

# NUCLEAR CONFIDENCE-BUILDING MEASURES IN SOUTH ASIA: MANAGING NUCLEAR OPERATIONS AND AVOIDING INADVERTENT NUCLEAR WAR

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## **ABSTRACT**

Among many possible Indian and Pakistani confidence-building measures (CBMs) are agreements that would assist each country avoid inadvertent nuclear war. Understanding the framework within which such CBMs could be created is, therefore, important. Based on a review of published literature, the structure of the Indian and Pakistani national command authorities is discussed in the paper. Select CBMs relevant for the safer operations of the Indian and Pakistani nuclear command structures are then discussed.

## **INTRODUCTION**

India and Pakistan have both recognized the need to develop nuclear confidence-building measures (CBMs).<sup>2</sup> The aim of this paper is to understand the framework within which India and Pakistan could develop CBMs that would assist each country avoid inadvertent nuclear war in the course of managing nuclear operations. The aim of nuclear operations, including command and control systems, is to “prevent peacetime nuclear operations from leading to nuclear war, especially in crises, and to carry out in wartime the missions assigned to nuclear forces”.<sup>3</sup> CBMs consisting of an improved communication infrastructure, and the exchange of nuclear information would assist India and Pakistan in avoiding inadvertent nuclear war. This study focuses on CBMs related to communication and information sharing. Controls on the operations of nuclear forces, and arms control agreements to limit certain types of weapons systems also serve a similar purpose, but are not discussed here for brevity.

In peacetime, a time of crisis, or a time of war, each country will attempt to manage its nuclear operations for maximum advantage. A danger exists that in doing so, either side could create conditions that spiral out of control and lead towards a nuclear confrontation. As pointed out by Paul Bracken, “Although each side may well believe that it was taking necessary precautionary moves, the other side might see a precaution as a threat. This would in turn click the alert level upward another notch.”<sup>4</sup> There is a danger, therefore, that India and Pakistan’s command and control structures could become locked into an unstable, escalating process.

The Indian and Pakistani nuclear command and control structures differ, as they represent different declaratory doctrines. India has a declared no-first use policy, while Pakistan does not. This difference is reflected in the command structures primarily in the greater integration of the military into Pakistan’s structure. The doctrines of India and Pakistan are evolving, as are the military institutions that control nuclear forces. The time is opportune, therefore, for each country to begin analyzing how these two structures interact; and ensure that their operations do not lead inadvertently to nuclear war.

## **INDIA'S NATIONAL COMMAND AUTHORITY**

India's Strategic Forces Command (SFC) was created in January 2003. This was another step towards the greater operational integration of India's nuclear forces with its military. The Commander-in-Chief of the SFC reports to the Chairman, Chiefs of Staff Committee (CCOSC). The three service Chiefs make up a committee, the chair of which is the longest serving member. The Chairman then has a separate standing organization. In October of 2001, India created the Integrated Defense Staff (IDS) that serves as the principal secretariat to the CCOSC. The CCOSC normally reports to the Defense Minister, but will report on nuclear matters to the National Command Authority. The Cabinet Committee on Security appointed the Commander-in-Chief of the SFC. In the official press release of this appointment, the role of the SFC is described as "to manage and administer all Strategic Forces".<sup>5</sup> As a crisis develops, and strategic units become operational, control of the assets is expected to pass to the SFC. The delivery systems include aircraft, and Prithvi and Agni missiles. These systems will presumably stay with the respective forces (currently the Army and Air Force) in times of peace, but move into the control of the SFC in a crisis.

Figure 1 describes India's National Command Authority.<sup>6</sup> Two Councils, Political and Executive, make up the National Command Authority. The Prime Minister chairs the Political Council. This is the sole body that can authorize the use of nuclear weapons. The National Security Advisor chairs the Executive Council. The Executive Council provides inputs for decision-making by the National Command Authority and executes the directives given to it by the Political Council.

The Political Council is made up of the Prime Minister, who is the Chair, and is also the head of the Department of Atomic Energy. The other members are the Deputy Prime Minister, who currently is also the Home Minister, the Finance Minister, the Defense Minister, and the External Affairs Minister. The office of the Principal Secretary in the Prime Minister's Office serves as the Secretariat to the Political Council.

The Prime Minister always heads the Department of Atomic Energy (DAE), and the Defense Minister controls the Defense Research and Development Organization (DRDO). These are the two scientific organizations that would be involved in the transfer of fissile cores and weapons assemblies to the Indian military. Members of the Political Council control both of these organizations.

The Executive Council is made up of the following members:

- National Security Advisor (Chair)
- Chiefs of Army, Air Force, Navy
- Chair, Joint Intelligence Committee
- Convenor, National Security Advisory Board
- Cabinet Secretary
- Heads, Intelligence Agencies
- Secretaries, Ministries represented on Cabinet Committee on Security (Home, Finance, Defense)

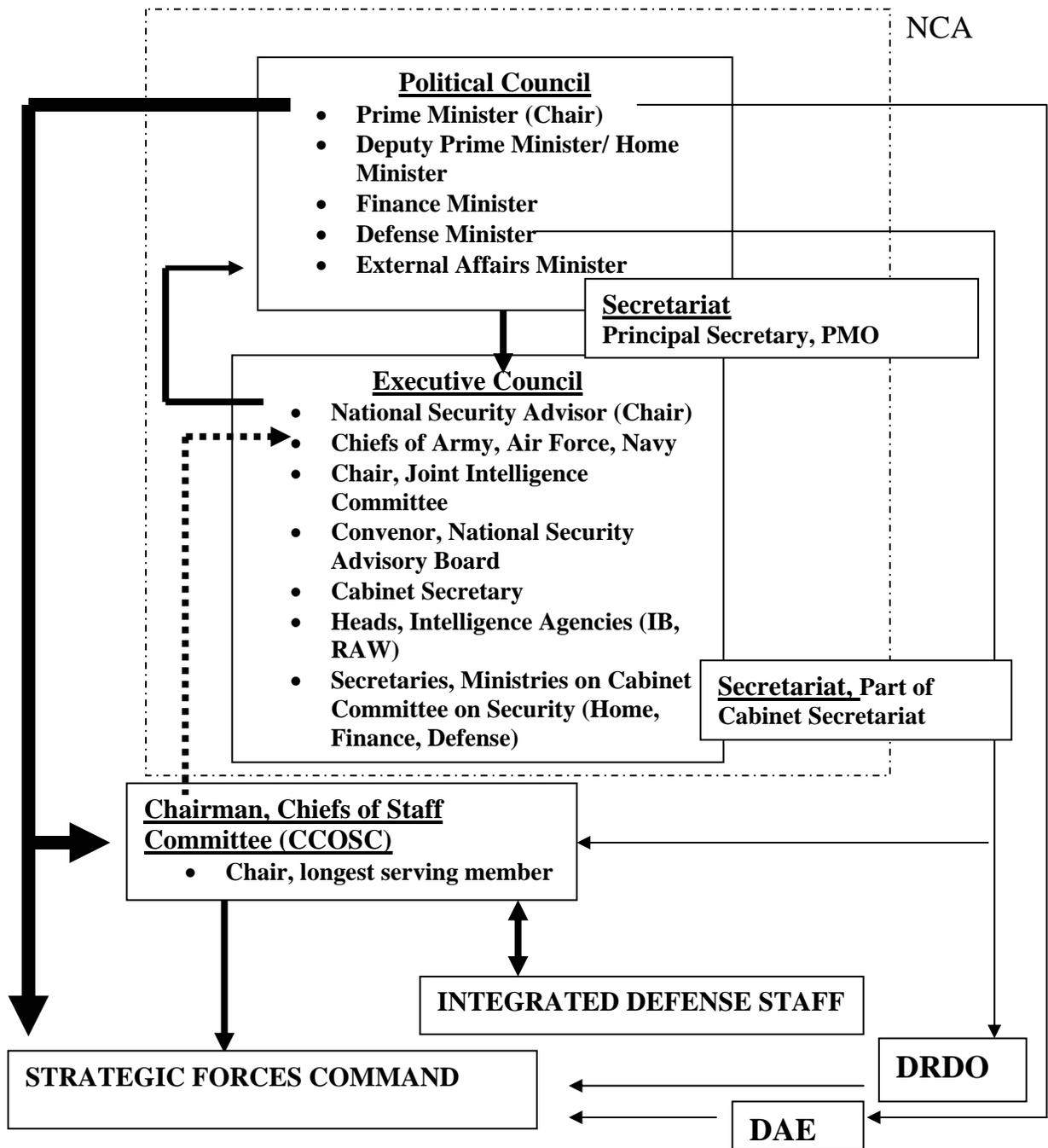


Figure 1: A schematic description of the Indian National Command Authority. (Source: gleaned from various official press releases and published articles.)

Currently, the National Security Advisor is also the Principal Secretary to the Prime Minister. A part of the Cabinet Secretariat serves as the Executive Council's Secretariat.

The Executive Council does not have continuous, direct control of the SFC. The SFC reports to the CCOSC, and the CCOSC normally reports to the Defense Minister. The Chiefs of the Army, Air Force, and Navy are, however, present in the Executive Council. The CCOSC will report to the Executive Council on matters that have a nuclear content. The main link between the Executive Council and the SFC is therefore one of providing input up the chain of command. The role of the Executive Council is primarily to advise and provide input to the Political Council. It can be presumed that as a crisis escalates, under the authorization of the Political Council and with the involvement of the DRDO and DAE, the SFC will receive the fissile cores well before any final authorization for use by the Indian Prime Minister. It is in this preparatory phase that the Executive Council will play its most important and an intermediary role of implementing the directives of the Political Council. In the event that the Political Council orders a nuclear retaliatory strike, the Prime Minister can be expected to directly contact the SFC, and not work through the agency of the Executive Council. The heavy bold arrow describes this situation in Figure 1, showing the likely route of the final authorization from the Indian Prime Minister.

## **PAKISTAN'S NATIONAL COMMAND AUTHORITY**

The National Command Authority of Pakistan is described in a flow chart published on the web site of the Pakistani Ministry of Foreign Affairs.<sup>7</sup> Figure 2 depicts a schematic of this structure. This National Command Authority was established in February 2000 by the military government led by General Pervez Musharraf. Although the scheme depicted in Figure 2 is taken from a current web site of the Pakistani Ministry of Foreign Affairs, there have been some political changes within Pakistan that are not reflected in the scheme. The National Command Authority has now been slightly modified since its first inception. The Head of Government is now the President. A Prime Minister has been elected as a part of reforms to bring back at least some form of limited democracy to Pakistan. The NCA now includes the Prime Minister of the country as a Vice-Chair, leaving the President as the Chair. The National Command Authority is responsible for policy formulation and will exercise employment and development control over all strategic forces and strategic organizations. The National Command Authority is made up of an Employment Control Committee, a Development Control Committee, and a Strategic Plans Division (SPD).

The head of the Pakistani government chairs the Employment Control Committee. Other members include the Ministers of Foreign Affairs, Defense, Interior; the Chairman of the Joint Chiefs of Staff Committee (CJCSC); the three service chiefs; the Director-General of the SPD, and technical advisors as required. Only this Committee is authorized to make a decision on the employment of nuclear weapons.

The head of the Pakistani government, the President, also chairs the Development Control Committee. Other members include the Vice-Chair, the Prime Minister, the CJCSC; the three service chiefs; the director-general of the SPD; and representatives of strategic organizations and the scientific community. The Development Control Committee develops the strategic assets required to carry out the employment orders

issued by the Employment Control Committee. The SPD acts as the secretariat for the NCA. The SPD is located in the Joint Services Headquarters (under the CJCS) and is led by a two/three-star General, who is traditionally from the Army.



Figure 2: A schematic of Pakistan’s National Command Authority. (Source: Pakistan’s Ministry of Foreign Affairs.)

### WHAT THE DIFFERENCES IN THE NCA’S PROBABLY REPRESENT

The review presented of the two NCAs establishes that the military plays a greater role in the upper-level decision-making body of Pakistan’s NCA. India’s Political Council does not include military chiefs, while in the case of Pakistan’s Employment Control Committee the military plays a significant role. The SPD, a military organization, in the case of Pakistan serves as the Secretariat to both committees of the NCA. In the case of India, the two councils that make up the NCA have separate Secretariats, both civilian and under political control. The President, the titular Commander-in-Chief of the armed forces, does not have any role in India’s NCA. In the case of Pakistan, the President (who currently is also the Chief of the Army) is the overall head of the NCA. The enhanced military role is a reflection of the greater role of the military in Pakistan’s political spheres

The Chairman of the COSC in the case of India is the most senior Chief, and therefore this position rotates regularly among the three services. The Chairman of the COSC is

also a serving Chief with command of forces. In the case of Pakistan, the Chairman of the Joint Chiefs of Staff Committee is a separate appointment, and he does not have direct control of any forces. The operational control of nuclear forces will pass to the NCA in the case of Pakistan, while in the case of India, a new tri-services SFC will have the operational control. The Army, Navy and Air Force therefore appear better integrated into India's NCA, while in Pakistan's case, the Army, by virtue of its Chief being the Head of government, dominates the three services, as well as the NCA.

Unlike for Pakistan, scientists from India's strategic community do not participate directly in the NCA. This is probably representative of the fact that India's political elites have accorded a far lesser role to their strategic scientists, and attests to the greater political strength of Pakistan's strategic enclave. Intelligence agencies do not participate in Pakistan's NCA, while they do in the case of India. This fact might stem from India's no-first use posture, which creates a situation in which India must perform plan on using strategic warning to mobilize its forces, having declared that it will never be the initiator of an attack.

None of the differences noted here are significant enough that they would preclude the creation of appropriate CBMs between the two NCAs.

### **SELECT CBMS APPROPRIATE FOR INDIA-PAKISTAN**

Over the past fifty years, India and Pakistan have negotiated and signed a number of treaties, agreements, and CBMs, including some that relate to nuclear issues.<sup>8</sup>

A few of these CBMs have dealt with dedicated communication links, or "hotlines". For example, there is an existing hotline linking the two armies at the level of the Directors-General of Military Operations. There have been somewhat informal and intermittent arrangements in the past for telephone consultations between the Prime Ministers that have been called "hotlines", but this arrangement has never been institutionalized. At various times, there have been proposals to expand the number of hotlines between India and Pakistan. In 2001, before a summit at Agra, the Indian Defense Ministry proposed a new hotline between Indian and Pakistani Directors of Naval Operations.<sup>9</sup> In a crisis, there can be disadvantages in having a large number of parallel communications links. As pointed out by May and Harvey, "In a crisis, multiple links could be exploited by one side to sow seeds of confusion and internal discord in the other."<sup>10</sup> To counter this, a clearly articulated understanding and protocols as to what issues could be discussed on which level of hotline need to be developed. In a major crisis, only the heads of government should talk via a hotline to defuse the crisis.

Colonel Rafi uz Zaman Khan of Pakistan's SPD has proposed Nuclear Risk Reduction Centers (NRRCs)<sup>11</sup> in South Asia similar to those created by the US and the USSR. These NRRCs are proposed to serve as a concrete arrangement to build mutual trust and reassurance and prevent misperceptions. Colonel Zaman Khan has stated that the "establishment of NRRCs in India and Pakistan would serve as an effective, exclusive and a dedicated technical means of official communication for exchanging rapid, accurate

and factual information ... The NRRCs, by no means, would be designed as a substitute to political and diplomatic channels of communications. The existing hotline between the directors general of military operations, the heads of state, and other diplomatic channels of communications would continue to function as these have their own specific military, political, and diplomatic roles.”

Along with the concept of a NRRC, several other agreements between the US and the former USSR have particular relevance for India and Pakistan. Although many such US-USSR agreements exist, only two of these are discussed here. These agreements deal directly with the issue of avoiding inadvertent nuclear war. They are also the types of agreements that both India and Pakistan have formally discussed in the past, and that could form the basis for future treaties. These two US-USSR agreements are -

- Agreement on Measures to Reduce the Risk of Outbreak of Nuclear War between the United States of America and the Union of Soviet Socialist Republics
- Agreement between the United States of America and the Union of Soviet Socialist Republics on Notifications of Launches of Intercontinental Ballistic Missiles and Submarine-Launched Ballistic Missiles

On February 21, 1999, India and Pakistan signed the Lahore MoU. There is language in the Lahore MoU that is similar to that from the US-USSR risk reduction agreement signed on September 30, 1971. Article 1 of this agreement states, “Each Party undertakes to maintain and to improve, as it deems necessary, its existing organizational and technical arrangements to guard against the accidental or unauthorized use of nuclear weapons under its control.” The agreement states in Article 2 that, “The Parties undertake to notify each other immediately in the event of an accidental, unauthorized or any other unexplained incident involving a possible detonation of a nuclear weapon which could create a risk of outbreak of nuclear war.”

The US and the USSR signed the agreement on missile launch notifications on May 31, 1988, in Moscow. A similar idea is expressed in the Lahore MoU that states, “The two sides undertake to provide each other with advance notification in respect of ballistic missile flight tests, and shall conclude a bilateral agreement in this regard.”

Although the Lahore MoU tries to move towards the understanding embodied in the US-USSR agreement on risk reduction and missile launch notifications, the US-USSR agreements are much more comprehensive. They serve as an example for India and Pakistan to emulate.

Along with such agreements, the sharing of relevant information would also help in avoiding miscalculation and misperceptions. For example, given the history of military coups in Pakistan, there is a need for Pakistan to reassure India that any extra-constitutional transfer of power would not place control over nuclear assets at risk. Each side needs to reassure the other that the nuclear weapons in its possession are safe and secure, and that a robust command and control system exists

## CONCLUDING REMARKS

The Indian and Pakistani NCAs have some similarities in their structures, and also differ in some very important aspects. Despite these differences, there is nothing in the make-up of these two structures that would preclude either side entering into and implementing CBMs and other measures to reduce the risk of inadvertent nuclear war. In fact, during the Cold War, the US and the former USSR had markedly different NCAs, yet managed to enter into several successful agreements and CBMs. Some of these serve as useful models in trying to determine appropriate CBMs for India and Pakistan.

The need for India and Pakistan to enhance communication and information sharing regarding command and control systems has been ably described by India's Rear Admiral (Ret.) Raja Menon. He says, "Eventually, even a highly efficient command chain will create anxieties on the other side, but much of this can be removed by transparency in communicating the strengths of the command system to the other side."<sup>12</sup> Establishing that a command and control system is stable and robust enough to survive a first strike eliminates any possible temptation for considering such a strike. Controlled transparency in describing their command and control structures, therefore, will help India and Pakistan maintain deterrence.

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<sup>1</sup> Sandia is a multiprogram laboratory operated by Sandia Corporation, a Lockheed Martin Company, for the United States Department of Energy under Contract DE-AC04-94AL85000.

<sup>2</sup> India's draft nuclear doctrine states very clearly in section 8.5 – "In view of the very high destructive potential of nuclear weapons, appropriate nuclear risk reduction and confidence building measures shall be sought, negotiated and instituted." Although draft, this doctrine can be interpreted as a statement of intent. There is clearly an interest within India to engage in nuclear-related CBMs. Pakistan, too, is in support of nuclear-related CBMs, and at Lahore reached agreement with India on the need for such CBMs.

<sup>3</sup> Michael M. May, and John R. Harvey, "Nuclear Operations and Arms Control" in *Managing Nuclear Operations*, edited by Ashton B. Carter, John D. Steinbruner, and Charles A. Zrakert (The Brookings Institution, Washington, DC, 1987).

<sup>4</sup> Bracken, Paul, *The Command and Control of Nuclear Forces*, (1983: Yale University Press, New Haven, USA), p. 64.

<sup>5</sup> Press Release, "Cabinet Committee on Security reviews progress in operationalizing India's nuclear doctrine", Press Information Bureau, Government of India, January 4, 2003.

<sup>6</sup> This figure is derived from official press releases of the Press Information Bureau, Government of India, as well as newspaper articles on the subject that have been archived on the web site of the National Informatics Center that operates a Government of India web portal, implying presumably that these articles are in keeping with the official government position.

<sup>7</sup> Pakistan Ministry of Foreign Affairs, Organization of Pakistan's National Command Authority, <http://www.forisb.org/NCA.html>

<sup>8</sup> A survey of India-Pakistan nuclear related agreements is available in a paper by the author, [A Survey of Nuclear-related Agreements and Possibilities for Nuclear Cooperation in South Asia](#), SAND 98-0505/15, (Albuquerque: Sandia National Laboratories, 2000).

<sup>9</sup> Aneja, Atul, India, Pak, Naval Hotline? (Chennai: The Hindu, January 15, 2001)

<sup>10</sup> Michael M. May, and John R. Harvey, "Nuclear Operations and Arms Control" in *Managing Nuclear Operations*, edited by Ashton B. Carter, John D. Steinbruner, and Charles A. Zrakert (The Brookings Institution, Washington, DC, 1987).

<sup>11</sup> Colonel Rafi uz Zaman Khan, *Pakistan and India: Can NRRCs Help Strengthen Peace?* Occasional Paper No. 49 (Washington DC: Stimson Center, 2002) <http://www.stimson.org/southasia/pdf/nrccsouthasia.pdf>

<sup>12</sup> Rear Admiral (Retired) Raja Menon, *A Nuclear Strategy for India* (New Delhi: Sage Publications, 2000) pg. 241.