

PRESS INFORMATION BUREAU RELEASES

on

NUCLEAR WEAPONS

(2008-2012)*

Compiled by Kiran J Prakash

Centre for Nuclear & Arms Control



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CONTENTS

1	India's Nuclear Weapons and Platforms	1
2	Nuclear Weapons in the Neighborhood	24
3	Nuclear Weapons – Conventional Treaties and Agreements	34
4	Nuclear Security, Non-Proliferation and Disarmament	39

*Till August 2012

**INDIA'S NUCLEAR WEAPONS AND
PLATFORMS**

Nuclear and Arms Control Centre

Press Information Bureau
Government of India
Ministry of Defence

10-May-2012 19:37 IST

Naval Commanders Conference - 2012 Concludes

“Incorporating Quantum Enhancement in Technology, Ranging from Nuclear Propulsion to Advanced Weapon Platforms and Networked Systems”: Admiral Nirmal Verma

The Naval Commander’s Conference was conducted at New Delhi from 08-10 May 12. The Hon’ble Raksha Mantri inaugurated the conference and complimented the Indian Navy on its all round performance.

The Naval Commander’s discussed several important issues during the conference, including Operational Readiness, Coastal Security, Infrastructure Development, Information & Cyber Security as also Foreign Cooperation initiatives.

The necessity for the Indian Navy to incorporate quantum enhancement in technology, ranging from nuclear propulsion to advanced weapon platforms and networked systems, was highlighted by the CNS, especially in view of the recent induction of INS Chakra, the impending arrival of INS Vikramaditya and the P8-I Long Range Maritime Surveillance aircraft.

The CNS expressed satisfaction at the modernisation and capability enhancement of the Indian Navy, which was proceeding as per the Maritime Capability Perspective Plan. The CNS highlighted the fact, that 4-5 major warships and submarines were likely to be commissioned every year over the next five years and that Naval Aviation was poised for major growth in the years ahead.

Considering the ongoing expansion programme of the Indian Navy, a new ‘Safety Organisation’ to enhance safe operations of ships, submarines and aircraft was also discussed.

As 2012 is being observed as the ‘Year of the Ex-Serviceman’, several measures for enhancing the welfare of naval veterans and their widows were discussed for implementation. These include ‘Pension Adalats’ across the country, especially in rural areas and strengthening the delivery of the Ex-servicemen’s Contributory Health Scheme (ECHS).

The CNS concluded the conference by complimenting all personnel of the Indian Navy for their professionalism and patriotism, and exhorted them to continue to meet the maritime security challenges being faced by the nation.

PVS/AK

URL: <http://www.pib.nic.in/newsite/erelease.aspx?relid=83586>

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04-April-2012 15:06 IST

Antony Commissions Nuclear Submarine ‘INS Chakra’ into Indian Navy

The Indian Navy formally inducted the nuclear-powered submarine ‘INS Chakra’ into its fleet today. The INS Chakra was commissioned by the Defence Minister Shri AK Antony at a ceremony in Visakhapatnam this morning. Following is the text of his address on the occasion:

“It is really a pleasure to be here this morning for the momentous arrival ceremony of INS Chakra. The historic event reflects the high level of cooperation and strategic partnership between India and Russia.

It was more than five decades ago, in 1954, that the first nuclear-powered submarine Nautilus revolutionised submarine warfare. Nuclear propulsion has given the submarine the ability to operate submerged at high speeds for unlimited periods, limited only by human endurance.

Over the years, nuclear-powered submarines have assumed far greater significance and changed the complexion of maritime warfare. Indian Navy entered the era of nuclear propulsion in 1998 with the induction of the erstwhile Chakra, a Charlie class SSGN – wherein SS denotes “Submarine”, G denotes “Guided Missile” and N denotes “Nuclear”. The three-year lease of the erstwhile Chakra was a landmark event in international cooperation. The successful operation of this SSGN cleared the decks for the induction of present INS Chakra in its new ‘avataar’ into the Indian Navy.

Over the years, the Indian Ocean Region has assumed great strategic significance. This region is home to large population and some of the most dynamic and fast growing economies. Geo-strategically, India is the hub of this region. The disruption of sea-borne trade due to piracy, terrorism, or conflict can have serious repercussions on the economies and overall well-being of nations in the Indian Ocean Region. As peace and stability in the region are crucial to peace in the world at large, it is imperative that the Indian Navy maintains a strong, stabilising and credible naval presence in the region. At the same time, I wish to strongly emphasise that our naval presence is not at all directed against any nation, but only to act as a stabilising force and protect our strategic interests. Towards this end, the induction of INS Chakra is a step in the right direction. INS Chakra would no doubt play a major role in reshaping maritime operations of the Indian Navy in the years to come and ensure security, sovereignty and economic prosperity of the country.

Our defence forces in general and the Navy in particular, have had a long association with Russia. The lease of INS Chakra is a true reflection of the remarkably strong and close ties between our countries. I am confident that INS Chakra will symbolise both, the success of the Russian submarine building capability and the Indian Navy’s competence in exploitation of technologically complex platforms.

I take this opportunity to congratulate the Russian Navy, Russian crew, personnel of Amur shipyard and Vostok shipyard. I also thank JSC Rosobornexport for making this lease possible. Their support and cooperation has made it possible to successfully commission INS Chakra into the Indian Navy. I am sure that following in the true spirit of the longstanding, strategic friendship between our two great nations, the Russian Federation would extend the requisite technical support to INS Chakra during her operations in India.

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On behalf of the Republic of India, I congratulate the Indian Navy for successfully inducting INS Chakra. I also extend my heartiest congratulations to the Commanding Officer of INS Chakra and the crew for their painstaking efforts during the challenging phases of training, acceptance and passage to India. I wish the Commanding Officer, officers and men of the submarine fair weather following seas, good fortune and happy hunting.

The nation is really proud of this latest addition to the Indian Navy. All of us look forward to operate this powerful platform. I am confident that whenever called upon, INS Chakra, would bring credit and glory to our country and the Indian Navy.”

SitanshuKar in Visakhapatnam

URL: <http://pib.nic.in/newsite/erelease.aspx?relid=82089>

**Press Information Bureau
Government of India
Ministry of Defence**

29-December-2009 15:59 IST

**First indigenously built nuclear submarine launched indigenous MBT Arjun and T-90
Bhishma tanks inducted IAF gets eye in the sky**

YEAR-END REVIEW – 2009

Ministry of Defence

The country's march towards indigenization and strengthening of the Armed Forces through modernization and state-of-the-art weapons acquisitions were the highlights of the Ministry of Defence during the year 2009. The Navy took a giant leap with the launching of the first indigenously built nuclear propelled strategic submarine named 'Arihant' in July. The Indian Navy is well on its way to acquire a lethal punch in the years ahead when it gets the first indigenous aircraft carrier. The keel for the carrier was laid in Kochi in February. The Navy also received the first batch of three MiG-29K fighter jets. The Air Force got a big boost when the first of the three AWACS, the IAF's eye in the sky, joined its fleet in May. The Army's focus during the year was on indigenization with the induction of locally built MBT Arjun and T-90 Bhishma tanks.

To facilitate the indigenous defence industry and fast track acquisitions by transfer of technology from foreign vendors, the Ministry of Defence issued an updated Defence Procurement Procedure-2009 in October. The year also fulfilled a longstanding aspiration of the Armed Forces personnel when the President inaugurated the Armed Forces Tribunal in August. The other significant events during the year include Rescue and Relief during cyclone Aila that hit West Bengal and humanitarian aid to war-ravaged Sri Lanka and the participation by a 400-member tri-service contingent in the French National Day Parade for the first time.

NUCLEAR POWERED SUBMARINE 'ARIHANT' LAUNCHED

India's first indigenously built nuclear propelled strategic submarine named 'Arihant', meaning 'Destroyer of the Enemies', was launched on July 26 at the Ship Building Center, Visakhapatnam. India thus joined a select group of nations which have the

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technological capability to build and operate nuclear propelled submarines. Speaking on the occasion, Prime Minister Dr. Manmohan Singh, while congratulating the Director General of the ATV (Advanced Technology Vehicle) Programme, Vice Admiral (Retd) DSP Verma and all personnel associated with it for achieving this historic milestone in the country's defence preparedness, noted that they overcame several hurdles and barriers to enable the country to acquire self-reliance in the most advanced areas of defence technology. The Prime Minister made a special mention of the cooperation extended by Russia.

The 6,000 ton 'Arihant' is undergoing trials for two years before its commissioning.

KEEL LAYING CEREMONY OF INDIGENOUS AIRCRAFT CARRIER

In February the keel was laid in Kochi for the first indigenous aircraft carrier, making India the fourth nation to join a select club of designers and builders of over 40,000 tonne Aircraft Carriers. The ship that will carry 30 aircraft including Mig-29K, LCA Tejas and Kamov Ka-31 helicopters and include a complement of 1,600 crew, is expected to add punch to the Navy's capability when it joins the fleet in 2014. The carrier is the largest vessel for which construction has been undertaken at any Indian shipyard.

COMMISSIONING OF LANDING SHIP TANK INS AIRAVAT etc.

INS Airavat, the third Landing Ship Tank (Large) of the Shardul class was commissioned in May. As a platform designed for amphibious operations the ship can carry 10 Main Battle Tanks, 11 Combat Trucks and 500 Troops and has a considerable range and endurance at sea. With its weapon package, control systems and habitability conditions significantly enhanced from the earlier Magar class, Airavat delivers considerable punch and amphibious capabilities to the fighting prowess of the Indian Navy.

Four Fast Attack Craft namely INS Cora Divh, Cheriyan, Carnicobar and Chetlat were also commissioned over the year.

MiG-29K ARRIVAL

The first batch of three MiG-29K aircraft were received on December 04, 2009 at INS Hansa Goa. A total of 16 aircraft have been contracted from MiG RAC. These aircraft will be flown intensively after their acceptance.

CONTRACT FOR NAVY'S PATROL AIRCRAFT

A contract was signed in January with Boeing Industries for eight P-8I Long Range Maritime Patrol Aircraft worth \$2.137 Billion. Delivery of aircraft is scheduled between 2013-15.

NAVAL ACADEMY AT EZHIMALA

The Naval Academy at Ezhimala, Kerala was commissioned on January 08, 2009. This Academy named INS Zamorin will be the largest officer-training Naval Academy in Asia. The Academy, spread over an area of 2452 acres along the North Malabar coastline, would be conducting a four year 'B Tech' programme in 'Electronics and Communications' and 'Mechanical Engineering' for naval cadets.

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1ST BATCH OF WOMEN OBSERVERS JOIN INDIAN NAVY

Two lady officers were inducted as the first women Observers of the Indian Navy. Sub Lieutenant Seema Rani Sharma and Sub Lieutenant Ambica Hooda were awarded ‘Wings’ on November 20, 2009.

COASTAL SECURITY

In June a meeting chaired by the Defence Minister Shri AK Antony decided to set up a high level committee under the Chairmanship of the Cabinet Secretary to review the measures taken for coastal security at regular intervals. The other members of the committee will include the Chief of Naval Staff, Secretaries of all concerned Ministries such as Defence, Home, Petroleum and Chief Secretaries of Coastal States.

One significant achievement of the year has been the integration of all maritime stakeholders, including the several State and Central agencies into the coastal security matrix. Intelligence and information sharing has undergone a transformational change. The Indian Navy has established four Joint Operation Centres in all Naval Commands. All coastal security operations are now coordinated from the Joint Operations Centre, which are manned round the clock by Naval and Coast Guard teams. In addition, the state Marine Police and other agencies such as Customs, Intelligence Bureau, Ports etc are also networked with these centers. Besides the four Joint Operation Centers at Mumbai, Visakhapatnam, Kochi and Port Blair, each coastal district also has its own Operation Center for coordinating activity in their districts. The Coast Guard set up a station at Gandhinagar, Gujarat in December to strengthen maritime and coastal security in the northwestern region.

In a focused drive to enlist the support of fishermen for their role, awareness campaigns targeting coastal and fishing communities were conducted.

Recognizing that the Marine Police and CISF are not fully trained in maritime tasks, the Indian Navy has provided training assistance to all coastal states and CISF personnel. 263 CISF personnel have already undergone training at INS Chilka, the premier training establishment for sailors in the Indian Navy. Local Naval and Coast Guard elements in Tamil Nadu, West Bengal, and Maharashtra have also taken up similar training for the Marine Police. Nearly 1600 marine police personnel have been trained. This effort continues during joint patrols, in which the Navy and Coast Guard participate along with the Marine Police, CISF and Customs.

ANTI-PIRACY OPERATIONS

The Indian Navy maintained one ship on anti-piracy patrol duties in the Gulf of Aden throughout the year. During the year the Indian Naval warships escorted over 700 merchant vessels through the treacherous Gulf of Aden. About 14 piracy attempts were successfully thwarted by the Indian Navy.

From early November an additional ship has been deployed to patrol the maritime areas of Seychelles and Mauritius to counter the increasing cases of piracy in these areas.

FIRST OF IAF AWACS ARRIVES IN INDIA

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The first of the three Indian Air Force AWACS (Airborne Warning and Control System) platform arrived in India from Israel in May. Three Mig-29 and Jaguar aircraft escorted the giant IL-76 configured in its new avatar, each that took off from an advanced fighter airbase of South Western Air Command (SWAC). Air Officer Commanding-in-Chief, SWAC, Air Marshal KD Singh, Air Defence Commander Air Vice Marshal P Singh and the AOC Jamnagar, Air Commodore C Hari Kumar and air warriors of the airbase welcomed the crew of the AWACS aircraft that included the Commanding Officer of the first AWACS squadron, Group Captain B Saju. Their maiden touchdown on Indian soil also marked the first landing of the AWACS in an IAF airbase.

IAF REACTIVATES AIRFIELDS IN LADAKH

On September 18, 2009 an IAF AN-32 aircraft landed at Nyoma Advanced Landing Ground (ALG) in eastern Ladakh. Though helicopters have been landing at this ALG, this was for the first time that a fixed-wing aircraft has landed at the compacted airstrip of Nyoma, located 23 kms from the Line of Actual Control at an altitude of 13,300 feet. It marked the culmination of joint effort by the IAF and Indian Army to enable the IAF to operate in the inhospitable terrain of Leh-Ladakh region in support of the Army.

The landing came 15 months after an AN-32 landed at Daulat-Beg-Oldie (DBO), the highest airfield in the world situated at an altitude of 16,200 feet.

SU-30 INDUCTED IN TEZPUR

The Su-30 aircraft was formally inducted at Air Force Station Tezpur on 15 June 15, following the upgrade of the airbase in the northeast.

PRESIDENT INDUCTS VVIP BOEING BUSINESS JET 747/700 INTO IAF

President Pratibha Patil inducted the new state-of-the-art VVIP jet into the IAF on April 1, 2009. The President later undertook a flight to Assam aboard the new Boeing 747/700, christened as 'Rajdoot'. The sparkling white 60-passenger-capacity aircraft, designed on the lines of the US President's Air Force One and equipped with a wide range of security cover and latest communication devices, replaces the Boeing 737.

PRESIDENT FLIES SU-30, BOARDS AIRCRAFT CARRIER VIRAAAT

The President of India, Smt Pratibha Devisingh Patil became the first woman President anywhere across the world to fly a fighter jet. She undertook the historic half-hour sortie on the Sukhoi-30 MKI fighter aircraft at the Lohegaon airbase, Pune on November 25. Next month the President boarded the INSViraat, India's only aircraft carrier, and witnessed the operation of Sea Harrier Vertical Take-Off and Landing fighter jets from its decks. The 50-year-old 28,000 tonnes aircraft carrier rejoined the Indian Navy in August after a year-long refit at the Cochin Shipyard.

MMRCA FLIGHT TRIALS BEGIN

The Indian Air Force began flight evaluation tests for the procurement of 126 Medium Multi-Role Combat Aircraft (MMRCA) in August. US' Boeing and Lockheed Martin, French d'Assault, Swedish

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SAAB, European consortium EADS and Russian MiG are vying for the deal worth around Rs. 48,000 crore (\$10.2 billion). The IAF hopes to complete the tests by April, 2010.

IAF EFFORTS IN ECLIPSE STUDY

The Indian Air Force successfully undertook sorties to help Indian scientists study the total solar eclipse that took place on July 23. Two separate missions from Agra and Gwalior were flown along the path of the moon's shadow, a mission that was deemed hugely successful by scientists associated with the experiment. While one AN-32 transport aircraft carrying scientific equipment, cameras and scientists that took off from Agra landed back after a three-hour flight, a Mirage-2000 trainer from Gwalior took spectacular images of the celestial spectacle from 40,000 feet. With weather being clear at the altitudes and coordinates planned by the IAF pilots, both AN-32 and Mirage-2000 pilots were able to accomplish the mission successfully.

ARMY RAISES FIRST ARMoured REGIMENT OF MBT ARJUN

History of sorts was made on May 25 when the Indian Army proudly equipped itself with the first Armoured Regiment of the indigenously built Main Battle Tank, Arjun. The development marked the fruition of 35 years of research in self-reliance by dedicated Indian scientists against all odds. 16 tanks (cumulative 45 Arjun tanks) were handed over to Lt.Gen.D.Bhardwaj, DGMF, towards formation of the 1st Arjun regiment at a function in Avadi, Tamil Nadu.MBT Arjun is the state-of-art main battle tank designed and developed by the Combat Vehicles Research and Development Establishment (CVRDE), Avadi along with other DRDO and industrial partners. MBT Arjun is provided with excellent mobility, superior firepower and protection and its features are comparable to contemporary tanks operated by cavalries around the world.

INDIGENOUSLY BUILT T-90 'BHISHMA' TANKS ROLL OUT

India rolled out its first batch of the indigenous, Russian-designed T-90 tanks in August, which will be the country's main battle tank over the next three decades. The successor to the T-72 tanks, the T-90 - renamed *Bhishma* after the *Mahabharat* stalwart - is the one of the most advanced tanks in the world. It has night-fighting capability and can fire guided missiles from its turret. It is also designed to ensure protection of crew from radioactivity in the event of a nuclear attack. The Heavy Vehicles Factory at Avadi in Tamil Nadu will make 100 T-90 tanks annually over the next 10 years. The tank will be the spearhead of India's armoured corps and the mainstay of its offensive operations.

ARMY'S EFFORTS TO RESTORE NORMALCY IN J&K

The terrorist attacks in Jammu and Kashmir have drastically come down and infiltration has been largely checked, thanks to the strict vigil on the Line of Control maintained by the Indian Army. In view of the improved situation in the state, the Army withdrew two Divisions comprising closed to 30,000 troops.

THIRD SUCCESSFUL TEST OF BALLISTIC MISSILE INTERCEPTOR

India inched closer towards its endeavour to put in place its own home-grown Ballistic Missile Defence System by successfully carrying out the third Interceptor test on March 06, 2009 from the

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Integrated Test Range (ITR) at Wheeler Island in Orissa. The two-stage Interceptor Missile fitted with advanced systems hit the target enemy missile at 75 kms altitude. This third consecutive interception of Ballistic Missiles once again demonstrated the robustness of the Indian Ballistic Missile Defence (BMD) system.

DEFENCE PROCUREMENT PROCEDURE 2009 RELEASED

An updated and revised Defence Procurement Procedure-2009 was released in October 29, and it came into effect in November. It promotes indigenous defence industry, ensure transparency and accountability in all procurement cases and liberalizes Offset provisions to enable vendors to fulfil their obligations. The amended DDP-2009 introduced a new category named 'Buy and Make (Indian)' which enables indigenous private and public industry to enter into joint ventures with foreign suppliers by Transfer of Technology and not by Research and Development.

ARMED FORCES TRIBUNAL INAUGURATED

The long-awaited Armed Forces tribunal was inaugurated by the President Smt. Pratibha Devisingh Patil on August 07, 2009. Set up by an Act of parliament in December, 2007, the Armed Forces Tribunal has its Principal Bench in New Delhi and eight regional benches spread across the country. It has been followed with the setting up of the Tribunal's regional benches in Chandigarh, Jaipur, Lucknow, Kolkata and Chennai. The Tribunal will have 15 courts in all, - three each in New Delhi, Chandigarh and Lucknow and one each in Jaipur, Mumbai, Kolkata, Guwahati, Chennai and Kochi.

Aggrieved armed forces personnel will now be able to appeal against sentences handed down by the court-martial. The Tribunal has the powers to grant bail to any person in military custody. The Armed Forces Tribunal provides a judicial forum for the redressal of grievances of about a 1.3 million strong armed forces personnel and another 1.2 million Ex-Servicemen.

RESCUE & RELIEF DURING 'AILA' CYCLONE etc.

Acting upon the request of the West Bengal government, the Ministry of Defence dispatched medical teams of the Armed Forces personnel to the devastating cyclone 'Aila' affected areas of North and South 24 Parganas districts of the state in June. Many columns of the Army and several divers from the Indian Navy were also engaged in providing relief and rescue. These teams provided medical aid to several thousand people in the Aila affected areas. 5,000 kgs of relief stores were also distributed in the flood affected areas, which include clothing, food items and tentage. Divers from Indian Navy and Army personnel rescued 450 marooned persons and evacuated them to safer areas. Armed Forces also pressed into service Gemini boats in cyclone affected areas to distribute relief materials. IAF also pressed the Mi-17 helicopters into service to provide aid to the affected people.

When parts of Andhra Pradesh and northern Karnataka were badly affected by floods in the first week of October, the Army, Navy and IAF carried out extensive operations, rescuing over 3,600 people. More than 4.5 tonnes of rations were distributed by the Army to the marooned people in the two flood affected states. The Air Force deployed 32 aircraft and helicopters, carrying out 340 sorties.. The Navy also deployed two Chetak helicopters and diving teams for flood rescue operations.

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In February the IAF also launched Operation Humsafar to supply food and medicines to the snowbound remote areas of Doda district.

AID TO WAR-RAVAGED SRI LANKA

On the request of the Government of Sri Lanka, medical teams from Armed Forces were sent to war-ravaged northern Sri Lanka. Indian Air Force IL-76 transport aircraft airlifted several tones of medical aid to Colombo in March.

JOINT EXERCISES

The Indian Army conducted the joint exercise 'YUDH ABHYAS-09' with the US Army at Babina near Jhansi in October, towards coordinated peacekeeping and disaster relief operation. A Mechanised Infantry Battalion of Indian Army and 2nd Squadron of 14 CAV of 254 Stryker Brigade Combat Team comprising 325 US troops participated in this exercise. The Indian and Maldivian troops conducted 'EKUVERIN-09' exercise in Belgaum.

Exercise COPE INDIA 2009 was held in October at Agra between IAF and US Air Force. Six IAF Jaguars participated in a joint Air Exercise with the Royal Air Force of Oman at Thumrait, Oman the same month. Indian Navy's Eastern Fleet Task Force comprising four warships carried out joint exercise 'SIMBEX 09' in March with the Singapore Navy. The Fleet also exercised with the US and Japanese Navies under the aegis of the MALABAR exercise. Additionally enroute, the fleet conducted exercises with the navies of Philippines, Vietnam, Malaysia, South Korea and Indonesia. On the other hand, a Western Fleet Task Force comprising four ships were deployed to Europe from May, 2009. The fleet ships touched over 15 ports and in addition to having dedicated joint operations with the Royal Navy and the French Navy under the codenames 'Konkan' and 'Varuna' the ships also conducted exercises enroute with 12 different navies viz. the Algerian Navy, Portugese Navy, German Navy, Turkish Navy, Israeli Navy, Russian Navy, Royal Netherlands Navy, Spanish Navy, Moroccan Navy, Hellenic Navy, Egyptian Navy and the Royal Navy of Oman.

Indian Naval warships and aircraft also conducted joint surveillance of the extensive Exclusive Economic Zone in the waters of Maldives, Mauritius and Seychelles. Our ships conducted coordinated patrols with the navies of Thailand and Indonesia.

SEPARATE PAY COMMISSION FOR ARMED FORCES ANNOUNCED, PAY HIKE PROPOSALS IMPROVED

In a New Year bonanza for the Armed Forces on January 1, 2009, the Prime Minister's Office informed the Defence Ministry that the Armed Forces personnel would henceforth have a separate Pay Commission, which is delinked from the civilian pay panel. On April 21 the Government notified Pay Band-4A with a Grade Pay of Rs 8000 for Lieutenant Colonels and equivalents in Navy and Air Force, which benefitted about 15,000 officers. Later the Government approved higher wages under the Sixth Pay Commission for Lieutenant Generals and equivalent officers, putting them at par with the Director Generals of Police, a key demand of the Armed Forces. About 33 per cent of the total number of Lt Generals in the Army, Air Marshals in the IAF and Vice Admirals in the Navy, were granted the Higher Administrative Grade (HAG) Plus scales.

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AERO INDIA 2009

The 7th Edition of Aero India, Asia's premier Air Show, was held in Bengaluru from February 11 to 15, 2009. In size and number, this was the biggest air show, hosted by India so far. 592 exhibitors from 25 countries participated at the show. A number of aircraft including F-16, F-18, MiG-35D, Eurofighter, IJT, ALH Dhruv, AJT Hawk, C-17, Embraer 135 Business Jet Legacy 600, C-130J Hercules, Citation XLS,G 550, AN-12 Cargo and A-310 MRTT were on display. Defence Ministers of France, Peru, Bolivia, Surinam, Mongolia, Oman and Maldives came for the show. Besides high level delegations from 40 countries also attended the Show.

SAINIK SAMACHAR CENTENARY

The Armed Forces Journal 'Sainik Samachar' celebrated its Centenary on January 2, 2009. Sainik Samachar had started as Fauji Akhbar, an Urdu weekly on January 2, 1909, with an aim to provide Army personnel with 'a summary of news with a military bias'. It was re-christened as Sainik Samachar on April 04, 1954. The Defence Minister Shri AK Antony released a Coffee Table Book 'Soldiering On...' on the occasion.

INDIAN ARMED FORCES CONTINGENT PARTICIPATES IN FRENCH NATIONAL DAY PARADE

A 400-strong contingent of the Indian Armed Forces comprising marching columns and a combined military band from the Army, Air Force and Navy participated in the French National Day parade on July 14, 2009 in Paris. This was the first time an Indian military contingent was accorded the honour. The contingent was commanded by Air Commodore RK Mathur.

ANTONY TAKES OVER AS DEFENCE MINISTER FOR THE SECOND TIME

Following the resounding win of the United Progressive Alliance in the April-May General Elections to the 15th Lok Sabha, Shri AK Antony took over as the Defence Minister for the second time on May 25, 2009. Shri Antony has been at the helm of the Defence Ministry since October 25, 2006.

APPOINTMENTS

Shri Pradeep Kumar took over as the Defence Secretary on July 31 following the superannuation of Shri Vijay Singh. Shri Kumar was already working as Secretary (Defence Production) in the Ministry of Defence. Earlier on May 31, Air Chief Marshal Pradeep Vasant Naik took charge as the 19th Chief of Air Staff from Air Chief Marshal Fali Homi Major and later the Navy got Admiral Nirmal Verma as its new chief, following the superannuation of Admiral Sureesh Chopra.

Eminent missile scientist Dr. Vijay Kumar Saraswat took over as the new head of the Defence Research and Development Organisation (DRDO) from Shri M Natarajan on September 1, 2009. Dr. Saraswat spearheaded the development of country's strategic and tactical missile systems including the 'Agni' series of strategic missiles covering a range up to 3,000 kms.

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URL: <http://pib.nic.in/newsite/erelease.aspx?relid=56489>

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**Press Information Bureau
Government of India
Department of Atomic Energy**

25-September-2009 12:24 IST

Pokhran – II tests were fully successful; given India capability to build nuclear deterrence: Dr. Kakodkar and Dr. Chidambaram

The Union government has reiterated that the Pokhran-II nuclear tests in May'98 were fully successful. Addressing a press conference in Mumbai yesterday, Dr. Anil Kakodkar, Chairman, Atomic Energy Commission (AEC) and Dr. R. Chidambaram, Principal Scientific Advisor and former Chairman, Atomic Energy Commission said, "The Pokhran-II tests had achieved their scientific objectives and had given India the capability to build fission and thermonuclear fusion weapons from low yields up to around 200 kilo tonnes (kt)." The statement comes after doubts raised by two scientists Mr. K. Santhanam and Mr. P. K. Iyengar on the success of the Pokhran-II nuclear tests conducted by India on 11th and 13th May, 1998. Mr. Kakodkar also said that on the basis of the capability, India had the ability to meet national security requirements and did not need to conduct more nuclear tests. The AEC Chairman however did not comment on issue of whether India should sign the CTBT Treaty, saying that a number of other factors needed to be taken into consideration for arriving at any decision.

Giving out the scientific details on the success of the May 1998 tests, Dr. Chidambaram, architect of the Pokhran-II tests, said that a number of yield measurement methods based on seismology, radio-chemistry and cavity measurements had confirmed the yield of the tests. He said that reputed US seismologist Professor Jack Evernden, who has professed taking into consideration geological and seismological differences between test sites, had made estimations of the May 1998 tests and they were consistent with India's results. Dr. Chidambaram said that a number of papers had been written on the results of the tests and they had been peer-reviewed in International Journals of repute. He also said that India now had the computer simulation capability to predict the yields - of nuclear weapons-fission, boosted fission and two-state thermonuclear – of designs related to those tested in May' 98.

Expressing distress over the objections raised by Shri P. K. Iyengar, the Principal Scientific Advisor said that even P. K. Iyengar agreed with the yield of the tests however the conclusions drawn by him on the efficiency were purely speculative in nature. Dr. Chidambaram wondered how without the knowledge of the design, the nature of fission-fusion break-up and quantity of thermo-nuclear material, Mr. Iyengar could calculate the efficiency the fuel burnt as 10%. He said, "no one outside the design team had the data to calculate fission-fusion yield break-up or any other significant parameter related to fusion burn". Responding to the doubts raised by Mr. Santhanam, Dr. Chidambaram said that the size of the crater depended on the depth of burial and nature of the rock medium. The Principal Scientific Advisor said that India was the only country, which had given out so much information on the tests and further information could not be revealed because of proliferation-related sensitivities.

A point by point response to the major doubts raised on the Pokhran – II tests as given by Dr. Chidambaram is given below.

Doubt -1

"If one goes by the numbers for the total nuclear yield put out by the Department of Atomic Energy, which I see no reason to dispute, the yield of the thermonuclear device detonated on May 11, 1998, was

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around 40 kilotons... In my opinion that ratio (of fission energy to fusion energy) must have been around 1:1... Therefore, by my estimate, the fusion yield could not have been more than 20kt... This suggests that the fusion core burnt only partially, perhaps less than 10 per cent.." (P.K. Iyengar, August 2000, repeated recently)

Response- 1

The important point is that Dr. P.K. Iyengar does not dispute the yield of the thermonuclear test. We do not understand, however, how, without knowledge of the design and, therefore, without knowledge of the fusion-fission breakup and the quantity of thermonuclear material in the device and its isotopic composition, he has tried to calculate the efficiency of fusion burn.

Doubt- 2

“The fission bomb yield from DRDO’s seismic instrumentation was 25 kiloton...” (K Santhanam & Ashok Parthasarathi, The Hindu, 17 September, 2009)

Response – 2

The BARC estimate of the yield for the fission device is 15 kiloton (not 25 kiloton) and for the thermonuclear device 45 kiloton. One of the methods used for the estimation of the device yield was close-in acceleration measurement, for which both DRDO and BARC had set up instrumentation. It soon became apparent that after discussion among the two groups of specialists that the DRDO data had anomalies and had to be rejected and that the BARC data, which had the expected waveforms, would be accepted.

Doubt -3

“The fission bomb left a crater 25 metres in diameter. If the TN device had really worked with a yield of 50 kiloton, it should have left a crater almost 70 metres in diameter...” (K. Santhanam & Ashok Parthasarathi, The Hindu, 17 September, 2009)

Response- 3

The surface feature produced at Ground Zero depends on the depth of burial and the rock medium around the shot point and the rock medium between the shot point and the ground. These were all different for the two device tests. The fission device was emplaced in rhyolite medium. The medium for the Pokhran-I test was shale and sandstone. The geology in the Pokhran region is inhomogenous. The propagation of the shock wave is affected by every interface. 3 – D simulation calculations of the rock mechanical effects done by BARC scientists, after considering all these factors, accounted for the observed effects in the thermonuclear test.

Incidentally, dimensions in rock mechanics scale by the power ($1/3.4$) for underground nuclear explosions- for chemical explosions, they scale by the power ($1/3$) or as cube root; the difference comes from the latent heat absorbed in the former case for vaporizing and melting the rocks around the point of

Nuclear and Arms Control Centre

detonation.

Doubt- 4

“Dr. P.K. Iyengar.... Informed me that trace levels of these same (radio) isotopes (sodium-22 and manganese-54) were detected in Apsara, a pure fission reactor” (K. Santhanam & Ashok Parthasarathi, The Hindu, 17 September, 2009)

Response – 4

The tail of the fission neutron spectrum extends to beyond the excitation energy of these reactions. But the fusion neutrons are of 14 MeV. That is why isotopes like Mn-54 and Na-22 are found in significant (not trace) quantities in the rock samples from the thermonuclear device site rock samples. If one sees the gamma-ray spectrum of a typical rock sample of the thermonuclear test site, published in refereed journals by BARC scientists, sharp peaks for these radioisotopes are seen, not just bumps in the background! In the Mn-54/Ce-144 ratios from the samples of the two test sites, reproduced by R. Ramachandran in his Frontline article of 25th September, 2009, this ratio for the thermonuclear test samples is seen as a high multiple of the ratio for the fission test samples”

AM(DD)/SB

URL: <http://www.pib.nic.in/newsite/erelease.aspx?relid=52820>

**Press Information Bureau
Government of India
Department of Atomic Energy**

24-September-2009 18:39 IST

Press Statement by Dr. Anil Kakodkar and Dr. R. Chidambaram on Pokhran-II tests

India conducted five nuclear tests of advanced weapon designs on 11 and 13 May 1998 at the Pokhran range in Rajasthan Desert. The first three detonations took place simultaneously at 15:45 h. IST on 11 May. These included a 45 kt thermonuclear device, a 15 kt fission device and a 0.2 kt sub-kiloton (i.e. less than 1 kiloton) device. The two nuclear devices detonated simultaneously on 13 May were also in the sub-kiloton range – 0.5 and 0.3 kt.

The Atomic Energy Commission(AEC), in its press release of 15 September 2009, has stated that, in the meeting of the AEC held on May21, 1998, the Commission had been briefed about the technical details of the tests. In the meetings of the Commission held on March 26, 1999 and November 18, 1999, the results of the radiochemical analysis of bore-hole samples, reconfirming the estimated yields, were presented. The AEC, in the press release of 15th September, 2009, noted that the yield of the thermonuclear test was further confirmed through comparison of ground motion and displacement simulation with actual observations in the field. The AEC’s statement concluded that “the AEC has thus no reason to doubt the yield of the thermonuclear test carried out on May 11, 1998”.

Shaft depths for containment of radioactivity

Nuclear and Arms Control Centre

The physical–mechanical processes associated with the propagation of the stress field set up in a geological medium by a sudden release of the explosive energy of a nuclear device – such as vaporisation, melting, crushing, fracture and motion of the rock – are dependent on the chemical composition of the rocks and their physical and mechanical properties such as density, porosity, water content, equation of state, strength, etc. Detailed computer simulation calculations were carried out for each of the five shafts of the May 1998 tests in order to ensure containment of radioactivity.

Self-reliance in the nuclear weapons development programme

These tests were the culmination of a committed team effort and backed by the development of the necessary know-how and expertise over decades. Nuclear weapons development requires expertise in a range of disciplines including explosive ballistics, shock wave physics, condensed matter physics, materials science, nuclear and neutron physics, radiation hydrodynamics, radiation–matter interaction physics, advanced electronics engineering backed by production, fabrication and processing technologies over a wide range. It requires complex computer simulation software development to enable accurate prediction of weapon yields. In each one of these areas, we have some of the world’s leading experts. In the field of shock wave physics, for example, we are one of the leading groups in the world in the area of equation of state at high pressures.

Nuclear weaponisation

The 15 kt fission nuclear weapon had evolved from the PNE device tested in 1974, with substantial changes that were needed to make it smaller in size and weight from the point of view of weaponisation. The two-stage thermonuclear device, with a fusion-boosted fission trigger as the first stage and with the features needed for integration with delivery vehicles, was tested at the controlled yield of 45 kt and had the purpose of developing nuclear weapons with yields up to around 200 kt. The sub-kiloton devices tested again had all the features needed for integration with delivery vehicles and were tested from the point of view of developing low-yield weapons and of validating new weapon-related ideas and sub-systems. It was gratifying that all the devices functioned perfectly in all aspects certifying the quality and robustness of the designs. Thus the carefully-planned series of tests carried out in May 1998 gave us the capability to build nuclear weapons from low yields up to around 200 kt. A great deal of further scientific and technical development work has taken place since then.

The yield of the May 1974 PNE experiment

The common physics makes a PNE relevant for weapon design and, therefore, the success of the May 1974 test was important for us. Even at that time, our diagnostic capabilities were good. The yield of the May 1974 test announced by Chidambaram and Ramanna in a meeting on PNEs in the International Atomic Energy in Vienna in 1975 of the May 1974 test was 12–13 kt, which is also accepted internationally.

Seismic and other data on May 11, 1998 tests

Nature of seismic magnitudes

BARC scientists have published detailed analysis of the seismic data on the 11 May 1998 tests and it fully confirms the total announced yield for these tests. Most of the global analysis of seismic data on underground nuclear explosions is based on two seismic ‘magnitudes’, mb and Ms, the so-called body-

Nuclear and Arms Control Centre

wave magnitude and surface-wave magnitude, respectively. The former is calculated from measurements of compressional seismic waves (P waves) in the body of the Earth and the latter from measurements of surface seismic waves (Rayleigh waves).

International analysis of the 11 May 1998 seismic data

Surprisingly, indicative of the need for careful analysis, the Prototype International Data Centre for verifying the compliance of CTBT first announced our 11 May nuclear explosion seismic event as ‘an earthquake at a depth of 56 km on the India–Pakistan border’! But this was later corrected to ‘explosions with a combined yield – consistent with the announced yield (by India)’

Professor Jack Evernden, a world renowned US seismologist, has always maintained that, for correct estimation of yields, one should ‘account properly for geological and seismological differences between test sites’; this was in the context of what he called the ‘incorrect (U.S.) claims of Soviet cheating on the (1976 Threshold Test Ban) treaty limit of 150 kilotons.’ He had also warned about the use of indiscriminate ‘magnitude bias’ while analysing mb (body wave magnitude) teleseismic data. The underestimation of our May 11 total yield by one group in the USA can be traced to the use of such an invalid ‘bias’. Jack Evernden prefers the use of surface wave magnitudes to body wave magnitudes and his analysis of the 11 May 1998 seismic data is consistent with ours.

Analysis by Indian seismologists

Strong Lg and Rayleigh waves (period 3.5–7 s) were observed from the 11 May tests at several sensitive in-country stations of the Indian Meteorological Department (IMD) and of the Department of Atomic Energy. These have been analysed by BARC scientists.

The main conclusions are summarised below:

* A comparison of body wave magnitudes of the 11 May 1998 tests and of the 18 May 1974 test from thirteen stations around the world gives an average difference, Δmb , of 0.45 between them.

* The estimated mb values at any recording station are susceptible to geological and seismological uncertainties at the test site and at the recording site. But these get cancelled out when taking the difference in mb values for two underground explosions at the same site and for the same recording station. So this value of Δmb of 0.45 is reliable and gives a ratio of yields of 4.46. As explained earlier, the yield of the May 1974 test was 12–13 kt. So this method gives the total yield of the 11 May 1998 tests as between 54 and 58 kt.

* From the surface wave magnitude obtained from an analysis of regional Rayleigh waves, a total yield of 49–52 kt is obtained for the 11 May 1998 tests.

* The average mb (Lg) magnitude obtained from the data from the IMD stations and the Gauribidanur array and the ARC stations is 5.47. A comparison of Lg waves for the 11 May 1998 tests and the May 1974 test gave a yield ratio of 4.83 between these events. So this method gives the total yield of the 11 May 1998 tests as between 58 and 63 kt.

• Thus, the yield estimates of the 11 May 1998 tests from the teleseismic and regional seismic data are

Nuclear and Arms Control Centre

fully consistent with the yields announced immediately after the tests for the fission device and the thermonuclear device.

Confirmatory evidence

We have other confirmatory evidence from close-in measurements carried out on the day of the tests. For example, comparison of the acceleration data with the available global data from a similar geophysical environment gives a total yield value of 58 kt (Sikka et al., 1998a).

The bore-hole gamma radiation logging and radiochemical measurements on the rock samples extracted from the sites by BARC scientists give the yield for the fission device (unpublished data) as (13 ± 3) kt and for the thermonuclear device as (50 ± 10) kt.

The Thermonuclear device

The two-stage device

The thermonuclear device tested on 11 May was a two-stage device of advanced design, which had a fusion-boosted fission trigger as the first stage and a fusion secondary stage which was compressed by radiation implosion and ignited. For reasons of proliferation sensitivity, we have not given the details of the materials used in the device or their quantities. Also, our nuclear weapon designers, like nuclear weapon designers all over the world, have not given the fusion component of the total yield for our thermonuclear test.

Controlled thermonuclear yield

We tested our thermonuclear device at a controlled yield of 45 kt because of the proximity of the Khetolai village at about 5 km, to ensure that the houses in this village would suffer negligible damage. All the design specifications of this device were validated by the test. Thermonuclear weapons of various yields up to around 200 kt can be confidently designed on the basis of this test.

The post-shot radioactivity measurements on samples extracted from the thermonuclear test site have confirmed that the fusion secondary gave the design yield. The radioactivity generated from an underground thermonuclear explosion, apart from unburnt fissile material and tritium, consists essentially of two parts:

- fission products from the fission trigger and from the fission component in the fusion secondary stage, if present
- neutron-induced radioactivity in the surrounding rock mass and construction materials; here one can look specifically for the neutron activation products of high energy neutrons, such as sodium-22 and manganese-54, which are produced much more in fusion reactions than in fission reactions.

Comparison of the radioactivity of samples extracted from the test sites of thermonuclear and pure fission devices showed a much higher activity of ^{22}Na and ^{54}Mn in the former. This unambiguously confirmed the occurrence of the expected fusion reaction in the thermonuclear test. From a study of this radioactivity and an estimate of the cavity radius, confirmed by drilling operations at positions away from ground zero, the total yield as well as the break-up of the fission and fusion yields could be calculated. A comparison of the ratios of various activation products to fission products for the 15 kt device and for the 45 kt

Nuclear and Arms Control Centre

thermonuclear device also shows that these ratios are in agreement with the expected fusion yield in the thermonuclear device. The total yield comes out as (50 ± 10) kt for the thermonuclear device, consistent with the design yield and with the seismic estimate of the total yield.

As mentioned earlier, we have not given the fusion–fission break-up and, since we have not given the composition of the materials used nor their quantities, for reasons of proliferation sensitivity as mentioned earlier, no one outside the design team has data to calculate this fission–fusion yield break-up or any other significant parameter related to fusion burn. The full containment of radioactivity for a yield significantly more than 45 kt (the design yield and achieved yield) would also not have been a surety ; that was another reason for limiting the controlled yield of this device. Release of radioactivity occurs if the fractures reaching the ground surface get connected to the cavity of hot radioactive gases produced by the nuclear explosion.

CONCLUSION

* The May 1998 tests were fully successful in terms of achieving their scientific objectives and the capability to build fission and thermonuclear weapons with yields upto 200 kt.

* **Computer simulation capability to predict the yields of nuclear weapons-fission, boosted fission and two-stage thermonuclear – of designs related to the designs of the devices tested by us has now been established.**

* A great deal of further scientific and technical development work has taken place since May, 1998.

We have published as much data as is possible without releasing proliferation-sensitive information.

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**Press Information Bureau
Government of India
Department of Atomic Energy**

24-September-2009 18:35 IST

Pokhran – II tests were fully successful; given India capability to build nuclear deterrence: Dr. Kakodkar and Dr. Chidambaram

The Union government has reiterated that the Pokhran-II nuclear tests in May'98 were fully successful. Addressing a press conference in Mumbai this morning, Dr. Anil Kakodkar, Chairman, Atomic Energy Commission (AEC) and Dr. R. Chidambaram, Principal Scientific Advisor and former Chairman, Atomic Energy Commission said, “The Pokhran-II tests had achieved their scientific objectives and had given India the capability to build fission and thermonuclear fusion weapons from low yields up to around 200 kilo tonnes (kt).” The statement comes after doubts raised by two scientists Mr. K. Santhanam and Mr. P.

Nuclear and Arms Control Centre

K. Iyengar on the success of the Pokhran-II nuclear tests conducted by India on 11th and 13th May, 1998. Mr. Kakodkar also said that on the basis of the capability, India had the ability to meet national security requirements and did not need to conduct more nuclear tests. The AEC Chairman however did not comment on issue of whether India should sign the CTBT Treaty, saying that a number of other factors needed to be taken into consideration for arriving at any decision.

Giving out the scientific details on the success of the May 1998 tests, Dr. Chidambaram, architect of the Pokhran-II tests, said that a number of yield measurement methods based on seismology, radio-chemistry and cavity measurements had confirmed the yield of the tests. He said that reputed US seismologist Professor Jack Evernden, who has professed taking into consideration geological and seismological differences between test sites, had made estimations of the May 1998 tests and they were consistent with India's results. Dr. Chidambaram said that a number of papers had been written on the results of the tests and they had been peer-reviewed in International Journals of repute. He also said that India now had the computer simulation capability to predict the yields - of nuclear weapons-fission, boosted fission and two-state thermonuclear – of designs related to those tested in May '98.

Expressing distress over the objections raised by Shri P. K. Iyengar, the Principal Scientific Advisor said that even P. K. Iyengar agreed with the yield of the tests however the conclusions drawn by him on the efficiency were purely speculative in nature. Dr. Chidambaram wondered how without the knowledge of the design, the nature of fission-fusion break-up and quantity of thermo-nuclear material, Mr. Iyengar could calculate the efficiency the fuel burnt as 10%. He said, "no one outside the design team had the data to calculate fission-fusion yield break-up or any other significant parameter related to fusion burn". Responding to the doubts raised by Mr. Santhanam, Dr. Chidambaram said that the size of the crater depended on the depth of burial and nature of the rock medium. The Principal Scientific Advisor said that India was the only country, which had given out so much information on the tests and further information could not be revealed because of proliferation-related sensitivities.

A point by point response to the major doubts raised on the Pokhran – II tests as given by Dr. Chidambaram is given below.

Doubt -1

"If one goes by the numbers for the total nuclear yield put out by the Department of Atomic Energy, which I see no reason to dispute, the yield of the thermonuclear device detonated on May 11, 1998, was around 40 kilotons... In my opinion that ratio (of fission energy to fusion energy) must have been around 1:1... Therefore, by my estimate, the fusion yield could not have been more than 20kt... This suggests that the fusion core burnt only partially, perhaps less than 10 per cent.." (P.K. Iyengar, August 2000, repeated recently)

Response- 1

The important point is that Dr. P.K. Iyengar does not dispute the yield of the thermonuclear test. We do not understand, however, how, without knowledge of the design and, therefore, without knowledge of the fusion-fission breakup and the quantity of thermonuclear material in the device and its isotopic composition, he has tried to calculate the efficiency of fusion burn.

Doubt- 2

Nuclear and Arms Control Centre

“The fission bomb yield from DRDO’s seismic instrumentation was 25 kiloton...” (K Santhanam & Ashok Parthasarathi, The Hindu, 17 September, 2009)

Response – 2

The BARC estimate of the yield for the fission device is 15 kiloton (not 25 kiloton) and for the thermonuclear device 45 kiloton. One of the methods used for the estimation of the device yield was close-in acceleration measurement, for which both DRDO and BARC had set up instrumentation. It soon became apparent that after discussion among the two groups of specialists that the DRDO data had anomalies and had to be rejected and that the BARC data, which had the expected waveforms, would be accepted.

Doubt -3

“..The fission bomb left a crater 25 metres in diameter. If the TN device had really worked with a yield of 50 kiloton, it should have left a crater almost 70 metres in diameter...” (K. Santhanam & Ashok Parthasarathi, The Hindu, 17 September, 2009)

Response- 3

The surface feature produced at Ground Zero depends on the depth of burial and the rock medium around the shot point and the rock medium between the shot point and the ground. These were all different for the two device tests. The fission device was emplaced in rhyolite medium. The medium for the Pokhran-I test was shale and sandstone. The geology in the Pokhran region is inhomogenous. The propagation of the shock wave is affected by every interface. 3 – D simulation calculations of the rock mechanical effects done by BARC scientists, after considering all these factors, accounted for the observed effects in the thermonuclear test.

Incidentally, dimensions in rock mechanics scale by the power ($1/3.4$) for underground nuclear explosions- for chemical explosions, they scale by the power ($1/3$) or as cube root; the difference comes from the latent heat absorbed in the former case for vaporizing and melting the rocks around the point of detonation.

Doubt- 4

“Dr. P.K. Iyengar.... Informed me that trace levels of these same (radio) isotopes (sodium-22 and manganese-54) were detected in Apsara, a pure fission reactor” (K. Santhanam & Ashok Parthasarathi, The Hindu, 17 September, 2009)

Response – 4

The tail of the fission neutron spectrum extends to beyond the excitation energy of these reactions. But the fusion neutrons are of 14 MeV. That is why isotopes like Mn-54 and Na-22 are found in significant (not trace) quantities in the rock samples from the thermonuclear device site rock samples. If one sees the gamma-ray spectrum of a typical rock sample of the thermonuclear test site, published in refereed journals by BARC scientists, sharp peaks for these radioisotopes are seen, not just bumps in the background! In the

Nuclear and Arms Control Centre

Mn-54/Ce-144 ratios from the samples of the two test sites, reproduced by R. Ramachandran in his Frontline article of 25th September, 2009, this ratio for the thermonuclear test samples is seen as a high multiple of the ratio for the fission test samples”

AM(DD)/SB

URL: <http://www.pib.nic.in/newsite/erelease.aspx?relid=52813>

**Press Information Bureau
Government of India
Vice President's Secretariat**

12-November-2008 17:57 IST

Vice President Releases the Book “India’s Nuclear Policy”

The Vice President of India, Shri M. Hamid Ansari released a book entitled “India’s Nuclear Policy” authored by noted security expert Shri Bharat Karnad at a function here today. Addressing on the occasion, the Vice President said that no discussion on national security can be uni-dimensional. The rationale for military security and weapons systems is one aspect of the matter. The real debate today is about human security and about non-military threats. Many of these are trans-national. The challenge is to develop both a psychological propensity and technological capability to respond to the latter.

The book examines Indian Nuclear Policy, doctrine, strategy and posture, clarifying the elastic concept of ‘credible minimum deterrence’ at the Centre of the country’s approach to the nuclear security. This concept permits the Indian Nuclear Forces to be beefed up, size and quality wise, and to acquire strategic reach and clout, even as the qualifier ‘minimum’ suggests an overarching concern for moderation and economical use of resources and strengthens India’s claims to be a ‘responsible’ nuclear weapon State.

Following is the text of the Vice President’s address:

“This is a substantive book, authoritative and densely written with 158 pages of text and 875 end notes. Its subject can only be described as deadly serious. Professor Karnad, who needs no introduction to the strategic community, has done it with the same thoroughness that characterised his earlier tome, published in 2002. It will certainly provoke debate.

There has been and continues to be a good deal of informed, and even more uninformed, discussion on nuclear weapons in the global context. In the vocabulary of economics, a monopoly of possession gave way to an oligopoly. It resulted in a set of rules emanating from the game theory. The assumptions and rules were disturbed when the nuclear weapons debate developed a regional context. The new arrivals, however, developed their own game theory. This, despite the sceptics, has held ground for over a decade. The theological certitude of an earlier era has now given way to doubt in some quarters.

A third dimension however was bound to emerge, and did. It relates to cross-category interaction. What would happen when a player in the regional category has to interact in nuclear terms with a global player of the first category?

Prof. Karnad’s focus is on ‘the working of India’s nuclear strategy and posture’. He takes on board India’s

Nuclear and Arms Control Centre

doctrine of ‘credible minimum deterrence’ (CMD) and seeks to examine it in a ‘militarily sustainable stance’ and, as he puts it, ‘with the nitty gritty of realising a credible, effective, and survivable thermonuclear force’. He develops this argument to show that the direction of India’s nuclear strategy and posture, to quote him again, ‘are headed clearly away from the minimalist notions of nuclear deterrence’.

Analysing this theorem in depth, he concludes that ‘it is the indecisiveness and lack of will of the Indian political leadership to take hard national security decisions that is the weak link in the deterrence chain’.

Prof. Karnad’s conclusion, based on scenario-building and war games in the strategic community, is even more specific: ‘ If India does not speedily close the gap in the size and quality of its strategic forces, which gap can in a crisis be psychologically debilitating, China with its “stronger nuclear capability” will hold the whip hand’.

I find the scenario disturbing in terms of its assumptions.

The first of these relates to the doctrine of nuclear deterrence. There is a credible body of opinion that considers the doctrine a recipe for instability. Possession generates the impulse to further develop, and modernise, existing stock piles. This necessarily has a reaction leading to escalation.

Secondly, the emergence of actual or potential regional nuclear weapon powers is a reality. Each case has an impulse and a calculus of its own. Containment carries in itself the germs of a breakout, resulting in proliferation. It may thus result in the opposite of what is intended.

Thirdly, the conclusions about decision-making by the political leaders in a democracy are far too sweeping to be relevant. Competence or lack of it has a wider rationale and is not to be associated with a particular type of leadership. Democracies can be competent or incompetent; so can dictatorships including military dictatorships. Enough examples from recent and not-so-recent history can be cited for both types of situations. No segment of society has a monopoly of wisdom. Successful societies have invariably been examples of cooperative harmony.

Fourthly, the propensity to identify potential military adversaries has wider implications and, to my mind, should be eschewed. The world we live in is far too complex and far too rapid in its transformation to encourage definitive formulations. What Heraclitus said on flux has to be kept in mind. States have interests, not friends or enemies. These interests can be adjusted and reconciled.

Finally, the impact of globalisation on national security needs to be factored in. It affects state capacity and autonomy. We are currently witnessing the consequences of financial globalisation.

No discussion on national security can be uni-dimensional. The rationale for military security and weapons systems is one aspect of the matter. The real debate today is about human security and about non-military threats. Many of these are trans-national. The challenge is to develop both a psychological propensity and technological capability to respond to the latter. How would we develop a credible minimum deterrence to these? Would this not be a relevant priority for the strategist as the 21st century and its threats unfold”?

SK/BS

URL: <http://pib.nic.in/newsite/erelease.aspx?relid=44785>

Nuclear and Arms Control Centre

**Press Information Bureau
Government of India
Prime Minister's Office**

14-October-2004 13:55 IST

NCA reviews nuclear capability

The Nuclear Command Authority (NCA) under the Chairmanship of the Prime Minister, Dr. Manmohan Singh, reviewed today all aspects of India's nuclear capabilities. It took stock of the command and control structures in place.

The Nuclear Command Authority approved measures to sustain India's nuclear and missile capabilities within the relevant principles of India's nuclear doctrine.

URL: <http://pib.nic.in/newsite/erelease.aspx?relid=4371>

NUCLEAR WEAPONS IN THE
NEIGHBORHOOD

Nuclear and Arms Control Centre

**Press Information Bureau
Government of India
Ministry of External Affairs**

30-August-2006 12:18 IST

Visiting Deputy Foreign Minister of Iran holds talks with senior officials

In keeping with the practice of regular high-level exchanges between India and Iran, Iran's Deputy Foreign Minister for Asia, Oceania and Commonwealth, Dr. Mehdi Safari, who arrived yesterday morning, held talks with the Secretary (East), Shri Rajiv Sikri. The discussions covered bilateral and regional issues, and focused in particular on the nuclear issue and cooperation in the energy sector.

Dr. Safari explained Iran's response to the P5+1 package. He emphasised that Iran is open to negotiations and is willing to cooperate fully with IAEA but will insist on its rights under the NPT and on the issue being reverted to the IAEA. The Secretary (East) underlined that India does not want confrontation and destabilization in the region. He said that India believes that as a signatory to the NPT, Iran must enjoy all its rights and honour all its obligations. He emphasised that India wants all issues to be resolved through dialogue and discussion rather than coercion.

On energy, India emphasised the importance of Iran honouring the LNG deal signed in June 2005. Both sides reaffirmed their commitment to the gas pipeline project.

Dr. Safari also called on the National Security Adviser, Shri M. K. Narayanan, and Foreign Secretary, Shri Shyam Saran.

PKM/MK

URL: <http://pib.nic.in/newsite/erelease.aspx?relid=20373>

**Press Information Bureau
Government of India
Ministry of External Affairs**

24-August-2006 17:37 IST

Nuclear reactors of Pakistan

Rajya Sabha

The Minister of State in the Ministry of External Affairs, Shri Anand Sharma informed the Rajya Sabha today that a US based non-governmental Institute for Science and International Security (ISIS) in a recent report stated that Pakistan was making a second heavy water production reactor inside the Khushab nuclear complex which was capable of producing enough plutonium for 40 to 50 nuclear weapons a year. Pakistani Ambassador to Washington, Mahmud Ali Durrani in an interview to "The Washington Times" on 4th August, 2006 however stated that the ISIS report was grossly exaggerated. He also stated that "the plutonium may certainly be used for military purposes, but it is simply not the case that it will increase our capability X-fold." The ISIS report was subsequently disputed by the US National Security Council. According to a New York Times report of August 3, 2006, US National Security Council Spokesman, Frederick Jones said that "US Government experts believe that the reactor is expected to be substantially smaller and less capable than reported".

Nuclear and Arms Control Centre

Government constantly monitors all developments that have a bearing on India's security environment and is committed to taking all necessary steps to safeguard the nation's security.

This information was given by the Minister in reply to a question by Dr. Murli Manohar Joshi, MP and Shri Raj Mohinder Singh Majitha, MP.

AK/MK

URL: <http://pib.nic.in/newsite/erelease.aspx?relid=20247>

**Press Information Bureau
Government of India
Ministry of External Affairs**

17-May-2006 16:20 IST

Sanctions on Indian Atomic Scientists by United States

Lok Sabha

On September 29, 2004, the United States imposed sanctions, pursuant to Section 2 & 3 of the Iran Proliferation Act of 2000 of the United States on fourteen entities, which included two Indian scientists, Dr. Y.S.R. Prasad and Dr. C. Surendar. Later, under the same provision of US law, on December 30, the United States imposed sanctions on nine foreign firms that included two Indian firms, Sabero Organics Gujarat Ltd and Sandhya Organics Ltd. The sanctions bar the US Government from doing business with these firms and persons, including providing assistance to them or permitting participation in US Government assistance programmes. They also prohibit all US Government sales of any item on the US munitions list, any defence article, defence services or design or construction services under the Arms Export Control Act of the United States. They also ban export licenses to sell dual-use items under the United States' Export Administration Act of 1979 or the Export Administration Regulations, and suspend any existing licenses.

The Government of India issued statement through the MEA Spokesperson on both occasions; stating, in the case of atomic scientists, that we did not share the US assessment. One of the scientists Dr. C. Surendar had never visited Iran while in service or after his retirement. Dr. Y.S.R. Prasad had initially visited Iran under the aegis of the IAEA Technical Cooperation Programme. Thereafter, he provided consultancy on safety related aspect connected with the Bushehr Nuclear Power Plant which is under IAEA safeguards. He had not visited Iran since mid-2003. The spokesperson also stated that no sale of materials, equipment and technologies was involved, no transfer of sensitive technology had taken place, Government of India's commitment to prevent onward proliferation is second to none and our track record in this regard is well-known. With regard to the sanctions on the two Indian firms, the Spokesperson of the Ministry of External Affairs stated that US actions were not justified as these entities had not acted in violation of our laws or regulations. The Government of India also took up the issue of sanctions with the US Government during bilateral interactions. These efforts resulted in the US Government announcement, through a Federal Register notification on December 30, 2005 that sanctions on Dr. C. Surendar had been withdrawn. Sanctions on Dr. Y.S.R. Prasad and the two Indian firms – Sabero Organics Gujarat Ltd and Sandhy Organics Ltd – have not been lifted. Government of India is continuing its efforts with the US Government.

This information was given by the Minister of State of Ministry of External Affairs, Shri Anand Sharma in

Nuclear and Arms Control Centre

reply to a question by Shri Rasheed Masood.

NSD/Hb

URL: <http://pib.nic.in/newsite/erelease.aspx?relid=17750>

**Press Information Bureau
Government of India
Prime Minister's Office**

18-April-2006 17:39 IST

Representatives of Muslim Organizations Meet PM

A delegation of representatives of various Muslim organizations led by Shri Syed Ahmad Bukhari, Shahi Imam, Jama Masjid, Delhi, met the Prime Minister today.

The delegation informed the Prime Minister that a Representative Conference of the Muslims was held in the Jama Masjid Complex on 18.03.2006, in which certain resolutions relating to major issues facing the community were adopted. Shri Bukhari presented a memorandum to the Prime Minister enclosing the list of such issues, including the sanction of a special economic package for the victims of communal riots, reinstatement of the minority character of the Aligarh Muslim University, initiatives required to address the economic and educational backwardness of the Muslim community, illegal occupation of wakf properties, and increasing the corpus fund of the Maulana Azad Education Foundation and the Minorities Development and Finance Corporation.

The Prime Minister informed the delegation that the Government has set up the High Level Committee under Justice Rajindar Sachar to study and prepare a Comprehensive Report on the Social, Economic and Educational Status of the Muslim Community of India. The Committee is expected to complete its work and present its report in the near future. He stated that the Government is committed to address the genuine problems of the Muslim community and provide equitable opportunities for the economic and educational advancement of the community to ensure their due participation in the development processes.

In response to a question raised by one of the delegates in regard to Indian foreign policy and the vote against Iran in the IAEA, the Prime Minister stated that improvement in the relations between India and the US is in the interest of all citizens of India. He emphasised that there is no question of succumbing to any external pressure in regard to our foreign policy. However, it is a fact that Iran had a clandestine nuclear programme for several years and it is not in our interest to have another nuclear weapon state in our neighbourhood. Iran should have all the rights and duties of a signatory state to the NPT.

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URL: <http://pib.nic.in/newsite/erelease.aspx?relid=17179>

Nuclear and Arms Control Centre

**Press Information Bureau
Government of India
Prime Minister's Office**

06-March-2006 14:16 IST

Prime Minister's reply to the debate in Lok Sabha on India's vote at the IAEA on Iran's nuclear programme

Following is the text of Prime Minister, Dr. Manmohan Singh's reply in Lok Sabha today to the debate on India's vote at the IAEA on Iran's nuclear programme:

“Hon'ble Members have raised several points in the debate following my suo motu statement on our vote at the IAEA on Iran's nuclear programme. I respect the views voiced by Hon'ble Members on this important issue and I thank them for contributing to the debate in this august House.

Several members have made the point that our foreign policy should be guided by national interests, and that our positions on such issues should not be based on the position of other countries. My friends, Shri Gurudas Dasgupta and Shri Subroto Bose made these points, as did Shri Kharabela Swain. There can be no two opinions that Government should not take pre-determined positions, or positions at the behest of other nations. No one can dispute that it is Government's duty to take a position on such matters after a dispassionate examination of the facts, keeping in mind our national interests. I respectfully submit that in the present case, the Government has done precisely this. We have considered the facts and have exercised our independent judgement before taking a position. This is also the very essence of the policy of Non Alignment, which my friend Shri Rupchand Pal exhorted us to follow.

Let me recapitulate the essential facts of the matter:

Iran has the legal right to develop peaceful uses of nuclear energy, but it also has certain obligations and responsibilities, based on the Safeguards Agreement which it voluntarily undertook with the IAEA.

It was in recognition of the existence of several unanswered questions that Iran agreed to start the process of assisting IAEA with investigations into several past activities.

An important part of this process was the voluntary suspension by Iran of all enrichment and reprocessing activity in November 2004.

However, since last August, Iran has renewed production of Uranium Hexafluoride, and since then, of uranium enrichment.

Unresolved question regarding centrifuge imports and designs to make uranium metallic hemispheres remain. The origin of such procurement is an issue of direct concern for us.

Under these circumstances, our position was based on these facts, which emerged from an objective investigation by the IAEA, and through information disclosed by Iran itself.

There is also the question that several Hon.ble Members raised regarding the IAEA Board of Governors' meeting today. Shri Chandrapan and Shri Owaisi spoke of this. I should inform Members that it is as yet

Nuclear and Arms Control Centre

not clear in what manner this issue will be taken up by the Board of Governors today. The Resolution adopted by the IAEA Board of Governors last month mentions certain steps that Iran and the IAEA will be taking. Discussions are taking place in Vienna on this matter. The Government's approach will be based on our consistent policy of promoting efforts for a resolution of issues through dialogue and discussions. I would like to assure Hon'ble Members that Government will take into account the sentiments expressed in this House in this context.

Some points were also made regarding options that could have been explored by the international community. There have also been discussions between Iran and Russia in this regard. We remain hopeful that solutions acceptable to all sides will be found. We do not favour confrontation, rhetoric or coercive measures as these only exacerbate tensions in the region and beyond. India has consistently stated that all sides must work to find mutually acceptable compromise solutions, and that confrontation should be avoided at all costs. For this to be possible, time must be given for diplomacy to work. I think there is consensus in Parliament and in our country that confrontation is not in the interests of India or of our region. Whenever the matter is taken up, we will work with all like-minded countries, including those from the NAM, for a mutually acceptable resolution of the issue.

Several Hon'ble Members including Maj. Gen Khanduri expressed concerns regarding our relations with Iran, and the effect of these developments on this important relationship. As I said in my suo motu statement, our Government is committed to widening, deepening and expanding our diverse and mutually beneficial ties with Iran. Only recently, my colleague, the Minister of State for External Affairs, Shri E. Ahammed, visited Tehran. He had meetings with the President of Iran, H.E. Mr. Ahmadinejad, as well as several Ministers of the Government of the Islamic Republic of Iran. Shri Ahammed emphasized our desire to remain engaged with Iran on all issues of mutual interest. Our desire to further deepen the friendly and productive ties between our two countries was fully reciprocated.

Government will continue to monitor the situation closely, and will deal with the Iran issue with the seriousness that it merits.

In dealing with this issue, we will pay due attention to our relationship with Iran, the need to maintain peace and stability in the Gulf region and safeguarding our own security.

I reiterate that this House can rest assured that we will also take into account the sentiments expressed in the House."

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URL: <http://pib.nic.in/newsite/erelease.aspx?relid=16232>

**Press Information Bureau
Government of India
Prime Minister's Office**

17-February-2006 15:50 IST

PM's SUO MOTU STATEMENT ON IRAN IN PARLIAMENT

The Prime Minister, Dr. Manmohan Singh, made a suo-motu statement regarding India's vote in the IAEA on the issue of Iran's Nuclear Programme in Parliament today.

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Following is the text of the Prime Minister's suo motu statement:

“Taking into account the concerns that have been raised about India's vote on the Iran nuclear issue at the meeting of the Governing Board of the International Atomic Energy Agency in Vienna, on February 5, 2006, I rise to apprise this august House of the facts of this matter.

“ Let me begin by affirming that India's vote on the IAEA resolution does not, in any way, detract from the traditionally close and friendly relations we are privileged to enjoy with Iran. Indeed, India-Iran ties, as we have repeatedly emphasized, are civilizational in nature. We intend to further strengthen and expand our multifaceted ties with Iran to mutual benefit.

Let me also state that the importance of India's relations with Iran is not limited to any single issue or aspect. This relationship is important across a wide expanse of cooperation, both bilateral and multilateral. We also cooperate on regional issues. We value this relationship and intend to do what we can to nurture our bilateral ties. Let me reiterate in this context that we are committed to the proposed Iran-Pakistan-India gas pipeline. The economics of this project is currently under professional investigation by internationally reputed consultants. This is a necessary step in taking the pipeline project forward.

On the specific issue of Iran's nuclear programme, let me reiterate what I have said publicly on several occasions. As a signatory to the NPT, Iran has the legal right to develop peaceful uses of nuclear energy consistent with its international commitments and obligations. It is incumbent upon Iran to exercise these rights in the context of safeguards that it has voluntarily accepted upon its nuclear programme under the IAEA.

These rights and obligations must also be seen in context of developments since 2003, when IAEA began seeking answers to a number of questions arising from Iran's nuclear activities, some of which were undeclared to the IAEA in previous years. Subsequently, in context of these demands, Iran did extend cooperation to the IAEA in investigations of its some of these activities.

In November 2004, Iran agreed with the EU-3 (France, Germany, and the UK) to voluntarily suspend all enrichment and reprocessing activities until questions relating to its past nuclear activities were clarified by the IAEA. However, since August last year, Iran has renewed production of uranium hexafluoride and thereafter, has resumed uranium enrichment.

Successive reports of the Director General of the IAEA have noted that while Iran's cooperation has resulted in clarifying a number of questions, there remain many unresolved questions on key issues. These include the use of centrifuges imported from third countries, and designs relating to fabrication of metallic hemispheres. Hon'ble Members are aware that the source of such clandestine proliferation of sensitive technologies lies in our own neighbourhood, details of which have emerged from successive IAEA reports. This august House will agree that India cannot afford to turn a blind eye to security implications of such proliferation activities.

The objectives of upholding Iran's rights and obligations and our security concerns arising from proliferation activities in our extended neighbourhood have shaped our position. Therefore, our approach has been consistently in favour of promoting all efforts to find a solution, based on acceptable mutual compromises, in which Iran's interests and the concerns of the international community would be

Nuclear and Arms Control Centre

addressed. We have consistently worked to promote a consensus in the IAEA towards this end. This has been the logic of our stand at the IAEA Board of Governors Meetings both in September 2005 and earlier this month.

I might remind Hon'ble Members that it is only on these two occasions that the Resolution that resulted has not been a consensus one, and a vote has been necessary. Despite that, in the latest vote this month, the Resolution not only had the support of all P-5 countries including Russia and China, but also of important NAM and developing countries such as Argentina, Brazil, Egypt, Ghana, Singapore, Yemen and Sri Lanka.

The resolutions passed in September last year and earlier this month underlined the need for time to be given for diplomatic efforts to continue. The recent resolution of February 5 asks the Director General of IAEA to inform the UN Security Council of the status of negotiations with Iran, and the steps that Iran needs to take to address these questions. It calls for continued diplomatic efforts including through exploration of the option provided by Russia, which we have supported. Hon'ble Members are aware that Russia had offered to locate a joint venture project on Russian soil to address Iranian needs for enriched uranium, provided Iran suspends its enrichment programme to increase international confidence regarding the unresolved questions of the last two decades. Russia and Iran are currently in discussions on the subject, and we remain hopeful of a positive outcome. It is our hope and belief that the issues that have arisen can still be resolved through discussion and dialogue.

I have set out the background in which we have taken a position at the IAEA. I would like to reiterate our unshakeable conviction that such a sensitive issue, which concerns the rights and international obligations of sovereign nation and a proud people can only be addressed through calm, reasoned diplomacy and the willingness on all sides to eschew confrontation and seek acceptable compromise solutions. We are therefore deeply concerned by escalating rhetoric and growing tensions and the possibility of a confrontation over this issue. This is a matter of concern for us as tensions in this region - where our vital political, economic and security interests are involved $\frac{3}{4}$ affects us directly. The region hosts 3.5 million Indian citizens whose welfare is a major concern of my Government.

We therefore call upon all concerned to exercise restraint, demonstrate flexibility and continue with dialogue, to reach an amicable solution. As I mentioned, there will be another meeting of the IAEA Board in March this year at which a full and regular report will be presented by the IAEA Director-General. In the days to come, we will support diplomatic efforts in this regard, drawing upon our friendly relations with all the key countries involved.

The Government is conscious of the need to balance several important considerations in this regard. We have a strong and valuable relationship with Iran, which we would like to take forward in a manner that is mutually beneficial. We have great respect and admiration for the Iranian people with whom our fraternal ties go back several millennia. We have every intention of ensuring that no shadow is cast on these bonds.

In the overall context that I have outlined in detail, I am confident that this august House will agree that the stance taken by this Government has been consistent and in keeping with our own well considered and independent judgment of our national interests. I am confident that this policy will receive the support of this House and our nation".

URL: <http://pib.nic.in/newsite/erelease.aspx?relid=15565>

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**Press Information Bureau
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Ministry of External Affairs**

08-December-2005 17:41 IST

Discussion on Iran issue with US President

Rajya Sabha

The Minister of State for External Affairs, Shri Rao Inderjit Singh told the Rajya Sabha today that Iran's nuclear issue came up for discussion with the US President during Prime Minister's recent visit to New York in September 2005. Prime Minister and US President exchanged views on the issue of Iran's nuclear programme and the consultations in progress at the IAEA in Vienna at that time. The Prime Minister conveyed the importance of engaging in intensive diplomatic efforts to evolve an international consensus on this issue.

The Minister further said that India's stand remains unchanged on this issue. India continues to believe that a way could be found to reconcile Iran's need for nuclear energy for its development with the international community's concern over proliferation. India supports keeping the door open for dialogue and consensus and avoidance of confrontation. India is opposed to the matter being referred to the UN Security Council, and believes that International community needs to keep Iran engaged in a dialogue to resolve the issue. India welcomes the cooperation that Iran has been extending to the IAEA to enable it to fulfill its mandate.

This information was given by the Minister in reply to a question by Shri Rajkumar Dhoot.

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URL: <http://pib.nic.in/newsite/erelease.aspx?relid=13991>

**Press Information Bureau
Government of India
Ministry of External Affairs**

01-December-2005 18:35 IST

Indian stand on IAEA Vienna vote

Rajya Sabha

The Minister of State for External Affairs, Shri E.Ahmed told the Rajya Sabha today that the 2nd Indo-Iran Special Joint Working Group on Iran-Pakistan-India gas pipeline project was held in Tehran at the invitation of H.E. M.H. Nejad Hosseinian, Deputy Petroleum Minister for International Affairs, Government of Iran on 24th October, 2005. The issue of India's vote at the IAEA was not discussed. The Iranian Embassy in New Delhi had clarified on 28th September, 2005 that agreements on the LNG deal and gas pipeline between the two countries were "still in force and passing through their normal process."

The Minister further informed that the IAEA Board of Governors at its meeting on 24th November, 2005 also discussed Iran's nuclear issue. The Board reiterated its support for the resumption of negotiations between Iran and the EU-3. No resolution was presented to the Board.

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This information was given by Shri E. Ahamed in reply to a question by Shri B.K. Hariprasad.

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URL: <http://pib.nic.in/newsite/erelease.aspx?relid=13770>

**Press Information Bureau
Government of India
Ministry of External Affairs**

27-April-2005 17:21 IST

Development of nuclear weapons by Pakistan

The Minister of State for External Affairs, Shri Rao Inderjit Singh, in a written reply to a question by Sh. Shivraj Singh Chouhan, Sh. Niitsh Kumar and Sh. Ramji Lal Suman said that it is well known that for more than three decades, Pakistan has actively pursued a clandestine nuclear weapons programme. The problem of clandestine acquisition of nuclear weapons technologies by Pakistan is a matter of deep concern. In its interactions with key interlocutors, including the US, India has consistently shared its concerns regarding the adverse effect of such developments on India's security. The Government carefully monitors all such developments which have a bearing on our security and is committed to taking all necessary steps to safeguard the nation's security, he added.

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URL: <http://pib.nic.in/newsite/erelease.aspx?relid=8823>

NUCLEAR WEAPONS - CONVENTIONS,
TREATIES AND AGREEMENTS

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**Press Information Bureau
Government of India
Cabinet**

15-June-2007 14:8 IST

Ratification of the Amendment to the Convention on the Physical Protection of Nuclear Material (CPPNM)

The Union Cabinet today approved the ratification of the Amendment to the Convention on the Physical Protection of Nuclear Material, 1980 and also to amend the Extradition Act 1962.

Becoming a Party to the Convention would strengthen the international legal framework to combat terrorism and also enhance international cooperation in investigation, prosecution and extradition of those who commit terrorist acts and acts of sabotage involving radioactive material or nuclear devices and facilities.

The Amendment to the Convention :

The States Parties, at a Diplomatic Conference held at IAEA Headquarters in July 2005, adopted an Amendment to the Convention with a view to strengthening the provisions of the Convention, in particular, for including terrorist acts and acts of sabotage against nuclear materials / nuclear facilities among the offences that States Parties are required to make punishable, under their domestic laws.

The amended CPPNM will make it legally binding for States Parties to protect nuclear facilities and material in peaceful domestic use, storage as well as transport. It will also provide for expanded cooperation between and among States regarding rapid measures to locate and recover stolen or smuggled nuclear material, mitigate any radiological consequences of sabotage and prevent and combat related offences.

URL: <http://www.pib.nic.in/newsite/erelease.aspx?relid=28638>

**Press Information Bureau
Government of India
Ministry of External Affairs**

21-February-2007 17:30 IST

India and Pakistan sign agreement on 'reducing the risk from accidents relating to nuclear weapons'

An Agreement was signed between India and Pakistan on 'Reducing the Risk from Accidents Relating to Nuclear Weapons', here today. The External Affairs Minister of India, Shri Pranab Mukherjee and the Foreign Minister of Pakistan, Mr. Khurshid M. Kasuri, were present on this occasion. The Agreement was signed by Shri K.C. Singh, Additional Secretary (International Organizations) in the Ministry of External Affairs, Government of India and Mr. Tariq Osman Hyder, Additional Secretary (UN & EC), Ministry of Foreign Affairs of the Islamic Republic of Pakistan.

The Agreement enters into force with immediate effect.

NSD/MK

URL: <http://pib.nic.in/newsite/erelease.aspx?relid=24971>

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**Press Information Bureau
Government of India
Cabinet**

16-June-2006 18:12 IST

Signing and ratification of the International Convention for the suppression of Acts of Nuclear Terrorism

The Union Cabinet today gave its approval for signing and ratifying the International Convention for the Suppression of Acts of Nuclear Terrorism adopted by the General Assembly of the United Nations on April 13, 2005. The Convention has been opened for signature at UN Headquarters in New York from 14th September 2005 and will remain up to 31st December, 2006. The Nuclear Terrorism Convention is the first anti-terrorism convention adopted since the terrorist attacks of September 11, 2001 on New York.

The Nuclear Terrorism Convention will strengthen the international legal framework to combat terrorism. The Convention will provide the legal basis for international cooperation in the investigation, prosecution and extradition of those who commit terrorist acts involving radioactive material or a nuclear device. India is already a Party to the 12 international terrorism conventions and protocols. By signing and ratifying this Convention, India will strengthen its credentials as a responsible partner in the fight against terrorism.

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URL: <http://pib.nic.in/newsite/erelease.aspx?relid=18433>

**Press Information Bureau
Government of India
Ministry of External Affairs**

11-May-2005 17:50 IST

Global treaty on nuclear terrorism

The Minister of State for External Affairs, Shri Rao Inderjit Singh told the Lok Sabha today that the UN General Assembly on 13 April 2005 adopted by consensus the International Convention for Suppression of Acts of Nuclear Terrorism. The Convention aims at preventing and punishing acts of terrorism involving the use of nuclear materials and substances and promotion of international co-operation for extradition and prosecution of persons involved in such acts.

The Minister informed that the Convention will be opened for signature by member states of the UN at the UN Headquarters from September 14, 2005 to December 31, 2005.

This information was given by Shri Singh in reply to a question by Shri Sugrib Singh.

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URL: <http://pib.nic.in/newsite/erelease.aspx?relid=9165>

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**Press Information Bureau
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Ministry of External Affairs**

21-June-2004 15:9 IST

India-Pakistan Expert-Level Talks on Nuclear CBMs - Joint Statement

The following is the text of the Joint Statement issued here today about the Indo-Pak expert level talks on nuclear CBMs.

In accordance with the agreement between the Foreign Secretaries of India and Pakistan in February 2004, Expert Level talks on Nuclear Confidence Building Measures were held in New Delhi from 19-20 June 2004. Dr. Sheel Kant Sharma, Additional Secretary (IO), headed the Indian delegation and Mr. Tariq Osman Hyder, Additional Secretary (UN and EC) led the Pakistan side. The visiting Pakistani delegation also called on the External Affairs Minister Shri K. Natwar Singh, the National Security Advisor, Shri J N Dixit and the Foreign Secretary Shri Shashank. The talks were held in a cordial and constructive atmosphere.

Both sides :

- *Conscious* of the need to promote a stable environment of peace and security between
- The two countries,
- *Recognizing* that the nuclear capabilities of each other, which are based on their national security imperatives, constitute a factor for stability,
- *Committed* to national measures to reduce the risks of accidental or unauthorized use of nuclear weapons under their respective controls and to adopt bilateral notification measures and mechanisms to prevent misunderstandings and misinterpretations,
- *Conscious* of their obligation to their peoples and the international community,
- *Committed* to work towards strategic stability.
- Agreed on the following :
 - The existing hotline between the DGMOs would be upgraded, dedicated and secured.
 - A dedicated and secure hotline would be established between the two Foreign Secretaries, through their respective Foreign Offices to prevent misunderstandings and
 - Reduce risks relevant to nuclear issues.
 - Both countries will work towards concluding an Agreement with technical parameters on pre-notification of flight testing of missiles, a draft of which was handed over by the Indian side.
 - Each side reaffirmed its unilateral moratorium on conducting further nuclear test explosions unless, in exercise of national sovereignty, it decides that extraordinary events have jeopardized its supreme interests.
 - Both countries would continue bilateral discussions and hold further meetings to work towards the implementation of the Lahore MoU of 1999.
 - Both countries will continue to engage in bilateral consultations on security and non-proliferation issues within the context of negotiations on these issues in multilatera fora.
 - Both countries called for regular working level meetings to be held among all the nuclear powers to discuss issues of common concern.

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- Both sides agreed to report the progress of the talks to the respective Foreign Secretaries who would meet on 27-28 June 2004.

URL: <http://pib.nic.in/newsite/erelease.aspx?relid=2067>

**NUCLEAR SECURITY, NON-
PROLIFERATION AND DISARMAMENT**

Nuclear and Arms Control Centre

**Press Information Bureau
Government of India
Prime Minister's Office**

27-March-2012 14:52 IST

Seoul Nuclear Security Summit Communique

We, the leaders, gathered in Seoul on March 26-27, 2012, renew the political commitments generated from the 2010 Washington Nuclear Security Summit to work toward strengthening nuclear security, reducing the threat of nuclear terrorism, and preventing terrorists, criminals, or other unauthorized actors from acquiring nuclear materials. Nuclear terrorism continues to be one of the most challenging threats to international security. Defeating this threat requires strong national measures and international cooperation given its potential global political, economic, social, and psychological consequences.

We reaffirm our shared goals of nuclear disarmament, nuclear nonproliferation and peaceful uses of nuclear energy.

Committed to seeking a safer world for all, we also all share the objective of nuclear security. We recognize that the Nuclear Security Summit is a valuable process at the highest political level, supporting our joint call to secure all vulnerable nuclear material in four years. In this regard, we welcome the substantive progress being made on the political commitments of Participating States since the Washington Summit.

We stress the fundamental responsibility of States, consistent with their respective national and international obligations, to maintain effective security of all nuclear material, which includes nuclear materials used in nuclear weapons, and nuclear facilities under their control, and to prevent non-state actors from acquiring such materials and from obtaining information or technology required to use them for malicious purposes. We likewise recognize the fundamental responsibility of States to maintain effective security of other radioactive materials.

We reaffirm that measures to strengthen nuclear security will not hamper the rights of States to develop and utilize nuclear energy for peaceful purposes.

Noting the essential role of the International Atomic Energy Agency (IAEA) in facilitating international cooperation and supporting the efforts of States to fulfill their nuclear security responsibilities, we further stress the importance of regional and international cooperation, and encourage States to promote cooperation with and outreach activities to international partners.

Noting the Fukushima accident of March 2011 and the nexus between nuclear security and nuclear safety, we consider that sustained efforts are required to address the issues of nuclear safety and nuclear security in a coherent manner that will help ensure the safe and secure peaceful uses of nuclear energy.

We will continue to use the Washington Communiqué and Work Plan as a basis for our future work in advancing our nuclear security objectives. At this Seoul Summit, we agree that we will make every possible effort to achieve further progress in the following important areas.

Global Nuclear Security Architecture

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1. We recognize the importance of multilateral instruments that address nuclear security, such as the Convention on the Physical Protection of Nuclear Material (CPPNM), as amended, and the International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT). We therefore encourage the universal adherence to these Conventions. We urge states in a position to do so to accelerate their domestic approval of the 2005 Amendment to the CPPNM, seeking to bring the Amendment into force by 2014. We acknowledge the important role of the United Nations (UN) in promoting nuclear security, support the UN Security Council Resolutions 1540 and 1977 in strengthening global nuclear security, and welcome the extension of its mandate. We will strive to use the IAEA Physical Protection of Nuclear Material and Nuclear Facilities (INFCIRC/225/Rev.5) document and related Nuclear Security Series documents, and reflect them into national practice.

2. We recognize the contributions since the 2010 Summit of international initiatives and processes such as the Global Initiative to Combat Nuclear Terrorism (GICNT) and Global Partnership against the Spread of Weapons and Materials of Mass Destruction, within their respective mandates and memberships. We welcome the wider participation in the GICNT and the Global Partnership and value its extension beyond 2012. Noting the importance of strengthening coordination and complementarity among nuclear security activities, we welcome the proposal of the IAEA to organize an international conference in 2013. We welcome contributions from the industry, academia, institutes and civil society that promote nuclear security.

Role of the IAEA

3. We reaffirm the essential responsibility and central role of the IAEA in strengthening the international nuclear security framework, and recognize the value of the IAEA Nuclear Security Plan 2010-2013. We will work to ensure that the IAEA continues to have the appropriate structure, resources and expertise needed to support the implementation of nuclear security objectives. To this end, we encourage States in a position to do so and the nuclear industry to increase voluntary contributions to the IAEA's Nuclear Security Fund, as well as in-kind contributions. We also encourage continued IAEA activities to assist, upon request, national efforts to establish and enhance nuclear security infrastructure through its various support programs, and encourage States to make use of these IAEA resources.

Nuclear Materials

4. Recognizing that highly enriched uranium (HEU) and separated plutonium require special precautions, we reemphasize the importance of appropriately securing, accounting for and consolidating these materials. We also encourage States to consider the safe, secure and timely removal and disposition of nuclear materials from facilities no longer using them, as appropriate, and consistent with national security considerations and development objectives.

5. We recognize that the development, within the framework of the IAEA, of options for national policies on HEU management will advance nuclear security objectives. We encourage States to take measures to minimize the use of HEU, including through the conversion of reactors from highly enriched to low enriched uranium (LEU) fuel, where technically and economically feasible, taking into account the need for assured supplies of medical isotopes, and encourage States in a position to do so, by the end of 2013, to announce voluntary specific actions intended to minimize the use of HEU. We also encourage States to promote the use of LEU fuels and targets in commercial applications such as isotope production, and in

Nuclear and Arms Control Centre

this regard, welcome relevant international cooperation on high-density LEU fuel to support the conversion of research and test reactors.

Radioactive Sources

6. Taking into account that radioactive sources are widely used and can be vulnerable to malicious acts, we urge States to secure these materials, while bearing in mind their uses in industrial, medical, agricultural and research applications. To this end, we encourage States in a position to do so to continue to work towards the process of ratifying or acceding to the ICSANT; reflect into national practices relevant IAEA Nuclear Security Series documents, the IAEA Code of Conduct on the Safety and Security of Radioactive Sources and its supplementary document on the IAEA Guidance on the Import and Export of Radioactive Sources; and establish national registers of high-activity radioactive sources where required. We also commit to work closely with the IAEA to encourage cooperation on advanced technologies and systems, share best practices on the management of radioactive sources, and provide technical assistance to States upon their request. In addition, we encourage continued national efforts and international cooperation to recover lost, missing or stolen sources and to maintain control over disused sources.

Nuclear Security and Safety

7. Acknowledging that safety measures and security measures have in common the aim of protecting human life and health and the environment, we affirm that nuclear security and nuclear safety measures should be designed, implemented and managed in nuclear facilities in a coherent and synergistic manner. We also affirm the need to maintain effective emergency preparedness, response and mitigation capabilities in a manner that addresses both nuclear security and nuclear safety. In this regard, we welcome the efforts of the IAEA to organize meetings to provide relevant recommendations on the interface between nuclear security and nuclear safety so that neither security nor safety is compromised. We also welcome the convening of the High Level Meeting on Nuclear Safety and Security initiated by the UN Secretary-General, held in New York on 22 September 2011. Noting that the security of nuclear and other radioactive materials also includes spent nuclear fuel and radioactive waste, we encourage States to consider establishing appropriate plans for the management of these materials.

Transportation Security

8. We will continue efforts to enhance the security of nuclear and other radioactive materials while in domestic and international transport, and encourage States to share best practices and cooperate in acquiring the necessary technologies to this end. Recognizing the importance of a national layered defense against the loss or theft of nuclear and other radioactive materials, we encourage the establishment of effective national nuclear material inventory management and domestic tracking mechanisms, where required, that enable States to take appropriate measures to recover lost and stolen materials.

Combating Illicit Trafficking

9. We underscore the need to develop national capabilities to prevent, detect, respond to and prosecute illicit nuclear trafficking. In this regard, we encourage action-oriented coordination among national capacities to combat illicit trafficking, consistent with national laws and regulations. We will work to

Nuclear and Arms Control Centre

enhance technical capabilities in the field of national inspection and detection of nuclear and other radioactive materials at the borders. Noting that several countries have passed export control laws to regulate nuclear transfers, we encourage further utilization of legal, intelligence and financial tools to effectively prosecute offenses, as appropriate and consistent with national laws. In addition, we encourage States to participate in the IAEA Illicit Trafficking Database program and to provide necessary information relating to nuclear and other radioactive materials outside of regulatory control. We will work to strengthen cooperation among States and encourage them to share information, consistent with national regulations, on individuals involved in trafficking offenses of nuclear and other radioactive materials, including through INTERPOL's Radiological and Nuclear Terrorism Prevention Unit and the World Customs Organization.

Nuclear Forensics

10. We recognize that nuclear forensics can be an effective tool in determining the origin of detected nuclear and other radioactive materials and in providing evidence for the prosecution of acts of illicit trafficking and malicious uses. In this regard, we encourage States to work with one another, as well as with the IAEA, to develop and enhance nuclear forensics capabilities. In this regard, they may combine the skills of both traditional and nuclear forensics through the development of a common set of definitions and standards, undertake research and share information and best practices, as appropriate. We also underscore the importance of international cooperation both in technology and human resource development to advance nuclear forensics.

Nuclear Security Culture

11. Recognizing that investment in human capacity building is fundamental to promoting and sustaining a strong nuclear security culture, we encourage States to share best practices and build national capabilities, including through bilateral and multilateral cooperation. At the national level, we encourage all stakeholders, including the government, regulatory bodies, industry, academia, non-governmental organizations and the media, to fully commit to enhancing security culture and to maintain robust communication and coordination of activities. We also encourage States to promote human resource development through education and training. In this regard, we welcome the establishment of Centers of Excellence and other nuclear security training and support centers since the Washington Summit, and encourage the establishment of new centers. Furthermore, we welcome the effort by the IAEA to promote networking among such centers to share experience and lessons learned and to optimize available resources. We also note the holding of the Nuclear Industry Summit and the Nuclear Security Symposium on the eve of the Seoul Nuclear Security Summit.

Information Security

12. We recognize the importance of preventing non-state actors from obtaining information, technology or expertise required to acquire or use nuclear materials for malicious purposes, or to disrupt information technology based control systems at nuclear facilities. We therefore encourage States to: continue to develop and strengthen national and facility-level measures for the effective management of such information, including information on the procedures and protocols to protect nuclear materials and facilities; to support relevant capacity building projects; and to enhance cyber security measures concerning nuclear facilities, consistent with the IAEA General Conference Resolution on Nuclear

Nuclear and Arms Control Centre

Security(GC(55)/Res/10) and bearing in mind the International Telecommunication Union Resolution 174. We also encourage States to: promote a security culture that emphasizes the need to protect nuclear security related information; engage with scientific, industrial and academic communities in the pursuit of common solutions; and support the IAEA in producing and disseminating improved guidance on protecting information.

International Cooperation

13. We encourage all States to enhance their physical protection of and accounting system for nuclear materials, emergency preparedness and response capabilities and relevant legal and regulatory framework. In this context, we encourage the international community to increase international cooperation and to provide assistance, upon request, to countries in need on a bilateral, regional, and multilateral level, as appropriate. In particular, we welcome the intent by the IAEA to continue to lead efforts to assist States, upon request. We also reaffirm the need for various public diplomacy and outreach efforts to enhance public awareness of actions taken and capacities built to address threats to nuclear security, including the threat of nuclear terrorism.

We will continue to make voluntary and substantive efforts toward strengthening nuclear security and implementing political commitments made in this regard. We welcome the information on the progress made in the field of nuclear security since the Washington Summit provided by the participants at this Seoul Summit. The next Nuclear Security Summit will be held in [the Netherlands] in 2014.

SH/SK

URL: <http://pib.nic.in/newsite/erelease.aspx?relid=81756>

**Press Information Bureau
Government of India
Prime Minister's Office**

27-March-2012 14:50 IST

Nuclear Security Summit National Progress Report India

1) International Legal Instruments: India is party to all the 13 universal instruments accepted as benchmarks for a State's commitment to combat international terrorism. India is party to the Convention on the Physical Protection of Nuclear Material and is amongst the few countries which have also ratified the 2005 amendment to the Convention. India looks forward to early entry into force of the 2005 Amendment. India is also Party to the International Convention for the Suppression of Acts of Nuclear Terrorism. India supports efforts for promoting the universality of these two Conventions.

2) International Atomic Energy Agency: India has consistently supported IAEA's central role in facilitating national efforts to strengthen nuclear security and in fostering effective international cooperation. India is a member of the IAEA Commission on Nuclear Safety Standards and the Advisory Group on Nuclear Security. India has been actively involved in the preparation of the Nuclear Security Series documents produced by the IAEA. India has actively contributed to IAEA's Action Plans on Nuclear Security, including third plan for 2010-2013. India as a partner to the IAEA-US Regional

Nuclear and Arms Control Centre

Radiological Security Partnership (RRSP) has been organizing international training courses in India under the aegis of the IAEA. India offered assistance through the IAEA for search and recovery of orphan radioactive sources in countries which were unable to effectively deal with them and had sought such assistance. India commends the Agency's efforts to develop a Nuclear Security Information Portal and its efforts in developing a comprehensive set of guidance documents under the Nuclear Security Series.

We support the fifth revision of the recommendations contained in INFCIRC/225. We look forward to sustainable Agency activities in the area of nuclear security training and education and appreciate the assistance provided by the Agency to educational institutions in the area of Nuclear Security. India is a participant in the IAEA's Illicit Trafficking Database (ITDB), which was established in 1995 and disseminates information on confirmed reports about illicit trafficking and other unauthorized activities and events involving nuclear radioactive materials to the States. India has been supportive of the 2003 IAEA Code of Conduct on the Safety and Security of Radioactive Sources and voluntarily adopted its provisions. India has also conducted 9 regional training seminars on nuclear security in cooperation with the IAEA. Conclusion of Practical Arrangements between GCNEP and the IAEA would reinforce India's cooperation with the Agency.

3) UN and other mechanisms: Since 2002, India has piloted a resolution at the United Nations General Assembly on measures to prevent terrorists gaining access to Weapons of Mass Destruction. This resolution has been adopted by the General Assembly by consensus. India fully supports the implementation of United Nations Security Council Resolution 1540, its extension resolution 1977, and the United Nations Global Counter Terrorism Strategy. India is also a party to Global Initiative to Combat Nuclear Terrorism and has participated in its working groups on nuclear detection, nuclear forensics and response and mitigation. While nuclear security is being addressed at different forums, there is need to ensure that these efforts are mutually complementary and reinforce the related activities of the IAEA. We also cooperate with the Interpol's Radiological and Nuclear Terrorism Prevention Unit and the World Customs Organization. India participated in the High Level Meeting called by the UN Secretary General on Nuclear Safety and Security on 22 September 2011.

4) National legal framework: The Indian Atomic Energy Act 1962 provides the legal framework for securing nuclear materials and facilities. Amendments to this Act are under consideration to further strengthen the legal basis for nuclear security measures. In June 2005, India enacted the Weapons of Mass Destruction and their Delivery Systems (Prohibition of Unlawful Activities) Act, 2005. Updating of the export control lists and related regulations are undertaken as a continuous ongoing process. India has adhered to NSG Guidelines and has expressed interest in full membership of the NSG and other international export control regimes. India is taking a number of measures to strengthen nuclear security. The Government has introduced a bill in Parliament for the establishment of an independent Nuclear Safety Regulatory Authority which will also enhance oversight of nuclear security and strengthen synergy between safety and security.

5) Reducing Nuclear Material: With regard to minimization of use of civilian HEU, the enriched uranium based fuel in the APSARA reactor was placed in a safeguarded facility in December 2010. APSARA will use indigenous fuel which is not high enriched uranium. However, there is a growing demand for large-scale production of isotopes for a range of applications- healthcare, industry, food and agriculture. India's three stage nuclear programme is based on a closed nuclear fuel cycle, the principle of 'reprocess-to-reuse' and ensuring control over nuclear material at all stages. It is also important that technology is continually upgraded to develop nuclear systems that are intrinsically safe, secure and

Nuclear and Arms Control Centre

proliferation resistant. We have recently developed an Advanced Heavy Water Reactor based on Low Enriched Uranium and thorium with new safety and proliferation-resistant features.

6) International Cooperation: India has close cooperation with the IAEA's Programme of Action for Cancer Therapy (PACT). India has signed tripartite Agreements with IAEA and Sri Lanka and Namibia to donate our indigenously developed Cobalt teletherapy machine (Bhabhatron II) to these two countries as a step towards affordable treatment of Cancer. A similar machine was donated to Vietnam in 2008.

7) Global Centre for Nuclear Energy Partnership (GCNEP): At the first Nuclear Security Summit, India announced that it would establish a Global Centre for Nuclear Energy Partnership. We visualize this to be a state of the art facility based on international participation from the IAEA and other interested foreign partners. (Cooperation MOUs/Practical Arrangements have been concluded with some countries and the IAEA). To begin with, the Centre will consist of four Schools dealing with Advanced Nuclear Energy System Studies, Nuclear Security, Radiation Safety, and the application of Radioisotopes and Radiation Technology in the areas of healthcare, agriculture and food. The Centre will conduct research and development of design systems that are intrinsically safe, secure, proliferation resistant and sustainable, as we believe such technological solutions will strengthen nuclear security in the long run. The Centre will carry out research and development in radiation monitoring including development of detectors and nuclear emergency management. The Centre will also have state of the art training facilities for Indian and international participants and research by Indian and visiting international scientists. We are interested in development and conduct of courses in association with interested countries and the IAEA. An "off-campus" training course on Physical Protection was organized under GCNEP auspices in November 2011 for 25 participants, including 17 foreign nationals. Further courses planned for 2012 include: Prevention, Preparedness and Responses involving malicious acts with radioactive materials, Medical Management, Safeguard Practices etc.

8) Nuclear Security Summit Process: India supports implementation of the Washington Summit Communiqué and Work Plan. India contributed to the NSS process, including by hosting a meeting of the Sherpas in New Delhi 16-17 January 2012

SH/SK

URL: <http://pib.nic.in/newsite/PrintRelease.aspx?relid=81755>

**Press Information Bureau
Government of India
Prime Minister's Office**

27-March-2012 7:19 IST

PM's statement at the Plenary of the Nuclear Security Summit

Following is the text of the statement made by Prime Minister, Dr, Manmohan Singh, at the Plenary of the Nuclear Security Summit in Seoul today.

"I would like to join others in thanking President Lee Myung-bak for hosting this Summit and for the excellent arrangements made.

India fully shares global concerns on nuclear terrorism and clandestine proliferation, which continue to

Nuclear and Arms Control Centre

pose serious threats to international security. At the same time, given India's growing energy demands, we see nuclear energy as an essential component of our energy mix. Strengthening nuclear security, therefore, assists India's objective of promoting a safe and secure expansion of civil nuclear energy. We must continue to harness the numerous developmental benefits that nuclear science and technology offer, especially for developing countries.

We are in the process of expanding our nuclear energy generation to 62,000 MWs by 2032. We are taking forward our three stage nuclear programme based on a closed fuel cycle, with new safety features and proliferation-resistant technologies.

We are also determined that our expanded nuclear power programme will follow the highest standards of nuclear safety and security, whose synergy is essential to restore public faith in nuclear energy, especially after the tragic events at Fukushima.

We have undertaken comprehensive reviews of nuclear safety measures at our nuclear facilities. India has invited the Operational Safety Review Teams of the IAEA to assist in its own safety reviews and audit. Nuclear safety evaluations are being put in the public domain to enhance transparency and boost public confidence. We are also in the process of setting up a statutory, independent and autonomous Nuclear Safety Regulatory Authority. We are strengthening emergency preparedness and response to nuclear accidents.

Nuclear terrorism will remain a potent threat as long as there are terrorists seeking to gain access to nuclear material and technologies for malicious purposes. India is acutely conscious of this threat. Our resolution at the General Assembly on measures to deny terrorists access to weapons of mass destruction has been adopted by consensus since 2002.

We support the extension of UN Security Council Resolution 1540 and the work of its Committee and we intend to host a 1540 Workshop during this year to strengthen its implementation.

India is party to the main international legal instruments on nuclear security - the Convention on Physical Protection and its 2005 amendment, as well as the International Convention for the Suppression of Acts of Nuclear Terrorism. We support the universalization of these instruments.

Nuclear security is primarily a national responsibility but there are benefits to be gained by supplementing responsible national actions through sustained and effective international cooperation.

The Washington Communiqué and Work Plan set in place new benchmarks on nuclear security and new frameworks for international cooperation. We welcome the fact that this Summit will expand the scope of such cooperation by greater focus on minimization of High Enriched Uranium, information and transport security, nuclear forensics, preventing illicit nuclear trafficking, assistance for updating national regulations and building capacity for nuclear security.

India has contributed actively to the Nuclear Security Summit process, including by hosting a Sherpa meeting in New Delhi in January this year.

We have made good progress in the establishment of the Global Centre for Nuclear Energy Partnership, which I announced at the Washington Summit. The physical infrastructure for the Centre is being set up.

Nuclear and Arms Control Centre

We have commenced 'off-campus' courses. Such courses will be held more frequently in the future. We have signed documents for cooperation on the Global Centre with the United States of America, Russia, France and the IAEA.

India is expanding its technical assistance to developing countries, including by providing our indigenously developed Cobalt teletherapy machines – Bhabhatrons - for cancer treatment.

The IAEA has a central role in strengthening the international global nuclear security architecture. I am happy to announce that India will contribute 1 million US dollars to the IAEA's Nuclear Security Fund for the years 2012-13.

India will participate in the Agency's 2013 international coordinating conference of various nuclear security activities, including the Global Initiative to Combat Nuclear Terrorism and the Global Partnership.

The best guarantee for nuclear security is a world free from nuclear weapons. Our former Prime Minister, Mr. Rajiv Gandhi, put forward an Action Plan for global nuclear disarmament in a time-bound framework almost 25 years ago. This remains the most comprehensive and elaborate proposal to achieve this objective.

Attaining the goal of a nuclear weapon-free world will require commitments embedded in an agreed multilateral framework involving all states possessing nuclear weapons. This should include measures to reduce nuclear dangers by reducing the salience of nuclear weapons in security doctrines and by increasing universal restraints on the first use of nuclear weapons.

We also support the early commencement of negotiations on a Fissile Material Cut-off Treaty in the Conference on Disarmament in Geneva.

India has never been a source of proliferation of sensitive technologies and we are determined to further strengthen our export control systems to keep them on par with the highest international standards. We have already adhered to the guidelines of the NSG and MTCR. As a like-minded country with the ability and willingness to promote global non-proliferation objectives, we believe that the next logical step is India's membership of the four export control regimes.

In conclusion, I would like to reiterate India's commitment to strengthen and improve further the effectiveness of its nuclear safety and security systems and make a significant contribution to the enhancement of the global nuclear security architecture.

Thank you."

SC

URL: <http://pib.nic.in/newsite/erelease.aspx?relid=81740>

Nuclear and Arms Control Centre

**Press Information Bureau
Government of India
Ministry of External Affairs**

05-August-2010 15:32 IST

Nuclear Weapon Policy

Government remains committed to the objectives of the 1988 Rajiv Gandhi Action Plan for Nuclear Weapon Free and Non-violent World Order. This was stated on numerous occasions in the UN General Assembly including in the statement made by the Prime Minister on 26 September 2008 as well as in statements made by the Indian delegation in the First Committee of the UN General Assembly dealing with Disarmament and International Security. Similarly, reference to the Rajiv Gandhi Action Plan was included in the Working Paper on Nuclear Disarmament submitted by India to UN General Assembly in 2006. India's national statements in recent years at the Conference on Disarmament in Geneva have also included references to the Rajiv Gandhi Action Plan. Government proposes to pursue this matter in the First Committee in the forthcoming UN General Assembly commencing in September 2010.

This information was given by Shri S.M. Krishna, Minister of External Affairs, in a written reply to a question in the Rajya Sabha today.

YSK:PM

URL: <http://www.pib.nic.in/newsite/erelease.aspx?relid=64194>

**Press Information Bureau
Government of India
Department of Atomic Energy**

29-April-2010 17:48 IST

Nuclear Security Summit

Washington Nuclear Security Summit was a personal initiative of US President Barack Obama who in his Prague speech of April 2009 described nuclear terrorism as the most immediate and extreme threat to global security. The focus on combating nuclear terrorism is consistent with our concerns on terrorism and clandestine proliferation. Strengthening nuclear security is also consistent with India's interest in the safe and secure expansion of civil nuclear energy.

During the Summit, Prime Minister underlined our plans for developing 35000 MWe of nuclear energy by 2022 in the context of India's three-stage programme as well as newly opened opportunities for civil nuclear cooperation with the international community. India's concerns on clandestine proliferation and the danger of nuclear material and technical know-how falling into hands of non-state actors were also underlined. The Rajiv Gandhi Action plan of 1988 remains the most comprehensive and elaborate proposal to move toward a nuclear weapon free world and we remain committed to it. The danger of nuclear terrorism makes early elimination of nuclear weapons a matter of even greater urgency. At the summit, Prime Minister announced the establishment of a global Centre for Nuclear Energy Partnership in India. This is a logical step after the opening up of international civil nuclear cooperation.

The Summit outcome contained in a Communique and a Work Plan is aimed at fostering political commitment on nuclear security and follow up action in forums such as International Atomic Energy Agency.

Nuclear and Arms Control Centre

This was stated by Shri Prithviraj Chavan, the Union Minister of Science & Technology and Earth Sciences in the Rajya Sabha today.

GG/BS

URL: <http://pib.nic.in/newsite/erelease.aspx?relid=61179>

**Press Information Bureau
Government of India
Prime Minister's Office**

13-April-2010 11:41 IST

Transcript of the Prime Minister's press conference at Washington

Opening statement by PM

I have concluded my visit to Washington DC for the Nuclear Security Summit.

As I said earlier, India welcomes the initiative taken by President Obama to focus the attention of the international community on nuclear security. This is an important issue for us because without ensuring security we will not be able to harness nuclear energy for our developmental purposes.

We are satisfied with the Communique and Work Plan that have been adopted by the Summit. India participated actively in the preparatory process.

I have announced that India will establish a Global Centre for Nuclear Energy Partnership. This will be owned and managed by the Government, but will be open to international participation in terms of academic exchanges and R and D efforts. This initiative is the next logical step in India's engagement with the world after the opening of international civil nuclear cooperation with India.

India's statement at the Summit outlines our approach to the issues of nuclear security, nuclear terrorism, clandestine proliferation and global disarmament.

After listening to the world leaders at the Summit, I feel a sense of vindication of India's position. The intersection of international terrorism and clandestine proliferation affects our security directly. The concerns that we have been expressing for decades on the dangers of proliferation and risk of nuclear materials finding their way into the wrong hands are today finding widespread acceptance.

When India called for the total elimination of nuclear weapons in the 1950s our voice was not heeded. Today the world is veering around to the vision we had put forward of a world free from nuclear weapons. The world is beginning to see merit in pursuing universal, non-discriminatory and complete nuclear disarmament. We will continue to persevere in our efforts in this direction.

During my stay I had bilateral meetings with President Obama, President Nazarbaev, Prime Minister Abbas El Fassi, Prime Minister Stephen Harper, President Sarkozy and Chancellor Merkel.

I had fruitful discussions with President Obama on a host of issues relating to our bilateral relations, the regional situation, and the world economy. We look forward to hosting President Obama in India later this

Nuclear and Arms Control Centre

year.

My discussions with President Sarkozy, Chancellor Merkel and Prime Minister Harper focused largely on the future role of the G20 in the post-crisis phase of the global economic recovery. I will be visiting Canada for the next G20 Summit in June. I conveyed to President Sarkozy that we are looking forward to his visit later this year to India.

Question and Answer Session

Q-1. How satisfied are you about the outcome of your bilateral meetings?

Ans – As far as the nuclear security summit is concerned its outcome is satisfactory from our point of view. The concerns which we have been voicing about nuclear security, about proliferation, and about nuclear terrorism, they have been taken notice of by the international community and the communique reflects that. So from that angle we are satisfied with the outcome. As for the bilateral discussions which are concerned they covered a wide range of issues, mostly relating to the future work programme of the group of 20. This was an exchange of views as to how the work of the G-20 should proceed in the months and years to come.

The world is now witnessing a recovery though the speed of recovery – there is still a question mark with regard to the working out of a framework for sustainable recovery and also the reform of international institutions including the Security Council and the Bretton Woods institutions, the working of the financial system, the need for regulation, whether one size fits all or there should be allowance for different stages of development. These are the issues which have to be taken on-board and I expressed our concern about these issues.

Q 2. Why should India bring its complaints to US about Pakistan instead of using its own leverage to straighten it out. Do you agree with the broad sentiment of the analysts that you shared better relations with President Bush than President Obama? Ans. Well I have a very good relationship with President Obama. So I think there should be no confusion on that point. There is no question of our taking our complaints against any country to another forum. Ultimately India has to tackle problems it faces on her own but international sentiment and international opinion does matter and if anyone asks about how is the bilateral relation between India and Pakistan working out, I explain our perspective and which is an open secret. I have said that on more than one occasion that Pakistan if it takes credible steps to bring the perpetrators of the horrible crime of 26/11 to book and that's the minimum that we expect from Pakistan and if Pakistan does that we would be very happy to begin talking once again about all our issues.

Q 3 & 4: Prime Minister Gilani told the media that he invited you to Pakistan and that you accepted the invitation and secondly the controversy about Shashi Tharoor and how do you react to that?

Ans : As far as the invitation from Prime Minister Gilani is concerned, I am hearing it for the first time. But I did run into him twice and we exchanged pleasantries and in fact I complimented the Prime Minister on the passage of the constitution amendment bill which makes the Prime Minister more powerful personality in Pakistan's political system but beyond that there was no serious discussion on any other issues.

And as far as what you have mentioned to me, I have heard about these things. I don't have all the facts

Nuclear and Arms Control Centre

before me and when I go back I will get all the facts and in the light of those if any action is necessary I think that would be the proper way to proceed. I cannot go by hearsay or what is in various columns of the news- papers.

Q -5. Problem of clandestine nuclear trade – no new measures.

Ans – We have been voicing our concern with regard to proliferation and the clandestine activities of nuclear trafficking. Well the world used to listen to us but this is the first time that the international community has sat together –47 countries to recognize that these are genuine concerns. So I think that's a matter of some satisfaction as far as India is concerned.

Q 6. President Lula is visiting Iran on May 15th , you also have been invited, do you plan to go to Tehran?

Ans – India has good relations with Iran. Iran is our neighbour and as far as going to Tehran is concerned, I have no plans. In any case I cannot make plans to travel at short notice and I have commitments in India but India will be represented at that conference.

Q 7. You and President Obama share a personal rapport. But does it really translate into concrete actions as far as the two administrations are concerned?

Ans : In matters relating to state craft I think one should not jump prematurely into conclusions which are not warranted by the facts on the ground.

Q 8. In your meeting with Obama, you forcefully expressed the issue of cross border terrorism. With US constraints in the War on terror in Afghanistan, how do you expect action?

Ans: Well I hope that what I said to President weighs considerably with the administration but I am not an astrologer. I cannot predict what will be final shape of things to come.

Q 9. US - Pak civil nuclear deal ?

Ans - Who am I to interfere with what goes on between the United States and Pakistan. That's a matter for these two countries to consider.

Q 10. Meeting with President Obama – we have been told Iran figured and did the US sanctions resolution at the SC come up. And with president Sarkozy as well.

Ans. I said to the President that we do not favour Iran's nuclear weapon ambitions. I also said to him that as a signatory of NPT Iran is entitled to all the rights of members who have signed the treaty regarding to the peaceful use of atomic energy. On the issue of sanctions I said to him as far as we are concerned we don't think sanctions really achieve their objective. Very often the poor in the affected country suffer more. As far as the ruling establishment is concerned, they are not really affected by these sanctions in any meaningful way. Beyond that there was no discussions.

Q 11. What do you hope to achieve in Bhutan when you meet Gilani?

Ans. Well it is still time to think about meeting in Bhutan. I think when we reach there, we will cross that

Nuclear and Arms Control Centre

bridge.

Q: 12. After the bilateral between President Obama and you, are you confident of getting access to Headley?

Ans. I raised that matter with the President. He did mention to me that he is aware of the legal position and that we will get access to David Headley.

Q 13. What more action are we looking for from Pakistan?

Ans - We all know that there are still people who are named as part of the conspiracy. They are roaming around freely and I do not want to name any one individually but that's the reality and these are facts which are borne out not by our investigations and our intelligence but by the intelligence of our friendly countries. We would like Pakistan to at least bring all these perpetrators of these horrible crimes to book and do so effectively.

Q 14. There is a perception that Indo-US relations are in drift? What direction did you give in the bilateral?

A: We have a multi faceted relationship. The economic content of the relation is important. There are several other dimensions. We work together in many regional fora. So it is not a single track operation. The United States is a super power. It is a very important player in global affairs. We look forward to working with the United States to find practical, pragmatic solutions to the problems which the world faces.

I believe these issues in South Asia can be resolved and should be resolved by meaningful bilateral dialogue. I do not feel there is a role for any outside force to come in.

Q-15. Prime Minister has said that he needs more evidence against the Lashkar-e Tayeba.

Ans. First of all I don't see there is any need for further evidence about the role of the Lashksar – e Tayeba. I think Prime Minister Gilani – I would hate to enter into an argument with him in a press conference. The American intelligence and American forces have themselves pointed out the role of the Lashksar-e Tayeba and their links to Al-Qaeda. So I do not think there is any need for me to produce additional evidence to Prime Minister Gilani about the role of the Lakshar –e- Tayeba, Hafeez Sayeed, Ilyas Kashmiri and Zakeeur Rehman are playing in fanning of terrorist acts directed against India.

Q 16. Issues to be taken with China in Brazil?

Ans: We have the border problem and that problem is to be resolved. We are working very hard to find practical, pragmatic solution to that problem. But we both recognize that it will take time. And both of us have agreed that pending the resolution of the border issue, peace and tranquility should be maintained along the line of control and by and large that is the situation that remains on the ground. As far as India's relations with China are concerned, the economic content of the relationship has increased very significantly. China is today probably India's largest trading partner. There are large Chinese investments in our country. There are large investments in China. On the economic front the relationships is moving in the right direction and at the Copenhagen conference India and China worked very closely to organize

Nuclear and Arms Control Centre

their position and there is now a recognition in China that in multilateral issues there is a similarity of approach between India and China and that both countries can gain by working together.

17. President Obama defended Pakistan saying their nuclear installations/ weapons are safe?

As far as our views are concerned you have to read my statement that gives our views on the matter.

URL: <http://pib.nic.in/newsite/erelease.aspx?relid=60958>

**Press Information Bureau
Government of India
Vice President's Secretariat**

10-June-2008 14:59 IST

Vice President gives Valedictory Address to International Conference on 'Towards a World Free of Nuclear Weapons'

The Vice President of India Shri Mohd. Hamid Ansari gave Valedictory address to International Conference on 'Towards a World Free of Nuclear Weapons' jointly organized by Centre for Strategic and International Studies and Indian Council of World Affairs today.

Following is the text of his Valedictory address on the occasion:

“ Any discussion necessitates clarity about concepts. In terms of the theory of statecraft, war has always been considered an instrument of policy. Pursuit of war necessitates weapons, defined as tools to gain advantage over an adversary. Improvement in the quality of weapons, and invention of new ones, is a logical outcome of the human trait to seek excellence, for success in subduing a political and military adversary by inflicting unacceptable damage.

The impulse to invent weapons of mass destruction, including nuclear weapons, was part of this process. Each new weapon system also propelled assessment of its implications in tactical and strategic terms. Both processes were accelerated in the second half of the 20th century.

Every invention, apart from its novelty, has to prove its utility. Mass destruction in the Spanish civil war was vividly depicted by Picasso's Guernica; less than a decade later, it was typified by London and Dresden. In the case of the nuclear weapon, the utility was brutally demonstrated at Hiroshima and Nagasaki. The scale of destruction there propelled consideration of the implications of the new weapon.

An early recognition came in the shape of the Baruch Plan of June 1946. It was rejected by the Soviet Union for reasons that were evident. In 1948, General Omar Bradley told an American audience that “the only way to win an atomic war is to make certain it never starts”.

None appreciated the implications better than the scientists. In July 1955 the signatories of the Russell-Einstein Manifesto spoke “not as members of this or that nation, continent, or creed, but as human beings, members of the species Man, whose continued existence is in doubt”.

Nuclear and Arms Control Centre

The venue of this conference is important; so is its timing. India has been an ardent advocate of prohibition on the production and use of nuclear weapons. Jawaharlal Nehru in 1954 spoke of the fear that “would grow and grip nations and peoples and each would try frantically to get this new weapon or some adequate protection from it.” Prime Ministers of India proposed prohibition in 1978 and again in 1982. In 1988 Rajiv Gandhi sought “not a marginal adjustment in the machinery of nuclear confrontation, nor a partial or temporary scaling down of the arms race”, but “a world which is rid of nuclear weapons”. His Action Plan for a World Free of Nuclear Weapons was comprehensive in its scope, passionate in its appeal, and clinical in its reasoning and analysis.

The idea was considered utopian. Despite this, and in the initial euphoria at the end of the Cold War, the global momentum for a less unpleasant world led to the conclusion of the universal and non-discriminatory Chemical Weapons Convention, with its intricate and intrusive verification mechanism. Significantly, however, the argument for outlawing it was not extended to nuclear weapons.

In regard to matters nuclear, the world has witnessed changes over the past decade and a half. This audience is knowledgeable about it. India herself has emerged as a nuclear weapons state.

On one side it is argued that the imperative of realism leaves no option but to accept the reality. On the other, those distressed over the fraying of world order and apprehensive of the “normative cost of silence” advocate a more assertive approach. “This is a time”, writes Professor Richard Falk in his recent book *The Costs of War*, “when realism and idealism are increasingly fused in their call for a future world order based on law and justice, but this cannot be made to happen without the engagement of the peoples of the earth acting as detribalized citizens without borders.”

Three questions arise:

- Is the logic of ‘realism’ unassailable?
- Does it hold good for the world of tomorrow?
- Has the argument for disarmament, and particularly for nuclear disarmament, ceased to be relevant for the survival of the human species?

The case for the possession of nuclear weapons needs to be assessed in strategic, legal, political, financial, developmental and environmental terms. This would unavoidably widen the ambit of discourse.

In the first place and according to the Federation of American Scientists, the global stockpile of nuclear warheads today remains at more than 20,000. Of these, more than 10,000 warheads are considered operational, of which a couple of thousand are on high alert, ready for use on short notice. The approach is premised on the doctrine of deterrence; the latter, however, remains inherently unstable, prone to human error or folly; the probability of the annihilation of the human race through the use of these weapons thus remains high, and must be considered unacceptable.

Secondly, nuclear armament ends up being, in its implications, anti-poor and anti-development. Stephen Schwartz, in his 1998 book ‘Atomic Audit’ on the comprehensive cost of the US nuclear weapons programme, has estimated that the US spent around \$6 trillion in total. The arms race led the former Soviet Union to the point of exhaustion and disintegration. The resource drain of other nuclear-weapon

Nuclear and Arms Control Centre

states would be equally high in proportionate terms. This level of spending by nuclear weapon states cannot but deny national resources for developmental or other purposes for public welfare.

Thirdly, the development, production, stockpiling and use of nuclear weapons results in immense, irreversible and unforeseen damage to the environment. As far back as 1987, the Report of the World Commission on Environment and Development, (known as the Brundtland Report), affirmed that “among the dangers facing the environment, the possibility of nuclear war is undoubtedly the gravest”. It noted that the “whole notion of security as traditionally understood in terms of political and military threats to national sovereignty must be expanded to include the growing impacts of environmental stress”; it concluded that “there are no military solutions to 'environmental insecurity'.”

Fourthly, there have been fundamental changes in the nature of conflict and of the structure of international relations. Conflict in the post-Cold War era has acquired new characteristics: it is not classical inter-state conflict; it is fuelled by identity based factors and issues of economic and social justice; and there is a drastic increase in the role of non-state actors. Weapons of mass destruction that were fashioned for inter-state conflict and their associated strategic deterrence doctrines premised on state behaviour have little relevance for the new reality.

The case for possession and use of nuclear weapons stands dented and lends credence to the need to re-think its fundamentals. Any endeavour on this basis must necessarily be rooted in legality and morality and be capable of demonstrating the advantages emanating from it.

How is this elusive goal to be attained? In exploring options, we need to remember that the community of nations has put in place agreements to outlaw chemical and biological weapons.

The question of legality poses problems. On a reference from the UN General Assembly on “threat or use of nuclear weapons”, the International Court of Justice gave an Advisory Opinion in July 1996. It decided that in customary or conventional international law there is neither an authorisation nor a prohibition of the threat or use of nuclear weapons. While it opined that such a threat or use would be contrary to the rules of international law applicable to armed conflicts, it noted that the current state of international law does not permit the Court to conclude definitively whether such threat or use would be lawful or unlawful in an extreme circumstance of self-defence, in which the very survival of a state would be at stake.

The distinguished audience here is cognizant of the UN General Assembly resolutions passed each year by a large majority reaffirming that “any use of nuclear weapons would be a violation of the Charter of the United Nations and a crime against humanity” as declared in its resolution 1653 (XVI) of 24 November 1961.

This reveals the desire of a very large section of the international community to move forward along the road to complete nuclear disarmament.

On the other hand, we have the annual re-affirmation of the Chapter VII Security Council Resolution 1540 of 2004 stating that proliferation of nuclear weapons “constitutes a threat to international peace and security”.

Put together, we get two sets of assertions:

Nuclear and Arms Control Centre

1. use of nuclear weapons is a crime against humanity;
2. proliferation of nuclear weapons is a threat against international peace and security.

Between the two ends of this spectrum, falls the question of production, possession and threat to use of nuclear weapons. It is an irony of Realpolitik that these have so far not been perceived to constitute a threat to international peace and security.

The ICJ addressed but did not resolve a critical question: Would a higher priority be accorded to the survival of the state if the survival of humanity itself were at stake?

A Dissenting Opinion summed up the legal dilemma: “The case as a whole presents an unparalleled tension between State practice and legal principle”. “When it comes to the supreme interests of State”, it noted, ‘the Court discards the legal progress of the Twentieth Century, puts aside the provisions of the United Nations Charter of which it is the principal judicial organ, and proclaims, in terms redolent of Realpolitik, its ambivalence about the most important provisions of modern international law”.

This impasse was reflected most recently in the Report of the UN Disarmament Commission on April 25, 2008 at the end of its Three Year Cycle of Deliberations. Releasing the Report, the Chairman of the Commission said that even set against the relatively low expectations, the results were meagre. “There was a stark contrast between the state of the world and the cooperation of the United Nations Member States in the Commission. Therefore, the credibility question is inescapable, and in time, each and every one of us should be able to answer it”.

The only way to resolve the impasse is to do it on a different plane. The modern state system is premised on the model emanating from the Peace of Westphalia. The reality of the sovereign state today, however, is very different from its theory. In 1991 Javier Perez de Cuellar had called upon the international community to help develop a “new concept, one which marries law and morality”.

Such an effort of bringing together law and morality would help initiate the process of resolving the dilemma highlighted by the ICJ in its Advisory Opinion. The process would then take us back to the Russell-Einstein Manifesto’s focus on the human being: “Remember your humanity, and forget the rest. If you can do so, the way lies open to a new Paradise; if you can not, there lies before you the risk of universal death.”

To transform vision into reality, a plan and a timetable on the pattern of the Rajiv Gandhi Action Plan would be essential. We have seen that, hitherto, nuclear disarmament has become almost synonymous with nuclear non-proliferation. A change would be possible only through such an Action Plan.

For much too long, ladies and gentlemen, the question of disarmament has remained in the exclusive domain of states and their experts. Is it not time now to open a window or two to let in the fresh breeze of global public opinion? We are aware of the beneficial results produced by such an approach in other areas that transcend state sovereignty.

Given the immobility of the current disarmament process, a new methodology may be worth a try”.

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Nuclear and Arms Control Centre

**Press Information Bureau
Government of India
Prime Minister's Office**

09-June-2008 11:57 IST

PM inaugurates International Conference on “Towards a World Free of Nuclear Weapons”

The Prime Minister, Dr. Manmohan Singh, inaugurated the International Conference on “Towards A World Free Of Nuclear Weapons” in New Delhi today. Speaking on the occasion, Dr. Singh said that we seek a world in which power flows through the empowerment of people, and from the strength and resilience of our economy, our society, our institutions and our values. The Prime Minister reiterated that India has no intention to engage in an arms race with anyone and said that India is fully committed to nuclear disarmament that is global, universal and non-discriminatory in nature,

“India is ready to add its own weight and voice to the global debate on nuclear disarmament with a view to crafting such a consensus on disarmament and non-proliferation. We need a collective approach anchored in a universal partnership that is supported by non-governmental communities and public opinion”, the Prime Minister added.

Following is the text of the Prime Minister’s address on the occasion:

“Welcome to New Delhi. We take great pride in hosting this International Conference on a subject that touches upon the very survival of humankind.

Twenty years ago, on this day, our former Prime Minister, Shri Rajiv Gandhi addressed the Third Special Session on Disarmament of the UN General Assembly.

Speaking on the theme of “A World Free of Nuclear Weapons” he introduced an Action Plan calling on the international community to negotiate a binding agreement on general and complete disarmament. At the heart of the Action Plan was a commitment to eliminate all nuclear weapons in three stages by 2010.

Rajiv Gandhi believed that disarmament, in particular nuclear disarmament, was essential to usher in a safe and non-violent world. He had a deep insight into the nature of evolution of technology, its potential for advancing human welfare as also for unleashing destruction. In this context he was acutely aware of the power of the atom. He wished that it should never again be used for destructive purposes.

The Rajiv Gandhi Action Plan was a comprehensive exposition of India’s approach towards global disarmament and continuity in our thinking. It symbolized the continuity in our thinking since 1954, when India pioneered the call for a complete ban on nuclear testing. The essential features of the Action Plan continue to remain valid even today.

A review of developments since 1988 presents a mixed picture on how far the world has moved to realise the vision of Rajiv Gandhi. On the one hand, the end of the Cold War has created an opportunity for the world to move away from the dangerous doctrines that were based on the precept of Mutually Assured Destruction. Greater engagement and realization of the inter-dependent nature of global security among major powers has created new space for action on disarmament. In 1993, the Conference on Disarmament was able to finalise the Chemical Weapons Convention, a multilateral, non-discriminatory and internationally verifiable treaty aimed at eliminating an entire category of weapons of mass destruction by

Nuclear and Arms Control Centre

a fixed date, namely 2012.

On the other hand, the painful reality is that the goal of global disarmament, based on the principles of universality, non-discrimination and effective compliance, still remains a distant one.

Even more disturbing, however, is the emergence of new threats and challenges to global security. I refer to the growing risk that nuclear weapons may be acquired by terrorists or those driven by extreme ideologies; the increasing danger of non-state actors, accessing nuclear materials and devices; the development of new weapon systems based on emerging technologies which pose challenges to space security and provide new roles for nuclear weapons; and the weakening of multilateralism even as bilateral arms control processes falter in shifting strategic landscapes.

The threat of climate change and global warming itself raises a range of security concerns, especially for us in the developing world.

India, which has witnessed rapid economic growth in the last few years, and is poised for even higher growth rates in the future, needs a peaceful international environment so that we can focus our resources on improving the lives of our people. We seek a world in which power flows through the empowerment of people, and from the strength and resilience of our economy, our society, our institutions and our values.

Our energy needs will continue to rise in the foreseeable future. We do not have the luxury of limiting our options of energy sources. We therefore wish to create an international environment in which nuclear technology is used not for destructive purposes but for helping us meet our national development goals and our energy security.

India is fully aware of its responsibilities as a nuclear weapon state. We have a declared doctrine of no first-use that is based on credible minimum deterrence. We have in place strict controls on export of nuclear and fissile related materials and technology. India has no intention to engage in an arms race with anyone. Above all, India is fully committed to nuclear disarmament that is global, universal and non-discriminatory in nature. The pursuit of this goal will enhance not only our security but the security of all other countries.

These objectives cannot be achieved through partial methods and approaches. The only effective form of nuclear disarmament and elimination of nuclear weapons is global disarmament. Nuclear weapons know no boundaries. Even today the nuclear arsenals in possession of the major powers are enough to destroy the world many times over. In this scenario it is not possible to “regionalize” nuclear disarmament.

It is in keeping with this approach that India has recently submitted a Working Paper on Nuclear Disarmament to the UN General Assembly, containing initiatives on nuclear disarmament. We hope to stimulate a debate and promote consensus on the way forward. These proposals have also been submitted before the Conference on Disarmament in Geneva. They are a set of practical measures for working towards the goal of a nuclear weapons free world. We do not wish to exclude other measures that may contribute to achieving this goal nor do we hold that there is a rigid hierarchy among these steps and a specific sequencing for their implementation. The measures we suggest include:

- Reaffirmation of the unequivocal commitment of all nuclear weapon States to the goal of complete elimination of nuclear weapons;

Nuclear and Arms Control Centre

- Reduction of the salience of nuclear weapons in security doctrines;
- Adoption of measures by nuclear weapon States to reduce nuclear danger, including the risks of accidental use of nuclear weapons;
- Negotiation of a global agreement among nuclear weapon States on ‘no-first-use’ of nuclear weapons;
- Negotiation of a universal and legally-binding agreement on non-use of nuclear weapons against non-nuclear weapon States;
- Negotiation of a Convention on the complete prohibition of the use or threat of use of nuclear weapons; and
- Negotiation of a Nuclear Weapons Convention prohibiting the development, production, stockpiling and use of nuclear weapons and on their destruction, leading to the global, non-discriminatory and verifiable elimination of nuclear weapons with a specified timeframe.

These proposals retain the spirit and substance of the Rajiv Gandhi Action Plan. We hope that other states will agree to a dialogue on these proposals, and will join us in committing to nuclear disarmament. That is the critical first step – a commitment, preferably a binding legal commitment through an international instrument, to eliminate nuclear weapons within a time bound framework. In parallel with this general commitment to nuclear disarmament, we need strengthened non-proliferation commitments such as on denying nuclear material, technology and equipment to terrorists. Pending global nuclear disarmament, all states must ensure that they do not allow proliferation of sensitive technologies into dangerous hands.

India is ready to add its own weight and voice to the global debate on nuclear disarmament with a view to crafting such a consensus on disarmament and non-proliferation. We need a collective approach anchored in a universal partnership that is supported by non-governmental communities and public opinion.

I wish your deliberations all success”.

AD/HS/MK

URL: <http://pib.nic.in/newsite/erelease.aspx?relid=39466>

**Press Information Bureau
Government of India
Ministry of Health and Family Welfare**

11-March-2008 15:8 IST

Global democratic processes must make progress towards nuclear disarmament possible: Dr. Ramadoss

Addressing the distinguished delegates on the concluding day of the 18th World Congress of International Physicians for the Prevention of Nuclear War (IPPNW) today, the Union Minister for Health & Family Welfare, Dr. Anbumani Ramadoss said that no other time would be more apt than the present period to debate on a theme of peace, health and development in the context of nations acquiring increasing

Nuclear and Arms Control Centre

destruction abilities using nuclear weapons. Representatives and leaders from more than 59 countries are participating in the Conference jointly organised by International Physicians for the Prevention of Nuclear War (IPPNW) and Indian Doctors for Peace and Development (IDPD).

The following is the summary of the Health Minister's speech:

History is witness to the unprecedented destruction caused by the atomic bombing on Hiroshima and Nagasaki. Till then mankind had only speculated the destruction it may cause. The damage done to mankind and civilization is remembered even today for the humanity to learn lessons. As of today, even if the States decide against the use of nuclear weapons, there is a serious danger of these weapons falling into the hands of non-state groups. A still dangerous proposition is the terrorists using these bombs or improvised nuclear devices.

However, the global race for nuclear militarization has forced countries with limited resources to think and act for preparedness and response. It is in this context that this Conference may have touched upon wide-ranging topics such as Nuclear Arms Race – Emerging Challenges, Small Arms Violence and Health, Globalization and Health, Energy Security and Environment, which are relevant to us today.

The International community is facing today a bigger challenge than nuclear destruction. The challenge of alcoholism, smoking and drug abuse needs the attention and action at global level. I hope the IDPD initiative of involving youth to mobilize opinion among community for peace and development will now also take up these challenges and would be a turning point for this generation to shape things for the future.

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URL: <http://pib.nic.in/newsite/erelease.aspx?relid=36253>

**Press Information Bureau
Government of India
Vice President's Secretariat**

09-March-2008 15:52 IST

Vice President addresses the 18th World Congress of International Physicians for the Prevention of Nuclear War

Following is the text of the Vice President of India, Shri Mohammad Hamid Ansari at the 18th World Congress of International Physicians for the Prevention of Nuclear War (IPPNW) here today.

“I am happy to be here at the inauguration of the 18th World Congress of International Physicians for the Prevention of Nuclear War. The pioneering work of the organisation and its efforts for peace, health and development need no mention here; it has been awarded the Noble Peace Prize. Conferences of this nature help in better understanding of the causes of armed conflict, especially from a public health perspective, and build grassroots awareness of the immense health and environment consequences of nuclear war. The involvement of students and youth as part of these conferences brings in the much-needed dimension of spreading awareness among the future decision makers.

This distinguished audience needs no reminding that the first resolution of the UN General Assembly of

Nuclear and Arms Control Centre

24th January, 1946 was adopted unanimously and sought the elimination of atomic weapons and all other major weapons adaptable to mass destruction from national armaments and the control of atomic energy to ensure its use only for peaceful purposes. The horrors of the use of nuclear weapons have convinced all responsible nations that elimination of nuclear weapons is necessary. The International Court of Justice had in its advisory opinion of 8 July 1996 concluded that “there exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control”. The nuclear disarmament discourse has been enriched by the contributions of the Non-Alignment Movement, various members States including India and even the community of Non-Governmental Organisations.

While there is agreement on the principle, the practical means and approaches necessary for realising this vision have been the subject of much debate and divergence of opinion. It was India that first proposed an end to nuclear testing in 1954. The principles for a Nuclear Non-Proliferation Treaty (NPT) were first proposed by India in 1965. India eventually refused to sign the NPT when it became clear that, instead of addressing the central objective of universal and comprehensive non-proliferation, the treaty only legitimized the continuing possession and multiplication of nuclear stockpiles by those few states possessing them.

I am reminded of what the Late Prime Minister Shri Rajiv Gandhi said in a speech before the United Nations. He argued: "We cannot accept the logic that a few nations have the right to pursue their security by threatening the survival of mankind...nor is it acceptable that those who possess nuclear weapons are freed of all controls while those without nuclear weapons are policed against their production. History is full of such prejudices paraded as iron laws: That men are superior to women; that white races are superior to the coloured; that colonialism is a civilizing mission; (and) that those who possess nuclear weapons are responsible powers and those who do not are not."

India aspires for a world that embodies this vision of Late Shri Rajiv Gandhi, of a non-violent world, free from the scourge of nuclear weapons. We have always held that progress towards nuclear disarmament will require mutual confidence in the international community to conclude universal, non-discriminatory and verifiable prohibitions on nuclear weapons leading to their complete elimination. We believe that the following elements constitute actionable and concrete steps towards achieving nuclear disarmament and have placed them for debate before the international community:

1. Reaffirmation of the unequivocal commitment of all nuclear-weapon States to the goal of complete elimination of nuclear weapons;
2. Negotiation of a convention on the complete prohibition of the use or threat of use of nuclear weapons.
3. Negotiation of a nuclear weapons convention prohibiting the development, production, stockpiling and use of nuclear weapons and on their destruction, leading to the global, non-discriminatory and verifiable elimination of nuclear weapons with a specified time frame.

An op-ed in The Wall Street Journal of 15th January, 2008 by George Shultz, William Perry, Henry Kissinger and Sam Nunn has again focused on nuclear disarmament noting that the spread of nuclear weapons know-how and material has brought us to “a nuclear tipping point”. They emphasised the need for a global dialogue that includes non-nuclear and nuclear nations to discuss, among other issues, “turning the goal of a world without nuclear weapons into a practical enterprise among nations, by

Nuclear and Arms Control Centre

applying the necessary political will to build an international consensus on priorities”. Yet, it is worth noting, that six decades after Hiroshima and Nagasaki, the focus of international efforts is still on “applying the necessary political will to build an international consensus on priorities”. It is a measure of the distance we need to travel to realise the vision of universal nuclear disarmament.

The theme of the Congress, ‘Peace, Health and Development’, is timely. I wish the Congress all success”.

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URL: <http://pib.nic.in/newsite/erelease.aspx?relid=36132>

**Press Information Bureau
Government of India
Ministry of Defence**

05-February-2008 18:38 IST

NPT Skewed, New Nuclear Weapon Nations Threat to World Peace: Pranab Mukherjee

Following is the text of the key note address delivered by the External Affairs Minister Shri Pranab Mukherjee to the 10th Asian Security Conference on “Asian Security in the 21st Century”, organized by the Institute for Defence Studies and Analyses (IDSA) here today:

It is indeed an honour to address this distinguished gathering of scholars and experts from around the world. IDSA has been at the forefront of the Indian debate on national and international security issues for the last 42 years. Its annual Asian Security Conference has served as an important international forum for the last 10 years. Each year, distinguished experts have assembled here to share and debate their views and perspectives on Asian security and on how to manage it better. On the 10th anniversary of this forum, IDSA has rightly chosen to focus on some of the pressing security issues that face Asia as a whole. I am sure your discussions over the next three days would go a long way in enlarging our understanding of Asia’s many security dilemmas and help devise better solutions to manage them.

This morning I would like to offer you my thoughts on some key issues relating to Asian security in the 21st Century.

Asia in the 21st Century will be a very different place than what it was in the past. For over 200 years, external powers played a dominant role in shaping Asia’s political, social, economic and cultural arenas. This situation has been undergoing significant changes for quite some time now.

The balance of influence on Asian affairs has begun to shift in favour of the countries of Asia. Japan was a lone swallow in the first half of the 20th Century. But in its second half, it blazed a trail that was followed by the East and Southeast Asian tiger economies. China and India have further fanned this Asian revival with their prowess in the manufacturing and service sectors. Asia today contributes just around a quarter of the global GDP, and this share is expected to rise to more than 50 per cent of the world by 2025. As Prime Minister Dr. Manmohan Singh recently noted, by the middle of the century, Asia may well account

Nuclear and Arms Control Centre

for more than 50 percent of foreign trade, income, saving, investment and financial transactions of the globe.

Asia's economic revival has given rise to many predictions about its future. These projections are based on two factors. The first is Asia's growing and relatively youthful population. It has been estimated that by 2010, 60 per cent of the world's population in the age group of 20 to 35 is likely to be Asian. And the second is the rapid growth of several Asian economies during the last few decades. China, for example, has been averaging a growth rate of about 9 per cent a year since 1980. For its part, India has averaged 8.5 per cent a year in the last five years. It is believed that these two factors would enable Asian countries to dominate the international economy and, by extension, international politics and security.

Whether this scenario comes about or not depends on a number of domestic and external factors. But what seems certain is the growing influence of major Asian countries on the structures and processes of international relations in Asia. At the same time, we cannot overlook the influence of external actors on the continent. Asian security in the 21st Century will thus be shaped by the interactions between major Asian powers and influential external actors such as EU, Russia and the United States.

Many security challenges confront Asia today - the spread of nuclear weapons, the threat of terrorism, threats to energy security, and so on. And many more challenges are likely to arise in the course of the Century, including the issue of climate change.

India has a critical role to play in tackling these challenges. With its economy growing at an impressive rate over the last few years, India has emerged as one of the drivers of economic growth in the world. India is a unique example of a country where development and democracy have gone hand in hand. Its role has become crucial for international economic integration and trade organisation, for preventing the spread of nuclear weapons, for tackling the threat of terrorism, for stabilising conflict-affected states like Afghanistan, for dealing with the issue of climate change, for building and strengthening multilateral institutions, and for collective and cooperative security in Asia.

A principal cause of concern in recent years has been the threat of nuclear proliferation. This is not limited only to new states acquiring nuclear weapons capability. It also extends to the very real threat of terrorist groups laying their hands on nuclear material and even fully assembled nuclear weapons.

These two security challenges are interlinked. And they are products of the demand-supply dynamic. On the supply side, the proliferation problem is a product of two factors. One is the inability of states to sufficiently safeguard their nuclear material, technology and facilities against attempts to procure WMD relevant items. The second factor is deliberate and callous proliferation by states including state failure to exercise adequate control over personnel engaged in nuclear programmes. It is well known how transfer of uranium enrichment technology, equipment and even weapon design has taken place clandestinely and flagrantly in our region. Even more alarming is the interest shown by radical terrorist groups in acquiring nuclear material and technology and the linkages that they had forged with a few nuclear scientists.

The challenge before us is to make sure that national laws and international commitments are better implemented by states to prevent leakage of material and technology from established nuclear programmes. The challenge also is to do this consistently and without short-term considerations of political expediency.

Nuclear and Arms Control Centre

On the demand side, the best way to address the dilemmas in the nuclear domain is to focus our efforts on the goal of global nuclear disarmament.

India, as you know, has held a principled position on the issue of nuclear weapons since the dawn of the nuclear age. It has many firsts to its credit in promoting arms control, disarmament and nonproliferation. As early as 1954, Pandit Jawaharlal Nehru issued the first ever call for a standstill to nuclear weapons tests. In 1965, it was India that first put forward the principles for a Nuclear Non-Proliferation Treaty. Indian enthusiasm for the NPT waned when it saw the reluctance of established nuclear powers to give up their arsenals. But in all these years, we have strictly abided by all the basic obligations enshrined in this Treaty as they apply to nuclear weapon States. Today, as a responsible nuclear weapon power, we are even more mindful of our duty to control the spread of WMD technologies and their delivery systems. We have signalled our willingness to be a part of the international consensus by adopting a comprehensive WMD Export Control legislation. We have also harmonised our export control lists with those prescribed by the Nuclear Suppliers Group and Missile Technology Control Regime. These measures also fulfill the obligations prescribed by UN Security Council Resolution 1540, which calls upon states to refrain from supporting non-state actors in their quest for weapons of mass destruction and their delivery systems.

We do not wish to see the emergence of additional nuclear weapon states, for it will only further endanger international security. And our goal continues to be a world free of nuclear weapons. This year marks twenty years since the late Rajiv Gandhi presented a bold Action Plan for a nuclear weapon free and non-violent world order. The central premises of the 1988 Rajiv Gandhi Action Plan are of current significance and relevance as they were two decades ago:

- First, a binding commitment by all nations to eliminate nuclear weapons in stages;
- Second, participation by all states in the process of nuclear disarmament; and here I would like to emphasise that nuclear disarmament does not alone mean arms control;
- Third, demonstration of good faith and building of confidence through tangible progress towards the common goal of a nuclear weapon free world;
- Fourth, changes in doctrines, policies and institutions to sustain a world free of nuclear weapons.

The vision of Shri Rajiv Gandhi continues to guide India's approach to nuclear disarmament. Personalities such as Henry Kissinger, George Shultz, Sam Nunn and William Perry who were at the center of crafting nuclear policy and who thought that nuclear weapons were essential to the security of their state are having a rethink today. We welcome this development and hope it leads, as envisaged in the Rajiv Gandhi Action Plan, to a commitment by all states to a nuclear weapon free world. As a responsible nuclear weapon power, India is ready to play its part in the process leading to global, non-discriminatory and verifiable elimination of nuclear weapons.

I now turn to the challenge of terrorism which haunts the world today. Asia in particular is home to by far the largest number of terrorist groups in the world. India has been facing this curse since the nineteen-eighties; first in Punjab, then in Jammu and Kashmir, and now in other parts of the country as well. We have consistently highlighted the need for a unified international response to transnational and trans-border terrorism.

Nuclear and Arms Control Centre

Terrorists derive their justification from politics, perceived or genuine grievances and economic disadvantage. In our view, no goal or grievance can justify the targeting of innocent people. In our view, terrorism is best defined as the deliberate targeting of innocent men, women and children. The September 11 attacks, the Madrid train bombing, the tragedy at Beslan, targeting of the London Underground, the serial bombs that ripped through Mumbai's commuter trains during rush hour in July 2006, all demonstrate this basic fact. Secondly the fact that terrorists have successfully used weakly governed territories to organise attacks, recruit and train their cadres should not obscure the responsibility of the state concerned to prevent the misuse of its territory for terrorist attacks. Terrorism is not a political tool to be deployed and withdrawn at will, for it can turn around and critically wound the state that wields it.

Afghanistan under Taliban rule was the most telling example in this regard. Continuing to allow these groups to enjoy the luxury of this space will have terrible consequences for the world at large. It is vital that Afghanistan emerges as a stable and peaceful country that no longer serves as a base for these groups.

The legitimately elected government in Kabul must be enabled to extend its rule throughout the country. Reconstruction activities need to go hand in hand with efforts to combat radical groups and ensure security. India is one of the largest contributors to the reconstruction effort in Afghanistan. We have committed around 800 million US dollars. Three thousand five hundred Indians work in various projects in that country. We will persevere with our earnest efforts in this regard and we will continue to coordinate these efforts with those of the international community.

It is equally important to stabilise Iraq, which is being torn apart by various factors including sectarian conflict and a violent insurgency. Failure will have repercussions throughout the West Asian region. Regional instability could damage the international economy by disrupting energy supplies and further driving up oil prices which have already breached the 100 dollar mark.

In the context of instability in West Asia, we need to reflect on issues impinging on energy security. Rapid economic growth, especially in Asia, is causing increased demands for fossil fuel. At the same time, reserves are estimated to deplete in future. There is the additional fear that energy flows could be disrupted either by the actions of states or non-state actors. Asian countries, which predominantly source their fossil fuel requirements from the Persian Gulf, seem particularly vulnerable to such disruptions. They all feel the acute need to ensure the security, stability and sustainability of fossil fuel supplies.

Allow me to share with you my thoughts on another important future challenge that will confront Asia as well as the world at large. This is the issue of climate change due to the accumulated and continuing emissions of carbon dioxide and other greenhouse gases. Weak and fragile states are particularly vulnerable to the damaging effects of climate change. You will recall that a few months ago UN Secretary General Ban Ki-moon highlighted the correlation between climate change and the crisis in Sudan's Darfur region. Climate change is truly a global problem and it requires global solutions. Developing countries like India cannot be expected to unilaterally forego the economic aspirations of their people. Advanced economies indeed have a greater obligation to cut down on emissions by encouraging more sustainable patterns of consumption. We need to devote greater efforts to generate alternate technologies and industrial processes that are environment-friendly and these technologies must be provided at affordable cost. The key principle is common but differentiated responsibility.

Nuclear and Arms Control Centre

None of the challenges I have outlined can be effectively tackled by individual countries on their own. Pooling national efforts and resources and channelling them through the cooperative structures of multilateral frameworks and institutions is essential. Only then can we muster the necessary will and resources to tackle these challenges.

Former UN Secretary-General Kofi Annan succinctly pointed out in an address at Harvard University in June 2004, and I quote a few lines from there: "It is in the interest of every country to have international rules and to abide by them. And such a system can only work if, in devising and applying the rules, the legitimate interests and points of view of different countries are accommodated, and decisions are reached collectively. That is the essence of multilateralism ...".

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