

International Atomic Energy Agency

questions at iaea@busun.net.

Welcome

Best wishes,
Asad Hassan

Dear Delegates,

Welcome to BUSUN 2010 and the International Atomic Energy Agency (IAEA). I hope that all of you are as excited as I am to take on the challenges that we face in this committee.

My name is Asad Hassan, and I am currently a sophomore concentrating in Engineering and Economics. I have been engaged with Model UN since high school, and this will be my second year being involved with BUSUN. Last year, I directed the Pakistan Cabinet, which was a mini-crisis committee. I have chaired committees like DISEC and CTC at other Model UN conferences. Chairing the IAEA will be a different experience for me, but I really look forward to it.

I hope this background guide will prove to be useful for you to start your own research and have some basic idea about the origins and aims of the IAEA and the necessary knowledge about the three topics that will be presented for discussion in the committee. However, I hope that you will realize that this document should only serve to get you started with your BUSUN preparation, as there is a vast amount of information that I cannot possibly cover in detail. I urge you to know the history and foreign policy of your country and particularly its stance pertaining to the specified topics. It is also important to keep yourself updated with recent developments regarding the topics as this guide was drafted well before our committee proceedings.

Although this is not a committee of the United Nations, we will use the standard rules and procedures of debate of the UN.

I look forward to perusing your position papers and some exciting debate in the committee! Do not hesitate to direct your

Committee History

The aim of the IAEA is to promote the peaceful use of nuclear technology and contain its use for military purposes like nuclear weapons. The genesis of the IAEA was the 'Atoms for Peace' speech delivered by President Eisenhower in the United Nations in 1953. As a result, 81 countries signed the IAEA Statute in 1956 and the Agency was formed independently of the U.N. in 1957. However, the Agency reports both to the U.N. General Assembly and the Security Council.

The three main pillars of the IAEA as described by the Statute are nuclear verification and security, safety and technology transfer. Due to the circumstances spelled out by the Cold War, it was impossible for the IAEA to begin work on its most important goals. However, after the Cuban Missile Crisis, the need for curbing nuclear weapons was strongly realized as the U.S and U.S.S.R. started seeking an agreement to limit nuclear weapons. As the nuclear club expanded to France and China by 1964, the need for controlling the spread of nuclear weapons paved the way for the Non-Proliferation Treaty in 1968. With the rising preference for nuclear energy especially in the light of the Middle East oil crisis, the need for a regulatory body was stronger than ever. The Chernobyl disaster reinforced the need for tangible, global safety measures. However the clandestine Iraqi nuclear program and NPT violations by North Korea in the 1990s drew attention to the need to strengthen the IAEA.

The Agency however can be accredited with the fact that Latin America, Africa, South East Asia and the South Pacific are nuclear weapons free. The IAEA was instrumental in

averting the proliferation of weapons after the collapse of the Soviet Union. Today, the IAEA has 151 members. The broad aims of the IAEA are verification of the peaceful use or storage of nuclear material from dismantled weapons and surplus military stocks of fissile material, determining the risks posed by the nuclear wastes of nuclear warships dumped in the Arctic, and verifying the safety of former nuclear test sites in Central Asia and the Pacific. In recent years, the Agency's work has taken on some urgent added dimensions. Among them are countermeasures against the threat of nuclear terrorism, the focus of a new multi-faceted Agency action plan.

In 2005, IAEA and its former Director General Mr. Mohamed El Baradei were awarded the Nobel Peace Prize in recognition of its struggle for a nuclear weapons free world.

Topic 1: Indo-US Nuclear Deal

Background

The Indo-US Nuclear Agreement Deal is the bilateral accord on civil nuclear cooperation between India and the United States. The accord was a result of a joint statement by President Bush and Indian Prime Minister Manmohan Singh in July 2005. Through this new deal, India envisions adding 25,000 megawatts of electricity to its nuclear power capacity by 2020. This would also see investment worth \$150 billion coming into India in the next decade for nuclear plants. As a result of this deal, India signed a similar agreement to purchase nuclear fuel and technology from France.

This highly controversial deal was made possible through several stages, which included amendments in U.S. domestic law, a new IAEA safeguard agreement and change in policy by the Nuclear Suppliers Group (NSG). Under the deal, India agreed to separate its civil and military nuclear program and place its civil

facilities under IAEA safeguards. The U.S. Congress passed the Hyde Act, also known as the Peaceful Atomic Energy Cooperation (PAEC) Act that modified the requirements of the U.S. Atomic Energy Act paving the way for the 123 Agreement. The NSG, a 45 member nuclear export cartel, made a special exception by granting a waiver to India whereby allowing nuclear trade with a country possessing nuclear weapons but not part of the Non-Proliferation Treaty (NPT).

The NPT recognizes the right of signatories to have access to peaceful nuclear technology allowing cooperation for civil nuclear programs. India, which is not part of the NPT, was thus barred from nuclear trade and it was not recognized as a nuclear state. However the agreement bypassed the NPT, tacitly legitimizing India's nuclear weapons and allowing access to nuclear technology and fuel from other countries.

Bloc Positions

The deal was seen as a major success for the Indian government. However the Prime Minister barred the deal from parliamentary scrutiny. Some political parties and activists offered stiff resistance over the deal and the government narrowly survived a vote of confidence. India maintains that the NPT is a biased treaty, legitimizing the nuclear weapons of only a few countries, and denying the technology to rest of the world, and thus does not effectively counter the question of non-proliferation. For the United States, it was a way to strengthen the strategic ties with India and to get a share in the future nuclear industry. Congress passed the PAEC Act with an overwhelming bipartisan support. The U.S. maintains that the deal would bring India closer to the NPT regime and recognize the commitment to non-proliferation. The U.S. also asserts that it has the right to terminate the deal if India tests a nuclear weapon. Russia, one of India's strongest allies, has supported the

deal, saying that it is recognition of non-proliferation efforts of India. China on the other hand declared to the NPT regime that the deal had hurt the aspirations of other countries, a referral to ally Pakistan. Recently, China inked a civil nuclear cooperation pact with Pakistan, which is also a non-signatory of the NPT, but possess nuclear weapons. The U.S. has demanded more transparency in the deal. Pakistan also approached the U.S. for a similar agreement, but was refused.

Issues and Questions to Consider

1. How will granting an exception to India affect global efforts to curtail nuclear weapons especially in the case of North Korea and Iran? What about other countries like Israel and Pakistan who have refused to sign the NPT?
2. How relevant is the NPT, given the case of India?
3. What effect will the deal have on the current arms balance in the Indian Subcontinent?

Topic 2: Transportation of Radioactive Material

Background

About twenty million consignments of various sizes containing nuclear materials are transported worldwide annually using public roads, railways, ships and aircrafts. It consists not only of fuel for, and radioactive waste from, nuclear power plants, but also of substances for medical diagnoses and treatment, sterilization, agriculture, food preservation and education, and a plethora of industrial applications including oil production. There has never been any accident in which a container with highly radioactive material has been breached, or has leaked. This can be accredited to the stringent safety requirements placed by the IAEA in conjunction with other organizations.

Under the terms of Article III of its Statute, the IAEA is authorized to establish or adopt standards of safety for protection of health and minimization of danger to life and property, and to provide for the application of these standards. IAEA safety standards are specified in the IAEA Safety Standard Series, which also includes transport safety.

In short, the transport safety standards are determined by IAEA technical committees taking into consideration the recommendations and findings of the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) and the International Commission on Radiological Protection (ICRP). Given the international dimension of transport, after approval, the transport safety standards established by the IAEA are incorporated into the UN Model Regulations for the Transport of Dangerous Goods. The UN Model Regulations apply to all nine classes of dangerous goods, and the standards of the IAEA serve as the sole input for the so-called "Class 7 radioactive material". The standards are then implemented with the aid of organizations like the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO).

Questions and Issues to Consider

Although, there has been no incident related to the safe transport of radioactive materials, concerns persist. The absence of a nuclear liability regime that is comprehensive in terms of coverage and membership has a considerable impact on the confidence placed in radioactive material transport operations. Some questions to consider are:

1. Is the current regulatory regime sufficient, and, if not, what improvements are needed?
2. Are all member states effectively implementing the standards?
3. Is the present international regime for emergency notification and response suitable for dealing with emergencies involving the

transport of radioactive material?

Topic 3: Management of Hazardous Wastes

Background

Hazardous wastes can include a variety of substances produced as unwanted byproducts of industrial, medical and chemical procedures. However, the IAEA is responsible for the management of radioactive waste in particular. Radioactive waste forms a very small part of the total amount of hazardous waste produced in the world. In the OECD countries, some 300 million tons of toxic wastes are produced each year, but conditioned radioactive wastes amount to only 81,000 m³ per year. There are three main kinds of radioactive wastes, Low Level Waste (LLW), produced from hospitals, medical procedures and industry, Intermediate Level Waste (ILW) and High Level Waste (HLW) produced from the nuclear fuel cycle itself. LLW can be safely buried in shallow landfill sites and has a short half-life. HLW however needs to be buried deep underground or far off in remote areas to prevent interaction with the living environment and is therefore of greater concern.

Waste from the fuel cycle can either be disposed directly, or it can be reprocessed to extract useful fuel and then dispose the remaining waste. HLW also needs to be treated before it can be finally disposed. It is left in sealed canisters and placed under ponds of water or dry concrete structures to reduce radioactivity and heat for up to 50 years. The waste can then be disposed off deep underground or in remote areas, yet the waste is not safe for thousands of more years, until the radioactivity decreases significantly.

Dealing with this waste poses significant problems. Effective waste disposal schemes are not put in place for financial reasons. Finland, Sweden and France are developing geologic

disposal sites for nuclear waste, 400 meters to 500 meters underground. However this is a difficult and very expensive procedure. In the United States, the Energy Department scrapped plans to create a permanent storage facility under the Yucca Mountain in Nevada after spending \$10 billion over thirty years. As a result, nuclear waste is being stored in now-defunct nuclear facilities not only posing a threat to the environment, but also raising concerns about nuclear proliferation.

With the lack of proper disposal facilities, radioactive and hazardous wastes are being illegally dumped. Russia has been accused of dumping radioactive waste and nuclear reactors containing spent fuel from submarines into the Arctic. It has been alleged that Guinea Bissau was to be paid \$600 million for storing and disposing of imported hazardous waste. The United States has been accused to 'exporting' its nuclear waste to places like Somalia and the South Pacific.

Issues and Questions to Consider

A summary of the amounts of radioactive wastes and management approaches for most developed countries are presented and reviewed periodically as part of the IAEA Joint Convention on Safety of Spent Fuel Management and the Safety of Radioactive Waste Management. However, there is lack of a common framework for the safety of radioactive waste management and disposal. Some questions to consider are:

1. What steps are necessary for the IAEA to prevent illegal dumping of waste?
2. How can the IAEA assist in measures to find a permanent waste disposal scheme?
3. Can the IAEA hold countries responsible for disposing nuclear waste at the peril of the environment or poorer countries?

Helpful Resources

International Atomic Energy Agency

www.iaea.org

United Nations Office for Disarmament Affairs

<http://www.un.org/disarmament/index.shtml>

World Nuclear Association

<http://www.world-nuclear.org>

News Sources

IAEA News Centre:

<http://www.iaea.org/NewsCenter/index.html>

BBC: www.bbc.co.uk

CNN: www.cnn.com

New York Times: <http://www.nytimes.com/>

Wall Street Journal: <http://online.wsj.com>

IBN-Live: <http://ibnlive.in.com/>