arms trade conglomerate. Xinshidai is jointly controlled by SASTIND and GSD of PLA.

There are nine authorised export corporations for conventional military goods (including aerospace systems and technologies, equivalent to items in Category I of the MTCR control list):

1) **Under the joint supervision of SASTIND and the PLA**: Xinshidai, CPMIEC, NORINCO, CATIC, CEIEC, and CSTC.

2) **Under the sole control of the PLA**: Poly Technologies (military and missile-related items), and China Xinxing General Corporation (military supply and logistics).

3) **Under the control of PAP**: China Jingjan Corporation (small arms, riot control and security equipment).

In addition, there are corporations which are authorised to export WMD controlled items:

1) **For nuclear controlled items**: CNIEC (see also footnote no. 625) and China Zhongyuan Export Corporation (CZEC).

2) **For chemical controlled items**: SINOCHEN, China Haohua Chemical Industry Group, and Dalian Material Dyeing Plant.


626 A New Direction for China’s Defence Industry, p. 34.

627 Dragon on the Horizon, p. 37.

628 Chasing the Dragon, pp. 35-36.
technical assistance in reviewing major nuclear exports e.g. for constructing nuclear reactors and other nuclear facilities. On the other hand, SASTIND has no official involvement in the export control process over chemical items, although in the past COSTIND was part of some interagency consultations.

It should be emphasised that SASTIND’s main objective is to promote defence export by the defence industry complex and to facilitate their marketing requirements. As a result, there is a conflict of interests between SASTIND’s leading role as export promoter and as an export control supervisor. These contradicting responsibilities can potentially influence SASTIND’s effectiveness as an export control agency.

Although the PLA lost a significant part of its control over the development and production entities in the defence industry complex, following the creation under the State Council of the new COSTIND/SASTIND, it still maintains extensive influence on defence export entities: GSD of the PLA, jointly with SASTIND, controls the New Era Group (also known as Xinshidai Group) which includes authorised export corporations. Most of the other defence export corporations (with authorisation for the export of missile-related items) are under the sole control of the PLA.

Furthermore, a new PLA division was established under CMC, the General Armament Division (GAD). GAD received, from COSTIND, the responsibilities for procurement and maintenance of the PLA weaponry. GAD is the PLA’s representative in the export control mechanism: it takes part in consultation processes on export applications for military and aerospace items, if the specific item is part of the PLA’s arsenal or its export could impair its military capabilities. Moreover, it seems that GAD is the export licensing authority for export corporations which are under the direct control of the PLA.

The PLA’s involvement in export control mechanisms through its participation in CMC is less significant. CMC still vet, in concert with the State Council, export applications for major/sensitive conventional military items, and aerospace/missile items. However, under the new reforms, CMC does not join the State Council in the evaluation process of major export

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630 Ibid, pp. 50-56; Export Controls in the People’s Republic of China, pp. 32-33.
631 Export Controls in the People’s Republic of China, p. 29.
632 Chasing the Dragon, p. 36.
633 See footnote no. 626.
634 Chasing the Dragon, p. 37.
applications in the nuclear, chemical and biological spheres. The State Council is also the forum which promulgated the regulations for the export of dual-use items. Thus, the State Council is officially the highest national entity which is most influential in export controls.

In order to establish an export control system according to international norms and which resembles to export control practices in western countries, civilian agencies acquired a stronger position in the Chinese system. MOFTEC as the Ministry of Commerce (MOFCOM) is involved in all export control mechanisms (the licensing process for military and aerospace items remains under the responsibility of COSTIND/SASTIND). MOFCOM replaced SACMPT as the leading agency for export controls on nuclear, chemical and missile dual-use items: MOFCOM coordinates the license application process and leads the interagency consultations on such applications.

MOFCOM also participates in the inter-agency consultations regarding export applications for all controlled items, but the review process is handled by designated agencies and not by MOFCOM: CAEA for nuclear items, SASTIND for aerospace and missile items, and the CWC Implementation Office (CWCIO) for chemicals. Furthermore, MOFCOM was authorised by the State Council to coordinate enforcement efforts on non-proliferation issues.

Another civilian agency, MFA, also gained a greater role in export control mechanisms. In 1997, a new MFA department was established: the Department for Arms Control and Disarmament Affairs (DACDA). DACDA was designated to deal with export controls and non-proliferation issues. According to new regulations on export controls which were published during the reform period (1997-2003), MFA is involved in all export control decision making for defence and WMD-related items if foreign policy considerations are

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637 Chasing the Dragon, p. 17.
639 Chasing the Dragon, p. 24.
640 The CWCIO is subordinate to the State Development Control Commission which is under the State Council. The CWCIO has existed in various names and forms since China’s accession to the CWC convention in 1993. For more details, see: Export Controls in the People’s Republic of China, p. 25 (no. 107).
641 Chasing the Dragon, pp. 55-59, 64-67, 74.
642 Ibid, pp. 25-26, 38. MOFCM coordinates its responsibilities with the customs services (General Administration of Customs - GAC) and with intelligence agencies (mainly the Ministry of Public Security - MPS).
643 Chinese Arms Exports, p. 39.
relevant. Moreover, MFA participates in internal discussions on all military exports to ‘countries of concern’\textsuperscript{644}.

4.2. The Differences between the New Chinese Export Control Mechanism and Pakistan’s Export Controls

As appears from the discussion above, the reforms in PRC’s defence industry sector since 1997 have modified its nature and diminished the PLA’s involvement and influence. As a consequence, the reforms have limited the PLA’s role in export control mechanisms. The discussion in this section will focus on the differences between the new Chinese export control system and the Pakistani one. The following debate will be dedicated to a comparative analysis between China and Pakistan regarding the new position of the different agencies in export control mechanisms, and to the principle and phases of the reform process in China.

It should be emphasised that the core rationale of China’s reorganisation was financial, and not necessarily for the improvement of export control procedures. The reforms in the defence industry aimed to form new business conglomerates as SOEs. These new corporations are market orientated, and are expected to project profits by their own industrial capabilities (including the modification of some of their manufacturing capabilities for civilian products), and without dependence on government subsidies. In parallel, the reforms were also designed to reduce to a minimum the PLA’s function as a business entrepreneur in light of the negative influence financial ventures might have on the officer’s corps. As a result, the civilian agencies took control of most of the defence industries.

China’s defence industry is significantly different from that of Pakistan. China’s defence export enterprises are world leading companies, and sell significant quantities of armaments and weaponry to foreign countries. Furthermore, since the beginning of the economic reforms in the 1980’s, China has advanced rapidly in its technological and industrial capabilities, and it has a private sector with an intense growth rate: thousands of companies trade in dual-use goods which can be converted to military applications and for WMD programmes. As a

\textsuperscript{644} Chasing the Dragon, pp. 27-28.
result, China had to devote its efforts to organising its control system in order to preserve its authority and to guarantees the success of the economic reforms.

On the other hand, Pakistan’s defence sector is relatively small and its private sector is less developed than that in China: most of the entities in Pakistan which can export defence or dual-use products are government organisations or their subsidiary companies. Hence, unlike China’s control system, Pakistan’s system should be primarily scrutinised according to its relevance to the defence industries and to the nuclear organisations.

As discussed in Chapter One, the objectives behind the formation of Pakistan’s control system were not economic as in PRC, but mainly to consolidate military dominance in decision-making processes regarding the nuclear programmes. Although there is a continuous effort to sell defence products (mainly conventional weaponry) from defence industries and nuclear organisations (with ordnance division), they are R&D organisations that support Pakistan’s military needs. As a result, they enjoy generous government grants and they are not expected usually to raise most of their funds through competition in international defence markets. Although there were some attempts to improve defence industry marketing capabilities, the formation of the control system was not considered part of this effort.

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Furthermore, the reforms in China’s defence industry complex and in its control system comprised two phases that were not part of the formation of Pakistan’s export control system. At the beginning of the process in March 1998 (during the 10th conference of China’s People’s Congress), as part of a reduction in government bureaucracy, it was declared that the PLA would no longer be involved in private businesses. Most of the defence industry complex and its export enterprises were removed from the PLA’s control to civilian responsibility (such as the reorganised COSTIND), and the military lost its dominant position in export control mechanisms. The PLA’s role was limited through the establishment of GAD under CMC to specific inputs in export controls over missile-related items and conventional weapon systems.

In the second phase, following the publication of most of the export control regulations in 2002 and 2003, MOFCOM and MFA, civilian agencies minded of China’s international obligations, received the leading role in preventing proliferation from China. Every export application must be reviewed by MFA if it could influence China’s foreign policy and its
international commitments. Furthermore, the State Council and not CMC became the final arbiter in granting export licenses for both military and dual-use items. Officially, the defence establishment faced considerable loss of authority on export control mechanisms and was no longer involved in decision making on dual-use exports and on non-sensitive nuclear, missile, and chemical exports.

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The above process of shifting power did not take place in Pakistan, and its defence establishment is far from sharing important responsibilities with civilian agencies. SPD, the designated military directorate for controlling nuclear organisations, centralises almost all responsibilities including the review of their export applications. No other agency is officially involved in the process.

Although SPD and SASTIND are responsible for the R&D organisations of WMD in their respective countries, there are wide differences in their roles in export control mechanisms. Similar to SASTIND, SPD is responsible for the financial aspects of the nuclear organisations’ R&D projects, and for marketing the nuclear organisations’ products and technologies. Nevertheless, SASTIND does not solely conduct the export control mechanisms: although SASTIND grants export licenses for military and major aerospace exports, it needs to consult with other agencies such as MFA and GAD. Furthermore, SASTIND is not involved in the review process of dual-use or chemical item exports, and is only one participant agency in the nuclear export process, directed by China Atomic Energy Authority (CAEA). On the other hand, SASTIND is also responsible for the conventional defence industry while SPD does not have official authority in this sector645.

645 SPD established a directorate for conventional and open programmes that probably has a role regarding the supervision of defence industries. However, this responsibility was never declared officially. See: Naem Salik, (representative of the SPD), Changes in Pakistan’s Nuclear Structure since 1998, Presentation at the workshop on ‘Building Confidence in Pakistan’s Nuclear Security’ (Washington DC, April 30th 2007). <http://www.partnershipforglobalsecurity.org/documents/Salik_Nuclear_Establishment.pdf> Accessed on May 3rd 2010.
The Role of Pakistan’s Military in the Control System over Nuclear Programmes

Figure 24: China’s Contemporary Export Control System in Comparison with Pakistan’s Export Control System - Main Agencies

Inter-Agency Forum/Organisation

Military Organisation

Inter-Agency Forum/Organisation With Military Dominance

Government Ministry

Government Agency in the Export Control System

Export Entities

Abbreviations:
- CMC - Central Military Commission
- COAS - Chief of Army Staff
- COSTIND - Commission of Science, Technology, and Industry for National Defence
- DACDA - Department of Arms Control and Disarmament Affairs
- DCC - Development Control Committee
- GAD - General Armament Department
- GLD - General Logistics Department
- GSD - General Staff Department
- ISHQ - Joint Staff Headquarters
- ISI - Directorate of Inter-Services Intelligence
- MFA - Ministry of Foreign Affairs
- MOC - Ministry of Defence
- MOD - Ministry of Defence Production
- MII - Ministry for Industry and Information
- MII - Ministry of Industry and Information
- MODP - Ministry of Defence Production
- MOFA - Ministry of Foreign Affairs
- MOFCOM - Ministry of Commerce
- NAC - National Command Authority
- NCA - National Command Authority
- NCA - State Administration for Science Technology and Industry
- SPD - Strategic Plans Division
- SASTIND - State Administration for Science Technology and Industry
- SOE - State-Owned Enterprise
- SECDIV - Strategic Export Control Division
- MII - Ministry of Foreign Affairs (PRC)

China

Pakistan

Subordinate to

Participation in inter-Agency Forums/Working Connection

Private Sector Exporters

Defence SOEs

Aerospace/Missile SOEs

Nuclear SOEs

MOFA

MOC

MOF

SPD

Defence Industry

Private Sector Exporters

Strategic/WMD Organisations

COAS

JSHQ

ISI

President

Prime Minister

Government Ministry

Inter-Agency Forum/Organisation

Inter-Agency Forum/Organisation With Military Dominance

Government Ministry

Government Agency in the Export Control System

Export Entities
The differences between the two national export control systems can be exemplified by their different positions in the system of civilian agencies. MFA in China is involved in all export control processes over military and dual-use items whenever foreign policy interests are at stake. On the other hand, the role of MOFA in Pakistan is ambiguous and has no official role in supervising nuclear organisations. According to past internal regulations nuclear organisations have to obtain clearance from MOFA for their export application, but it is not clear if these regulations are still in effect and what the guidelines of this process are. As mentioned in Chapters One and Four, MOFA has a central role through SECDIV in reviewing and licensing export applications of dual-use items made by private sector entities. SECDIV is coordinated by the Oversight Board of Export Control. The board is chaired by MOFA’s director general (the Secretary for Foreign Affairs), but it has representatives from other government agencies, including SPD. Hence, SECDIV’s operational framework is influenced by various interests, including those of the military.

The differences are also significant when comparing China’s MOFCOM and Pakistan’s MOC. MOFCOM is the licensing authority for all exports of dual-use items and it participates in export control mechanisms (except for missile-related items). On the other hand, MOC in Pakistan has only an administrative role in formulating the legal framework for export control and participate in consultations on export application of dual-use items. It seems that MOC is not even the licensing authority, but rather MODP (for the defence industry), SECDIV (for the private sector) and possibly SPD (for the nuclear organisations).

Regarding differences in the legal framework, China’s export control regulations are more comprehensive and detailed than the parallel legislations and statutory ordinances of Pakistan’s control system. As mentioned earlier, through PRC’s export control legal framework and official publications one can comprehend the division of responsibilities between different government agencies and the various steps in the export control mechanisms.

On the other hand, the primary legislation in Pakistan is opaque and the military and federal government conceal internal regulations. Thus, it is difficult to determine the precise division

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of responsibility between different agencies; which agency participates in the concrete consultation process, and if and when government decision-making forums (e.g. NCA, Export Control Oversight Board) are part of the export control licensing process. The enigma intensifies concerning control over the nuclear organisations responsible for most of Pakistan’s nuclear-related technologies and materials.

4.3. The Similarities between China’s New Export Control System and Pakistan’s Control Mechanism

Although China’s export control system underwent significant changes as a result of the reform process in its defence industry complex, it seems that the SOEs of its defence industry are more likely to receive greater sensitivity in the consideration of their export applications. The lenient approach can be exploited both by the export control agencies and the export corporations.

Most of the defence export enterprises are subordinate to SASTIND. They have a legal monopoly over trade with conventional military weaponry and aerospace controlled items. However, SASTIND has two hats: it is the designated agency that reviews their export applications, and it is also the chief government organisation for the promotion of defence exports. Moreover, some of the export corporations are under the PLA’s direct control and still apply to GAD for export licenses - and not to a civilian agency. As a result, the export control mechanisms could be bypassed by export enterprises connected to the PLA: they can trade their products by using military enterprises, which are not constantly subject to civilian scrutiny, and use them as their mediators.\(^648\).

The above situation is similar to the one in Pakistan: the nuclear organisations are supervised by SPD which is responsible for preventing proliferation parallel to increasing the budget of the nuclear organisations from marketing their products (including conventional weaponry). The same applies to the defence industries under MODP which is responsible for the Defence Export Promotion Organisation\(^649\).

In addition, the PLA still exercises influence on export control mechanisms beyond its official role. As mentioned, the PLA’s military enterprises are exempt from a civilian review of their export applications. Furthermore, major/sensitive export of controlled military or aerospace items is decided jointly by the State Council and CMC which includes a majority of military

\(^{648}\) Military Culture and Chinese Export Controls, p. 492.
Chapter Five

generals: they probably show more sensitivity towards the requests of the military-affiliated enterprises. CMC is the highest decision making forum for national security issues and it directs China’s entire defence establishment. Hence, CMC is likely to carry more weight on defence exports.

China and Pakistan share a similar approach of minimum necessary transparency regarding their export controls. China has gone a long way towards greater openness, but like Pakistan China has never made it clear what the position of the military in the control system is: the PLA sustained to a great extent its influence over the defence industry complex. China never fully explained how it intended to transform its general guidelines into specific measures. China explicitly declared it would examine the approval of defence exports could influence china’s national security and international obligations, the regional and internal stability of the recipient country. China also determined that one of its considerations is the record of the recipient country in pursuing a WMD program or actively sponsoring terrorism. Yet, unlike western countries, China refrained from publishing ‘black lists’ of countries and companies as an administrative tool for defence and sensitive export control.

5. Conclusion

Since the middle of the 1990’s PRC has made considerable modifications in its export control mechanisms. The mechanisms were gradually transferred from the authority and dominant influence of the PLA to the jurisdiction of the civilian government. Although the PLA still exerts considerable power within the export control system (mainly through its dominant position in the defence export sector) the final decision on granting export licenses is usually under the civilian agencies’ responsibility.

PRC was able to reform its export control system from a military oriental to a civilian one mainly as a result of structural conditions. First, the PLA constantly acknowledged the authority of the civilian leadership and the legitimacy of CCP. Second, it was necessary for the PLA to realise the negative implications of its involvement in private businesses and concretely in defence exports. Lastly, the Chinese government integrated western principles into its framework of export controls. Furthermore, the Chinese government was able to enforce its writ on SOEs, and to subordinate most of them to export controls under the responsibility of civilian agencies. The government was also able to establish legal,
procedural, and structural frameworks for export controls. This framework proved to be more effective in preventing proliferation than the system in place until the late 1990’s as evident from the decline in the involvement of defence export enterprises in assistance to WMD programmes of foreign countries\(^65\).

However, private Chinese companies and entities still assist WMD programmes usually by supplying dual-use items. PRC establishment still struggles to enforce its policy over the private sector which grows significantly each year. Most of the problems in exercising export controls relate to the level of professionalism of the manpower which deals with export applications. Furthermore, it is possible to manoeuvre the export control process by creating a smokescreen regarding the final destination of the export and by exploiting the tolerated corruption within the establishment (mainly based on well-rooted social networks known as Guanxi).

Nevertheless, China’s export control mechanisms are still evolving and improving. The level of professionalism is on the rise and the supervision of the defence industry complex is more effective. The PLA’s diminished role in export controls contributed to the professionalism of the control system: the military potentially complicated export control processes because of its conflicting responsibilities for the expansion of defence exports and the limitation of problematic international character. Furthermore, the PLA is most probably less sensitive than civilian government agencies (specifically MFA and MOFCOM) to international norms and to the negative implications of assisting nuclear programmes.

Pakistan still has a long way to go in order to achieve the level of efficiency of PRC’s export control system in preventing nuclear proliferation. Hence, it will be a considerable challenge for Pakistan to adopt western practices for its export controls. The main flaw in Pakistan’s export control system is the marginalisation of civilian agencies and their absence from the supervision over the nuclear organisations.

The dominant control of Pakistan’s military over nuclear programmes enables it to decide on sensitive export of nuclear-related items and technologies without major interference and

monitoring from other state organisations. The PLA was in a similar position until 1997 and indeed used its jurisdiction to allow defence exports and sensitive exports to countries which developed strategic capabilities. Nowadays, the PLA has lost much of its capability to export sensitive items without interference from other state agencies, although it can still use its influence and responsibilities in order to determine the outcome of the export control process.

Chinese experience in constructing an export control system indicates that the first step in establishing a viable system in Pakistan is to place its civilian authorities at the centre of its control mechanisms and create an authentic partnership between its government and the defence establishment. Nowadays, unlike China’s State Council and CMC, Pakistan’s national leadership seems to have limited and marginal involvement, in reviewing export applications. In addition, Pakistan’s civilian agencies must be an integral part of the export control process over the nuclear organisations.

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Chapter Five: Glossary of Abbreviations

AG - Australian Group
AQ Khan - Abdul Qadeer Khan
AVIC - Aviation Industries Corporation of China
BWC - Biological Weapons Convention
C-in-C - Commander in Chief
CAEA - China Atomic Energy Authority
CASC - China Aerospace Science and Technology Corporation
CASIC - China Aerospace Science and Industry Corporation
CATIC - China National Aero-Technology Import Export Corporation
CCC - Corps Commanders’ Conference
CCP - Communist Party of China
CEIEC - China Electronics Import Export Corporation
CMC - Central Military Commission
CNEC - China Nuclear Engineering Construction Corporation
CNIEC - China Nuclear Import Export Corporation
CNNC - China National Nuclear Corporation
COAS - Chief of Army Staff
COSTIND - Commission for Science, Technology, and Industry for National Defence
CPMIEC - China Precision Machinery Import Export Corporation
CSSC - China State Shipbuilding Corporation
CSTC - China Shipbuilding Trading Corporation
CWC - Chemical Weapons Convention
CWCIO - Chemical Weapons Convention Implementation Office
CZEC - China Zhongyuan Export Corporation
DACDA - Department of Arms Control and Disarmament Affairs
DCC - Cabinet Committee for Defence
  - Development Control Committee
DG ISI - Director General, Inter-Services Intelligence
GAC - General Administration of Customs
GAD - General Armament Department
GHQ - General Headquarters
GLD - General Logistics Department
GPD - General Political Department
GSD - General Staff Department/Headquarters
HQ - Headquarters
IB - Intelligence Bureau
ISI - Directorate of Inter-Services Intelligence
JCSC - Joint Chiefs of Staff Committee
JSHQ - Joint Staff Headquarters
MFA - Ministry of Foreign Affairs
MI - Military Intelligence Directorate
MII - Ministry of Industry and Information
MND - Ministry of National Defence
MOC - Ministry of Commerce
MOD - Ministry of Defence
MODP - Ministry of Defence Production
MOFA - Ministry of Foreign Affairs (of Pakistan)
MOFCOM - Ministry of Commerce (of China)
MOFTECH - Ministry of Trade and Economic Cooperation
MPS - Ministry of Public Security
MTCR - Missile Technology Control Regime
NCA - National Command Authority
NESCOM - National Engineering and Scientific Commission
NORINCO - China North Industries Corporation
NPT - Nuclear Non-Proliferation Treaty
NSC - National Security Council
NSG - Nuclear Suppliers Group
PAP - People’s Armed Police
PLA - People’s Liberation Army
PLAFAF - People’s Liberation Army Air Force
PLAN - People’s Liberation Army Navy
PRC - People’s Republic of China
R&D - Research and Development
US - United States of America
SACMPT - State Authority Committee for Military Product Trade
SASTIND - State Administration of Science, Technology and Industry
SBMPT - State Bureau of Military Product Trade
SECDIV - Strategic Export Control Division
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SOE - State-Owned Enterprise
SPD - Strategic Plans Division
WMD - Weapons of Mass Destruction
Conclusion

1. The Insights into Pakistan, its Defence Apparatus and the Nuclear Export Phenomenon

The main objective of this thesis was to reveal the fundamental problems in Pakistan’s control system over its nuclear organisations by exposing the interconnection between the bureaucratic procedures of the control system and the perceptions and organisational culture of Pakistan’s defence establishment. Similarly to a train which travels wherever its rails take it, the strategic context of operating the control system determines the latter’s actual ability to prevent proliferation. Understanding the environment in which the control system was created and operates might provide explanations why this system could not prevent the nuclear exports of AQ Khan’s network and why its efficiency is questionable regarding preventing nuclear exports from recurring.

1.1. AQ Khan’s Nuclear Proliferation Network and Pakistan’s Defence Establishment: the Organisational Dimension

This thesis demonstrates that the nuclear control system is an integral part of Pakistan’s defence establishment, and Pakistan is almost the only nuclear weapons country (perhaps together with North Korea) whose control system over its nuclear organisations has a strong military character. As discussed in length in Chapter Two, the Strategic Plans Division (SPD) connected to the Joint Staff Headquarters (JSHQ) is the prominent agency which centralises the responsibilities of the nuclear organisations. As a result, SPD has great influence over nuclear related transfer. SPD participates in any deliberation about nuclear programmes and their security, and might take part if technology and information sharing arises.

Not only are the nuclear programmes supervised by the military, but decision making on their progress is also under dominant military rule. SPD is controlled by the Army and it receives instructions regarding nuclear programmes from the Army chief (COAS) who usually consults on routine decisions with a small circle of aides, all of whom are senior military officers: CGS (responsible for staff work of the Army HQ), DGMO (in charge of all military planning) DGMI (head of intelligence activity), the head of SPD and the head of the ISI (involved in the security apparatus of nuclear programmes, and in the past responsible for clandestine operations involving procurements and transfer of nuclear-related items). Apart from the senior officers within the Army HQ (GHQ), COAS probably needs to consult on
major decisions in the nuclear programmes with other senior Army generals who are usually considered as his close circle of aides: the prominent corps commanders responsible for the defences on Indian and Afghan fronts and for the protection of the national command and control centres in and adjacent to the capital city, Islamabad.

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As evident, within the military, decision making on strategic issues strongly tends to be centralised with the participation of a small group of confidants. Even the chiefs of other military services (the Air Force and the Navy) and the nominal chief of the armed forces (The Chairman of the Joint Chiefs of Staff Committee - CJCSC) are in the margin of the core group of decision makers. These generals can be consulted when necessary (particularly CSCJC who is responsible for administrative support of SPD and for international military cooperation) but they are unlikely to exert considerable influence on a decision made by the Army-ISI nexus to assist the nuclear weapons project of a foreign country.

The main conclusion of this thesis is that the military’s dominant position in the control system over the nuclear organisations enables it to decide whether to offer nuclear assistance to foreign countries without any interference from the civilian agencies in the export control mechanisms. Among all the civilian agencies the Ministry of Foreign Affairs (MFA) participates in deliberations about the nuclear issue due to its valuable experience in diplomatic and international bodies and forums. Consequently, MFA will probably be called upon to give its opinion on the implication of nuclear assistance, but most likely without a voice in the decision making itself.

The other civilian agencies which are supposed to supervise the defence apparatus (such as the Ministry of Defence) appear to lack considerable weight in the decisions making on the nuclear issue. Moreover, even the civilian leadership (the President and the Cabinet) heavily depends on information about nuclear programmes provided by the military. The heads of government participate in the National Command Authority (NCA) which is officially in charge of the control system, but it is powerless to exercise authority and rarely convenes. As a result, Pakistan’s national leadership has been probably powerless to prevent or to halt a scheme of the military chiefs and their close circle of associates to assist foreign countries in the development of nuclear weapons programmes.

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The comparative analysis of Pakistan’s export control system and China’s contemporary and past export control mechanisms emphasises the main features in the system which enabled nuclear proliferation from Pakistan. The proliferation of WMD-related technologies and materials from China declined parallel to the reforms in the export control system which limited the role of China’s armed forces, the PLA. There is still proliferation from China, its control system has critical flaws in the implementation of China’s non-proliferation policy, and the PLA still holds significant influence over the defence industry and its export corporations. However, the origin of most assistance to WMD programmes of foreign countries shifted to the private sector and emanates from export corporations in whose management the PLA is involved.

The process of allocating responsibility to civilian agencies and integrating inter-agency practices into the work of the export control mechanisms proved to be an important element in preventing assistance for nuclear programmes by one of the state entities. Particularly important was designating government ministries as responsible for the export control process. Pakistan still preserves the military-centred control system with no substantial involvement of civilian agencies that China had until the middle of the 1990’s, and the proliferation record of AQ Khan’s network is comparable to the past involvement of Chinese state-corporations in nuclear assistance to Iran, Algeria, North Korea and Pakistan itself. Unlike the Chinese reforms, the reforms of 1999-2000 in Pakistan’s control system and the creation of NCA and SPD lack a real shift in the power centres of the system and appear mainly designed to reaffirm the Army’s dominant role in the supervision over nuclear organisations, and thus had no affect on improving Pakistan’s ability to prevent assistance to foreign nuclear weapons programmes. The connection of the nuclear organisations to the Army received formal recognition following the construction of the legal framework for the operation of the control system. Moreover, the affiliation of the nuclear organisations to the Army exempts them from the export control process which has been in existence since the reforms of 1999-2000 (for example in the Export Control Act of 2004), and practically thwarted even a minor attempt to strengthen a civilian government’s ability to prevent nuclear exports.

652 Nowadays, China supports Pakistan’s nuclear programme and provides nuclear reactors. Although China’s nuclear assistance is critical for Pakistan’s efforts to expand its nuclear capabilities and contradicts the spirit of China’s international obligations, Pakistan is already a nuclear weapons country; thus, China’s support is not equivalent to its nuclear assistance in the past to non-nuclear weapons countries.
The main modification of the reforms commenced in 1999-2000 was tightening the control over KRL, the nuclear R&D organisation headed by AQ Khan, and limiting Khan’s free-hand in internal issues concerning KRL since his pivotal role in developing Pakistan’s nuclear capabilities. The tightening of control eventually led to the removal in 2001 of AQ Khan from his position in KRL. AQ Khan’s strong stance enabled him to execute the nuclear assistance venture and operate the proliferation network outside Pakistan in the period 1987-2003. However, the Army, with the help of the ISI always vigorously maintained various means of supervising KRL which facilitated the nuclear export project: from assigning military officers to KRL’s negotiations on nuclear assistance with foreign delegates to facilitating the import and export operations of the nuclear proliferation network. The Army also positioned senior officers to protect KRL’s assets (equipment and knowledge) against various external attacks.

This thesis concludes that AQ Khan’s financial and ideological motivations coexisted with a structure of military control that was sufficiently strong to point his activities in directions that were congruent with Pakistan’s strategic interests as interpreted by influential officers. Nevertheless, the situation in Pakistan is hardly a clear-cut case: AQ Khan was a powerful official in Pakistan’s nuclear complex. Khan’s high public profile (which is unusual for a nuclear programme manager) and his image as “the father of Pakistan’s nuclear bomb” strengthened his internal position. As a result of the above, Khan and his associates in the proliferation network were probably the instigators behind several shipments of nuclear-related equipment from Pakistan. Although conclusive information is absent, judging from the widespread phenomenon of corruption and irregularities in all Pakistan’s social and governmental systems they probably also have a hold on the control system and on the nuclear organisations: AQ Khan and his associates were probably able to exploit the lenient approach of some military officers on some occasions rather than work to military direction.

In addition, although the nuclear export is perceived throughout this thesis as a well-implemented project it varied according to circumstances: different proposals for nuclear assistance were offered to different countries at different periods of time. It seems that there was no consistent and organised effort involved in nuclear proliferation, but rather a desire to grasp business opportunities. For example, the connection with Iran was limited at first by
COAS General Zia ul-Haq to the supply of nuclear related technology and knowhow (gas centrifuges, their parts and designs), but later, during General Aslam Beg’s tenure as Army chief, the assistance evolved into propositions for much broader assistance at all stages of the nuclear weapons development. These proposals for assistance eventually materialised partially under Beg’s successors, and Iran received an advanced model of gas centrifuges together with very sensitive data on developing the nuclear device.

1.2. AQ Khan’s Nuclear Proliferation Network and Pakistan’s Defence Establishment: the Agenda that Propelled the Project

In spite of the circuitous nature of Pakistan’s nuclear assistance, a strategic rationale appeared to generate it. This rationale was part of a valid paradigm of the Pakistan Army and this paradigm continues to determine the nature of the control system. Equal to other nuclear weapons countries, the magnitude of the nuclear dimension places it at the epicentre of Pakistan’s national security thinking. The insights from this thesis into the causes behind the decision of Pakistan’s defence establishment to offer nuclear assistance enabled it to highlight core elements of Pakistan’s national security thinking, its assumptions and its objectives.

As broadly discussed in Chapter Three, India is the focus of the Army’s paradigm as Pakistan’s main adversary, and the Army’s main objective is to achieve a strategic balance with its dominant neighbour. In order to achieve this highly ambitious strategic objective or at least to prevent further erosion of Pakistan’s position in the power equation (in light of the growing gap with economically, militarily, and internationally empowered India), it seems probable that elements in Pakistan’s defence establishment have desperately adopted a radical policy of advocating extreme measures, such as nuclear export and sponsoring terrorism: for example, since the 1970’s Pakistan has been able to influence power sharing in Afghanistan, and in the 1990’s to receive North Korea’s valuable assistance in developing nuclear missiles. Terrorism and nuclear proliferation have become destined to help Pakistan confront India’s military superiority, and to mobilise international awareness of the conflict as part of the campaign to pressurise India on Kashmir.
In the context of the rivalry with India, Pakistan’s nuclear development and assistance are inter-related with Islamabad’s relations with the US. Pakistan’s defence establishment has striven for decades to secure American support. However, the strategic failure to achieve a military alliance with the US against India or even to secure America’s military and economic assistance on a long term basis has evolved into bitterness within the defence establishment towards what was perceived as US duplicity and unreliability. At first, developing nuclear capabilities was aimed at diminishing the need to rely on US support, but later it seems there is a strong possibility that as a by-product of Pakistan’s Indian-centred thinking its nuclear programme became central to a ‘blackmail policy’ towards Washington in order to secure US military and economic assistance.

It appears that in practice the above policy has been perpetuated by Pakistan’s defence establishment in two stages. In the first stage, the defence establishment contemplated the perception to Washington that the current regime in Pakistan (dominated by the defence establishment) was the only alternative to the rise of a radical Islamic regime equipped with nuclear weapons. By adopting this view the US has lost much of its leverage on Pakistan by practically restraining the US from taking any punitive measures that might significantly damage the resilience of the Pakistani regime. Even when the US imposed economic and military sanctions on Pakistan between 1990 and 2001 it avoided labelling Pakistan as a “country of concern” (like North Korea, Iran, Libya and Syria) despite its involvement in nuclear proliferation and terrorism.

In the second stage the defence establishment was probably complicit in giving nuclear assistance to some of the US worst adversaries: Iran, North Korea and Libya, parallel to contacts with Syria and Saddam’s regime in Iraq. America’s vital interest in nuclear non-proliferation was damaged, and stability was undermined in the Middle East and North-East Asia where the US invested tremendous efforts in diffusing the potential explosiveness of these regions. Naturally, the direct benefits of nuclear assistance (such as financial incentive and technological contribution) were the main factor behind Pakistan’s nuclear assistance to the above countries; however, Pakistan’s defence establishment probably was also ready to assist these countries in developing nuclear weapons programmes in order to indicate to the US that without nurturing Pakistan the latter could cause irreparable damage to US global interests and to American nuclear non-proliferation efforts. Moreover, an increase in the total number of nuclear weapons countries, particularly with anti-western agenda, has a great potential for Pakistan to divert the US attention from Pakistan’s unique circumstances:
unstable country with nuclear capabilities in defiance of the NPT, and the only nuclear country among Muslim nations.

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In the final analysis, the main player in the defence establishment, the Army, has the leading role in directing the course of the entire country, and it routinely exercised its power to impose its agenda on national security policy. As revealed, the main focus of the Army on India as Pakistan’s arch enemy is also the perspective of the defence establishment on Pakistan’s overall strategic situation. The Army determined the course of the nation based on this fundamental conviction. In light of the Army’s main objective to have a strategic balance with consistently stronger India, the adopted policy strongly tends to include adopting radical means of closing the growing gap in the power equation, such as nuclear assistance to foreign countries.

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1.3. Pakistan’s Defence Establishment: the Main Focus of Analysis

The perspective of this thesis into Pakistan’s control system can offer a comprehensive explanation regarding the defence establishment and its decision making. Understanding the central role of the nuclear programmes in Pakistan’s national security thinking helped to realise the entire organisational rationale of the defence establishment and its overall strategic thinking. In turn, these insights can assist in evaluating other important national security issues, such as Pakistan’s controversial role in the campaign against Al Qaeda in Afghanistan, its foreign policy principally towards the US, India, China, and Muslim countries in close proximity (mainly Saudi Arabia, the Persian Gulf principalities and Iran).

The organisational rationale of the defence establishment was evaluated earlier in the discussion about Pakistan’s control system. This establishment appears to function as several circles of decision making surrounding the Army chief, Pakistan’s de-facto final arbiter throughout most of the period since the country’s independence in August 1947. The inner circle is COAS close group of associates, almost all of whom are senior Army officers who serve in key positions in GHQ or as corps commanders responsible for the Army’s prominent combat units. In this circle all the important decision making on the course of national security policy takes place including overall military operations plans, internal affairs, and
foreign policy towards neighbouring countries and global powers. COAS is usually first among equals, and he needs consensual support for his policies, so the generals will not attempt to block his agenda. However, the longer COAS stays in office or serves in addition as the official head of the country (as Chief Martial Law Administrator or as President, as in the case of Army chiefs Generals Ayub Khan, Yahya Khan, Zia ul-Haq, and Pervez Musharraf), the greater authority he acquires and the less consideration he is required to give to the views of his fellow officers.

The second circle of decision makers includes the senior command of the armed forces (Joint Staff, Air Force and Navy) whose opinions will be taken into consideration on national security issues mainly regarding military affairs such as joint planning, defence budget, and cooperation with foreign militaries. The chiefs of the armed forces may also be consulted occasionally on important national security issues; however their participation seems to be more in an advisory capacity than as equal members in decision making. The third circle of decision makers includes the civilian leadership which is supposed to control the defence establishment. The President and the Prime Minister are routinely briefed by the chiefs of the armed forces and can summon the Defence Cabinet Committee (DCC) which includes senior members of the government to set the course of all national security matters. Officially, the heads of government also nominate the heads of the armed forces, including COAS, but regularly both on national security issues and nominees the Army’s consent is desirable if not mandatory. The civilian leadership is informed about the Army policy objectives mainly in order to be co-opted and serve as a mean to divert international pressures.

The forth and last circle of decision making is comprised of the senior mandarins in government ministries who deal with the military administrative requirements such as budgets, properties, manpower, weaponry and logistics. The military has influence on the ministries which are supposed to be its supervisors but they are regularly treated as auxiliaries: the ministries of defence and defence production are manned by former military officers who look after the needs of their former respective military service. The Army approach also applies to the Ministry of Finance on budget issues. As mentioned in Chapter Two, MOFA is possibly treated as more valuable in light of the need for its contribution in formulating defence policy.

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The intelligence community plays an unusually dominant role in the defence establishment. The main intelligence agency, the ISI, is the military’s fundamental long arm for executing the Army’s agenda through clandestine operations and using militant groups as proxies against India and in Afghanistan. Furthermore, the ISI is entrusted with preserving the Army’s dominant role in Pakistan’s internal system primarily through mobilising political and public support for the Army’s agenda by influencing the mass media and the political system. The ISI is also responsible for containing any objection to the Army’s dominance from opposition factions in the public sphere, such as the media, non-governmental organisations and academia.

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As a consequence of the ISI’s vital role as the Army’s main operational agency and its responsibility for consolidating the Army’s internal and external interests, the organisation can be considered as an equal partner in the most intimate decision-making circles and is probably part of any critical conclusion on national security issues. It seems that the ISI’s significant operational role has overshadowed the organisation’s traditional function as an intelligence agency like its equivalent in western countries. In addition, most of the ISI’s senior directors probably have an operational background and tend to perceive special operations as the main solution to any strategic dilemma. As a consequence, the ISI likely tends to advocate decisions which include exhorting aggressive means which in turn strengthen the ISI’s central role.

### 1.4. Nuclear and Terror Proxies as a Critical Element of National Security

The dominance of the defence establishment and its inherent strong inclination towards aggressive means combined with its inability to achieve Pakistan’s strategic objectives by using traditional military means transformed into advocating proxies as the main course for advancing national security goals. As discussed in Chapter Three, in light of Pakistan’s inferiority in the power equation with India, proxies became one of the main tools of the defence establishment for pressuring India to incline towards Pakistan’s demands, and for having determinable influence on the future of Afghanistan. The ISI was designated to manage these operations due to the need of maintaining their clandestine nature: it has been crucial to preserve the Army’s capability of denying official involvement and thus having to
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pay a heavy price in risking a military escalation with India and souring Pakistan’s relations with the US and western countries.

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It is possible to indicate that the approach of using proxies is not limited only to connections with terror organisations which operate in India and Afghanistan while receiving military and financial support from Pakistan: similar methods were apparently employed to operate the nuclear proliferation network of AQ Khan. As in sponsoring terrorism, the defence establishment contemplated a network of private entities and individuals to promote national security objectives: through nuclear assistance allocating funds and technologies for the military and the nuclear programmes and in practice undermining American interests by supporting the nuclear weapons programmes of US staunchest adversaries. Similar to the contacts of the ISI with militant groups, a designated directorate, the SPD (and its predecessors), received full responsibility for coordinating the operations of the nuclear organisations, and as a consequence for AQ Khan as DG KRL and to his diverse proliferation activities. Akin to the project of sponsoring terrorism, the private entities involved in the nuclear proliferation project also seem to receive significant operational freedom as long as they delivered the desired results.

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2. The Possible Contributions of this Thesis to Academic Discourse

2.1. Military Influence on National Decision Making

The influence of the Pakistan Army, both in its uncontested effect on the running of the nation and its consistency for more than half a century is most unusual in the international community, even among countries which gained independence after World War Two and which had similar historical experience. However, Pakistan as an extreme model for military involvement in national decision making can be presented as an example of the main character of military participation in decision making and the military’s organisational culture in non-emergency periods.

The eminent feature of the Army and its decision-making processes seems to be strict compartmentalisation inside the Army HQ. Only key officials of senior rank and the bureaucratic department in the HQ which is under their command participate in the
consultations on national security issues and are involved in formalising the Army’s position. In Pakistan’s test case, there are only two important departments (the Military Operation Directorate and the Military Intelligence Directorate) which are responsible for military planning and policies, and both of them are under the Chief of General Staff (CGS) who is in charge of the smooth operation of the GHQ. Furthermore, even among the senior ranks, the decisions are left to a small group of senior Army officers while the others are at best consulted on the chosen policy.

Generally, the Army as a military organisation is a monolithic and conservative organisation which advocates discipline. As a result, decision making in the Army always depends on the Army chief and his views: he is the final arbiter and he can oppose the consensual opinion of his senior officers. The senior officers are personally appointed by COAS and are considered his associates. Although COAS does not formally need wide support for his preferred policy it is desirable due to the power of the high command in Pakistan. However, under the strict hierarchy it seems that the high command rarely objects to the chosen policy and it is almost impossible for them to change the designated course. Hence, the organisational framework for the decision making within the Army institution tends to lead to conformity and group thinking that cannot halt policy objectives promoted by the Army chief and his close circle of advisors.

Regarding the principle of inter-services cooperation within the armed forces, it seems from the Pakistani experience that a too dominant Army marginalises the Air Force and Navy and they are excluded from any deliberations on national security issues which are not directly connected to their operational missions, for example on foreign policy. The Army’s tendency to cast aside the other services only strengthened its inclination towards group thinking. The same argument applies to the castration of the Joint Staff HQ and the inter-services forums which could potentially provide a sounder opinion on national security issues from a broader perspective than one limited to a small group of principle Army officers and corps commanders under the command of the Army chief.

2.2. The Institutional Dimension of Export Control System

Similar to the anomalous nature of the Pakistani case study in the military context, the phenomenon of Pakistan’s nuclear export has been unprecedented since the beginning of the ‘nuclear age’ in August 1945 (the US nuclear attack on Japan which ended World War Two).
By examining the structural malfunctions in Pakistan’s control system over its nuclear organisations it is possible to improve general understanding of institutional arrangements which are essential for a control system, directed by a non-proliferation policy.

By illustrating an organisational model for export control mechanisms, mainly based on the rich and diverse experience of western countries (which due to their hold on relevant technologies were usually a destination for illicit acquisition efforts), it is possible to determine that an efficient export control system is obliged to have effective inter-agency procedures. These bureaucratic arrangements are needed for consultations and information sharing and are as fundamental as equipping the export control apparatus with the legal and administrative tools to conduct an effective process (such as demanding an end-user certificate and a catch-all clause inserted in the relevant export regulation).

The inter-agency procedures are mandatory not just to thwart any attempt of the exporter at an illegal commercial transaction, but additionally to prevent a concentration of excessive authority in a single agency which in turn could use it to allow nuclear export corresponding with its internal agenda. Inter-agency consultations narrow the possibility of clandestine nuclear assistance to foreign countries by imposing the need to coordinate it with several agencies with contradictory agendas. Moreover, allowing the Ministry of Foreign Affairs to play a key role in the export control system is likely to improve the efficiency of its supervision. Generally, the Ministry of Foreign Affairs is the most sensitive to the implications of proliferation on external relations and it is the greatest advocate in avoiding radical initiatives which are likely to infringe upon a country’s international status. As a consequence, the Ministry of Foreign Affairs strongly tends to impose the adherence of a national non-proliferation policy and international commitments.

In light of the export control system as an important government function which is linked to national security interests it usually includes direct contact with the national leadership. It can generally be argued that the greater the involvement of the leadership in the decision-making processes on export control, the less the chances of proliferation are. The national leadership has better awareness of the implications of proliferation on the overall status of the country and it tends to have a broader view on national security which diminishes the possibility of a decision on assistance for nuclear programmes of foreign countries. As a consequence, a decision by the national leadership itself on nuclear assistance is possible but less likely than a decision by a state agency which is limited to promoting its narrow interests.
Furthermore, from an organisational perspective it is important to avoid the monopoly of supervision over the R&D agencies and the defence industry by a single designated control agency. These relations could encourage a client-patron relationship or loose control and an independent R&D agency. In both instances, either the control agency or the R&D agency might exploit their power to initiate export of nuclear-related equipment.

2.3. The Factors behind the Nuclear Assistance of a Nuclear Weapons Country to a Foreign Nuclear Weapons Programme

Pakistan’s wide-ranging involvement in nuclear assistance to at least three countries (Iran, Libya and North Korea), and the offers of assistance to several others, presents a fundamental quandary about the motives behind this assistance: it appears to contradict the principles of collective security and might jeopardise the country which assists a foreign one with its nuclear weapons programme. As more countries acquire nuclear weapons, the nuclear weapons country loses its strategic advantage and its upgraded position as a member of the exclusive nuclear club. Furthermore, theoretically the nuclear weapons the supplier country helped to develop might be turned against it in the future as a deterrent. In an extreme scenario these developed capabilities might even be launched against the supplier country or transferred to terror organisations which could decide to launch a nuclear attack.

In addition, in Pakistan’s case, the assistance to Iran’s nuclear programme is more perplexing than its contacts with other countries, in light of the complicated relations between the two countries. Both countries have disagreements on a series of issues: the religious tension between Sunni Pakistan and Shi’ite Iran, the rivalry over regional hegemony in Central Asia, the future regime in Afghanistan and their support for rival factions, the close relations between Iran and India, the Shi’ite minority in Pakistan who are under constant threat of violence and terror, and the Baloch separatists who fight against Iran using Pakistan’s territory.

As it seems, Pakistan’s motives for assisting non-nuclear weapons countries are different from the factors behind the decision of nuclear powers to assist a world power (like the Russian nuclear cooperation with China) and allied countries (like the French assistance to Israel’s nuclear project) in developing a nuclear weapons programme. Pakistan and North Korea are the only two countries which have decided to assist other countries in developing nuclear weapons since the end of the Cold War in the early 1990’s.
Pakistan and North Korea together share the same factors which explain why these countries were involved in nuclear proliferation and not India and Israel which are also recognised nuclear weapons countries and not global powers. It appears that, as this thesis indicates, the dominant military influence on national security thinking and decision making determined the inclination of Pakistan and North Korea to provide nuclear assistance: the dominant position of the defence establishment affected the marginalisation of international considerations during the discussions. Furthermore, both countries had on one hand tense or hostile relations with the US and on the other hand maintained close contacts with countries (like Iran, Syria and Iraq under the rule of Saddam Husain) which aspire to challenge the current global order, including developing nuclear weapons. Contrary to Pakistan and North Korea, in India and Israel the defence establishment is under the control of a democratically elected government and their relations with rogue regimes are significantly limited.

3. Epilogue: Pakistan’s Contemporary State of Affairs and a Look towards the Future

The exposure of AQ Khan’s nuclear proliferation network in late 2003 and the neutralisation of the senior members of the network, both in and outside Pakistan, seem to have halted the network’s proliferation activities. AQ Khan was put under house arrest for several years as were his associates in KRL. However, the unchanged nature of the Pakistani control system means that further nuclear export activities cannot be ruled out. First, Pakistan’s defence establishment actively maintains its ability to establish illicit networks: There are some concerns that Pakistan uses the commercial contacts of the network in Europe to smuggle advanced dual-use nuclear technology in a similar pattern to the network’s original operation in the first years of Pakistan’s nuclear weapons programme.

Second, Pakistan is currently expanding its nuclear programmes significantly and aspires to construct several nuclear reactors and other necessary facilities relevant to the nuclear fuel cycle. The official objective is to handle the country’s acute electric power shortage; however, Pakistan does not hide the fact that a major factor is India’s ambition to expand its nuclear programmes by using the nuclear agreement with the US and the exceptional status granted by the Nuclear Suppliers Group in order to receive nuclear assistance. Furthermore, Pakistan blocks the US initiative for a Fissile Materials Cut-off Treaty (FMCT) that would freeze the global stockpiles of fissile materials. In addition, the expansion of nuclear programmes is supervised by SPD which is responsible for all military R&D programmes.
Third, Pakistan’s defence establishment continues to have full control over the nuclear programmes and does not share the major responsibilities with any civilian agency. As under civilian governments in the 1990’s, the military does not allow the political leadership to be involved and influence the current course of the nuclear development. Hence, the current nature of the control system is similar to the control mechanisms that allowed AQ Khan and his network to operate.

Pakistan is currently involved in fighting Islamist extremist at home while maintaining support for Taliban, if not Al Qaeda elements, in Afghanistan. The strategic thinking of Pakistan’s defence establishment reflects the duplicity of Pakistan’s role. By aiding the Afghan Taliban and its network of militant groups the defence establishment designates them to seize power in Afghanistan once the western forces withdraw from that country. In that way, Pakistan will be able to ally Afghanistan and block India’s attempts to improve its contacts with Kabul.

As a result, there is a fundamental conflict of interests between Pakistan and the US that ultimately surfaced following the American operation in Pakistan in May 2011 to capture Al Qaeda’s leader, Osama bin-Laden. The tension between the US and Pakistan is expected to worsen if Pakistan continues to aid its terror proxies and the US will insist on denying the Taliban and its associate factions a central role in the new Afghan regime after the withdrawal.

It appears that tension with the US promotes the possibility of another nuclear assistance episode. The military currently seems reluctant to engage in such activities because of Pakistan’s dependence on US military and economic assistance. If this dependency was seriously disrupted, however, Pakistan might again become a source for proliferation of nuclear technologies.
Bibliography

Books and Monographs


The Role of Pakistan’s Military in the Control System over Nuclear Programmes


56) Paracha, Sobia S. *Strategic Export Controls: Case Study of Pakistan*, Research Report No. 28 (October 2009), South Asia Strategic Stability Institute (SASSI).


71) Yousaf, Mohammad and Mark Adkin. The Bear Trap: Afghanistan’s Untold Story (London: Leo Cooper, 1992).


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36) Cong, Fu (Department of Arms Control and Disarmament, Ministry of Foreign Affairs of China). An Introduction of China’s Export Control System. Statement at ‘the Workshop on Non-Proliferation Export Control Regimes’ (Tokyo, December 11th-12th 1997).


The Role of Pakistan’s Military in the Control System over Nuclear Programmes


The Role of Pakistan’s Military in the Control System over Nuclear Programmes


Internet Websites


9) Russia’s Federal Service for Ecological, Technological and Nuclear Supervision (FSETNS) - in Russian: <http://www.gosnadzor.ru/osnovnaya_deyatelnost_slujby/>

10) UK Department for Business Innovation and Skills (BIS): <http://www.berr.gov.uk/export.control>

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