Chapter 21

The Pakistani National Perspective on Nuclear Non-proliferation

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I would like to thank the sponsors of the Amaldi Conference for providing me an opportunity to speak on the Pakistani national perspective on nuclear nonproliferation. I shall make a short presentation on the subject including steps that Pakistan has taken in the area of nuclear security, and briefly touch upon the related geo-political aspects arising out of the nuclearization of South Asia. Later, I look forward to answer your questions.

The areas where Pakistan has instituted measures in the broader realm of nuclear non-proliferation and nuclear security are legislative, legal, regulatory, institutional development, operational and enforcement, and international cooperation.

In the contemporary world, for many years now, concerns about nuclear non-proliferation and security have taken center stage as the most potent and potential threat to international order. This forum is fully aware of the serious implications of any weakness in this area anywhere in the world. No amount of effort expended in ensuring the highest standards of nuclear security by countries that are in possession of nuclear materials or capability can ever be enough.

It is with this very clear understanding that Pakistan as a responsible nuclear power, and the Strategic Plans Division or the SPD as the focal arm of the Pakistani Government on all matters nuclear have approached the subject of nuclear non-proliferation and security while planning and implementing various security measures and protocols.

When Pakistan became a nuclear power in May 1998, its first priority was to ensure that its nuclear capability was credible and effective so as to signal the right deterrence messages. Concurrently, an institutional national command and control system was put in place to ensure that all nuclear assets, materials, facilities and personnel were safe and secure under the tightest state control, invulnerable to any

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kind of proliferation. In the last 18 years, this has been the guiding philosophy for Pakistan and its nuclear managers.

By 1999 i.e. within one year of having conducted nuclear tests in response to the Indian nuclear tests of May 1998, Pakistan was successful in institutionalizing all aspects related to the management of our nuclear capability. In this context, we put in place:

- A Command and Control mechanism.
- Strategic Force Development Strategy.
- Strategic Forces in the three services which today are fully equipped, trained and operationalized.

Command and Control Structures. Pakistan's national Command and Control structures are generally familiar by now but I shall briefly recapitulate the essentials. The C2 is structured under three Constituents:

- Constituent 1—National Command Authority (NCA).
- Constituent 2—Strategic Plans Division (SPD).
- Constituent 3—Strategic Forces Commands.

Constituent-1. The NCA comprises of nine important decision makers of the country and includes the political and the military leadership. The Chairman is the Prime Minister. The members include four Federal Ministers i.e. Defence, Foreign Affairs, Finance and Interior, and from the military, the Chairman Joint Chiefs of Staff Committee and the Chiefs of the Army, Navy and the Air Force. The Secretary is the Director General of the Strategic Plans Division. The NCA is the apex decision making body on all nuclear matters.

Constituent-2. The SPD is a one window secretariat to the NCA. It conceives, develops, monitors, and manages Pakistan's nuclear, and space programmes on behalf of the NCA. It is headed by a three star General from the Army.

Constituent-3. Strategic Forces Commands have been raised in all the three services. Their control rests entirely with the NCA through the SPD.

Pakistan attaches the highest importance to nuclear non-proliferation and nuclear security. As generic evidence, in the last 18 years, despite a difficult internal security situation, none of Pakistan's nuclear facilities have faced any threat of proliferation or security because of the extra ordinary professionally conceived and implemented non-proliferation and security measures put in place by the SPD. These measures cover nuclear materials, infrastructure and personnel and have been successful in radiating the necessary deterrence effects against potential threats.

The Strategic Plans Division that I had the privilege of heading for over 15 years, conceived and developed a rigorous nuclear security regime simultaneously with speedy operationalization of the newly demonstrated nuclear capability. This was done comprehensively at the full spectrum levels i.e. strategic, operational and tactical within the broader concept of Credible Minimum Deterrence.

The SPD, through its Security and Intelligence Divisions, has incorporated stringent physical and technological solutions, runs a strict Personnel Reliability

Programme, and has developed security and intelligence capabilities to deal with all aspects related to nuclear security, including non-proliferation, insider and outsider threats and accidents.

A large security force, professional and agile, also includes a Special Response Force (SRF) which has a rapid air lift capability based on SPD's dedicated aviation resources. An integrated intelligence system has been instituted to provide depth in defense. Multi layered defence is the corner stone of Pakistan's nuclear security architecture and deploys a variety of physical and technological systems.

Nuclear security is not just about protecting nuclear assets and forces. It is a complete cycle of threat assessment, vigilance and response mechanisms. Pakistan created a comprehensive nuclear regulatory regime that encompasses not just physical protection of materials and facilities, but also fissile material control and accounting, transportation security, prevention of illicit trafficking, border controls, and plans to deal with possible radiological emergencies.

The Pakistan Nuclear Regulatory Authority (PNRA), an autonomous oversight body established in 2001, has developed a sustainable nuclear safety regulatory system for power reactors, and established response and recovery capabilities for radiological sources. The National Institute of Safety and Security works under the PNRA and trains professionals, technicians and managers in nuclear safety, security and radiation safety. NISAS, which was inaugurated by the DG IAEA in March 2014, conducts a wide range of professional training courses, workshops and on-job-training to build overall competency.

In 2004, Pakistan created a comprehensive export control regime. The legislative, regulatory, administrative and enforcement measures are at par with the multilateral export control regimes. We have revised the National Export Control Lists, on the basis of the European Union's integrated system, and harmonized them with the controls maintained by the NSG, Australia Group and MTCR. The National Detection Architecture also includes use of detection devices at several entry and exit points as well as other random check points to deter, detect and prevent illicit trafficking of nuclear and radioactive materials. The Integrated Cargo Container Control (IC-3) facility at Port Qasim near Karachi is a Container Security Initiative (CSI) compliant port.

When President Obama took the initiative in 2009 to launch a Nuclear Security Summit process, Pakistan welcomed the initiative. Since Pakistan equates nuclear security with national security, any measure to strengthen nuclear security was welcome as long as it remained a national responsibility and non-intrusive. Pakistan played a key role in elaborating the priorities of the Nuclear Security Summits and negotiating their outcome documents. Our contribution during the preparatory processes was positive and constructive. Pakistan participated in each Summit because it believed in the objectives of the NSS process and continues to abide by its obligations as a responsible nuclear weapons state.

As I said, nuclear security is a full spectrum and full cycle business. In 2012, we established Pakistan's dedicated Centre of Excellence for Nuclear Security Training which imparts security training based on international best practices and standards.

Some of the areas of training are Protective Force and Physical Protection, Security and Intelligence, Material Control and Accounting, Delay and Response.

At the Seoul Summit, the Prime Minister of Pakistan made the offer of utilizing the Centre of Excellence as a regional and international nuclear security training center. After some evaluation, the IAEA accepted the offer and today, the Centre of Excellence is functioning as a regional training hub on all nuclear security aspects. Senior international visitors to the Centre have appreciated the high standards of training developed by the Centre. IAEA Director General during a visit to the Centre in March 2014, said, "It is very impressive that you organize the training in a very systemic and operational manner." The PCENS, the acronym by which the Center is now known, has hosted the annual meeting of Nuclear Security Support Center Network in March 2016, the first time that it was held outside IAEA Vienna. It was attended by 50 participants from 33 countries.

Pakistan has invested heavily in nuclear safety at the plant, corporate and regulatory levels. Following the Fukushima accident, we conducted a detailed assessment of the safety parameters, emergency preparedness and response, and operators' training protocols and procedures. All authorizations since then require from the licensees to implement lessons learnt from the Fukushima accident.

In collaboration with the IAEA, we are implementing our Nuclear Security Action Plan (NSAP) to manage radioactive sources, secure orphan sources, detect radiation, and prepare for emergencies.

The SPD has also established a Nuclear Emergency Management System (NEMS) to address, respond and manage the complete spectrum of nuclear or radiological emergencies. Covering the entire range of activities, the system has state-of-the-art equipment, mobile labs, technical guidance provided by the PAEC and PNRA, and countrywide connectivity including with the National Disaster Management Authority.

Pakistan has regularly submitted reports to the UN Security Council 1540 Committee that list the measures we have taken for nuclear and radiological security as well as on controls over all forms of transfer of sensitive materials and technologies.

As a party to the Convention on Physical Protection of Nuclear Materials (CPPNM) and its 2005 Amendment, the Nuclear Safety Convention, the Convention on Early Notification of a Nuclear Accident, and the Convention on Assistance in the case of a Nuclear Accident or Radiological Emergency, Pakistan has been contributing to the nuclear security framework. Our consistent observance of the IAEA Code of Conduct and participation in the IAEA Incident and Trafficking Database (ITDB), have been highly useful. Pakistan has also ratified the CPPNM.

In recent years, Pakistan has been working with the Global Initiative to Combat Nuclear Terrorism (GICNT) in different areas, including the development of the Initiative's guidelines on a nuclear detection architecture, nuclear forensics and response and mitigation.

I would say that, with the possible exception of NPT, no conversation on nuclear nonproliferation and nuclear security would be complete without Pakistan's participation.

Here, I would like to take the opportunity to underline that Pakistan fully qualifies to become a member of the Nuclear Suppliers Group and other multilateral export control regimes. Pakistan's nuclear trade is one hundred percent legitimate and therefore all impediments in its way need to be removed. Pakistan will not accept discriminatory treatment on this account.

Pakistan has a proven record spanning four decades of safe and secure operation of civilian nuclear power plants, which are all placed under IAEA safeguards. Pakistan needs alternative, clean and sustainable civil nuclear energy for its burgeoning industry and to meet growing consumer demand. Our National Energy Security Plan includes a Nuclear Energy Vision—2050 to redress the existing energy deficits and to respond to the future requirements of our economy. Under the Vision 2050, Pakistan has targeted to generate 42,000 MWe. Nuclear energy is therefore an essential part of our national energy mix.

With the foregoing credentials in respect of nonproliferation and nuclear security, Pakistan is justified in asking the international community that a politically discriminatory approach towards Pakistan be discarded and Pakistan be fully integrated in the international nuclear mainstream. This can best be done by removing restrictions imposed on Pakistan. In this regard, Pakistan looks forward to an equitable access to international civil nuclear cooperation. Pakistan has worked with professionalism with the international community to erect strong barriers against nuclear non-proliferation as a preventative measure in order to strengthen international nuclear security.

With its long and varied experience in the nuclear field, Pakistan's mainstreaming in the international nuclear order will enable it to contribute to power generation, non-power application of nuclear technology, nuclear security and nuclear safety, in collaboration with the IAEA. I would add that with an advanced nuclear fuel cycle capability, Pakistan is in a position to provide nuclear fuel cycle services under IAEA safeguards, and to participate in any non-discriminatory nuclear fuel cycle assurance mechanism.

That being said, I would also like to take this opportunity to clear the fog of what we think are biased labels about the future trajectory of Pakistan's nuclear capabilities. I would not go into the skewed studies that would have the world believe that Pakistan's modest nuclear programme is the fastest growing nuclear programme, which it is not. The methodology used by these so called studies to draw conveniently simplistic conclusions is not only seriously flawed, but these also generously ignore the cold realities of an ever expanding conventional, nuclear and, lately, ideological threat on our eastern borders. I shall very briefly flag the serious developments taking place in the neighborhood because of which Pakistan is compelled to take bare minimum safeguards:

- Increasing conventional forces asymmetry.
- Aggressive war fighting doctrines despite the presence of nuclear weapons in South Asia.
- The nuclear arsenal buildup.
- The expanding missile programme including Ballistic Missile Defence.
- Nuclearization of the Indian Ocean.

Suffice to say that Pakistan is compelled to maintain the credibility and effectiveness of its strategic deterrent, which includes a variety of weapons based on the policy of Full Spectrum Deterrence remaining within the larger philosophy of Credible Minimum Deterrence. This Pakistani capability ensures the retention of a strategic equilibrium in South Asia, and has neutralized the use of the military as an instrument of policy, ruling out war as an option. It stands to reason therefore that the credibility of Pakistani nuclear weapons has contributed to deterring war thereby ensuring that peace, howsoever fragile and unstable, will prevail in the region. That the space and opportunity created by the presence of these weapons has not been taken up by dynamic and bold political initiatives for dialogue leading to conflict management and eventual resolution is a reflection of an unfortunate intellectual bankruptcy; acceptance of living with an unstable status quo between two nuclear powers is dangerous policy and strategy. It potentially threatens world peace.

It is therefore important for the international community to realize that feeding and further fueling discriminatory policies into the strategic dynamics of South Asia are dangerous and counter-productive and will only aggravate the existing imbalances. One can take the example of the Indo-US Nuclear Cooperation Agreement of 2008, and the consequent NSG exemption granted to India. Whatever dubious political or commercial benefits the parties to the arrangements may have drawn, these have caused harm to the international nonproliferation norms by legalizing exceptionalism. These have only served to strengthen Pakistan's resolve to find appropriate solutions to offset the fallout of those Agreements.

Similarly, attempts to isolate Pakistan through one sided and discriminatory criteria in judging the applications for NSG membership will not work. Pakistan has worked hard as well as, if not better than, any other country to establish its credentials as a responsible nuclear state and meets the necessary criteria to be a member of the nuclear export control regime. Our continued outreach and fruitful engagement with the NSG Troika has established that. Unfortunately, goal posts continue to be shifted to suit predetermined geopolitical objectives in an export control regime which is governed by technical criteria alone. Such an approach is not only discriminatory but will further introduce negative consequences in South Asia.

If lessons are to be drawn from the policy of exceptionalism of 2008, one of them would be that discrimination doesn't work. Secondly, if discrimination doesn't work, Pakistan will find solutions to offset the effects that the discrimination will generate. Third, efforts to isolate Pakistan will further reinforce the perception

that Pakistan is always subjected to double standards and must therefore look out for itself in every which way; which it will.

History bears testimony to the fact that Pakistan has always shown resilience in facing challenges. My submission therefore is that all applications for membership to the NSG should be judged on the basis of non-discriminatory objective criteria alone, and not through the prism of geo-political expediencies.

As the experience of the last 18 years shows, the nuclear capabilities of both India and Pakistan have sufficiently developed and matured to a point where a delicate strategic balance exists in South Asia. In my judgment the era of kinetic hot wars is behind us. A repeat of 1965, 1971 or even 1999 is unlikely. In South Asia today we go through alternating cycles of strategic stability and strategic instability. What is replacing the era of hot wars is a new era of an unnecessary cold war. I doubt if that is a wise way to go. Notwithstanding the interjection of conflicting interests of global powers in Asia with concurrent fallout in South Asia, India and Pakistan as responsible nuclear powers, struggling to develop their economies to fight poverty, must manage and resolve their many differences to move ahead. Zero sum games only lead to zeroes.

In a positive sense, the nuclear capabilities of both sides have put a check on unfettered politico-military options for either side. Pakistan has invested in the development of its Full Spectrum capabilities precisely with the objective of outlawing war as an instrument of policy. This investment ensures that peace prevails in South Asia. The larger question then is: does this bring about strategic stability? The answer is both yes and no. Yes because outbreak of war is deterred. No because the region remains on edge at the slightest provocation on either side leading very rapidly to the raising of the specter of a nuclear holocaust. Given the foregoing environments, strategic stability in South Asia can at best be described as a mirage, a seriously deceptive mirage, which, if not managed prudently, can be disastrous for the region and for the world.

Having given the Pakistani national perspective on nuclear nonproliferation, nuclear security and the related geopolitical dynamics of South Asia, I would conclude by leaving a question as food for thought.

For how long will a directly affected world allow the stability-instability paradox to persist in nuclear South Asia? Indefinitely, perhaps, in the hope that it will be able to diffuse crisis after crisis each and every time, year after year? Or, definitely by encouraging with far greater political will than that has been displayed so far for both sides to sit together to resolve conflicts through sustained and meaningful dialogue. Sitting on a nuclear powder keg for all times is a dangerous option.

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