
UNIT 9 DISARMAMENT AND ARMS CONTROL

Structure

- 9.1 Introduction
- 9.2 Disarmament
- 9.3 Arms Control
- 9.4 A Brief History of Arms Control and Disarmament
- 9.5 Arms Control and Disarmament Agreements
- 9.6 Descent in Hopes
- 9.7 Summary
- 9.8 Exercises

9.1 INTRODUCTION

It is well known that the physical availability of weapons can trigger mental states of anger and hostility into violent conflicts. Weapons and armed forces have a similar role in triggering wars. Even though mankind did often realise the devastation that war causes and wanted to avoid war, countries almost always stopped short of giving up arms – because of the compelling need to protect themselves against external aggression. As we noted in the earlier units, states function in anarchy, that is, in the absence of a higher authority to settle disputes between them. They constantly face, what has been described as a security dilemma, 'a structural notion in which the self-help attempts of state to look after their security needs, tends regardless of intentions to lead to rising insecurity for others as each interprets the its own measures as defensive and the measures of others as potentially threatening' (Herz, 1950). The self-help measures largely took the form of formation of alliances with other states to counter the 'enemy' or acquisition of arms in larger and better arms than those of the 'enemy' state. With the other states responding in a similar manner, there ensued an arms race between states or group of states. The two military grouping that emerged after the World War II, the Eastern bloc and the Western bloc of countries became locked in an arms race. With each of the superpower, that is, the United States and the Soviet Union, the leaders of these two bloc of counties, seeking to acquire more and better weapons than the other, a dangerous arms race ensued. By the early 1960s, they had stockpiled enough weapons to destroy the earth many times over. Out of this frightening scenario grew a concern for an immediate, effective check on the mad arms race and a need to make serious and sincere efforts towards disarmament and arms control. This unit examines arms control and disarmament efforts as tools for conflict avoidance and containment. The unit first clarifies the significant distinction between the two concepts, arms control and disarmament, which are frequently used interchangeably as linked, compatible and sometime as synonymous concepts. Later, it examines and assesses the arms control and disarmament measure5 take up, in the post-war period which witnessed the development and deployment of new and highly lethal weapons.

9.2 DISARMAMENT

As the word connotes, disarmament simply means denying oneself or a country from possessing weapons or certain types of weapons. Since the urge to resort to a violent fight is directly related to having a weapon at hand, be it a stick, or be it a ballistic missile, the best way to avert violent fights is to deny access to weapons. Thus, to people abjuring war or wishing at least to actively control its occurrence, disarmament becomes a high priority goal. The development and deployment of **enormously** destructive weapons-from field guns to high explosive bombs, from battle ships to submarines, from aeroplanes to rockets, from poisonous gases to nuclear bombs, made possible by the rapid advances in science and technology only increased the desire and urgency for **disarmament**.

World War I saw the coming into use of many of the weapons mentioned above and the scale of that war frightened the world about the very thought of war. As a corollary, disarmament as a device limiting war emerged as an urgent concern for the **League of Nations**.

However, simple and attractive disarmament appears to be a panacea for controlling wars; it is not a reliable method. Either denying some 'aggressive' states the right to maintain armies, or requiring nations to agree not to equip themselves with certain types of weapons (like naval ships, or aeroplanes) are not practicable means. It is equally difficult to **ensure** that armed forces are quantitatively limited. Therefore, **disarmament** became a very **ineffective** method. The sophistication of weapons which increased by leaps and bounds during and after the World War II placed further obstacles in the disarmament efforts. Particularly, the manufacture of nuclear weapons and their delivery systems during the cold war years greatly lessened the enthusiasm for disarmament and the methods of **arms control** emerged as prominent alternatives.

Disarmament has been a goal of peace movements and individual peace leaders as well as out and out pacifists, since the **mid-19th** century or even earlier. But the idea of stopping war by denying or destroying military weapons could only make sense in a context with a fairly high degree of military technology, because it requires specific single-function objects that can clearly be identified as weapons. So, it is the uniqueness of **modern** weapons as well as their destructiveness that has made disarmament seen as a way of controlling warfare. This idea has two separate foundations. Firstly, even if conflict is in human nature, a war fought without modern weaponry is clearly less **dangerous** for the human race. Secondly, the possession of rival complex of **armories** and the consequent arms races can actively be seen as causing wars, which would not happen otherwise.

The first imperfect disarmament attempts occurred during the period between the two world wars. Among the different disarmament theories and methods adopted, weapons specific disarmament measures were the first to be adopted. These aimed at prohibiting or limiting certain categories of weapons which were then regarded as a prime cause for wars on a large scale. The League of Nations promoted the Naval Disarmament Conferences among the then big powers, the UK, the USA, France, Japan and Italy and fixed quota-like limitation on sizes of the naval ships and the armaments they carry. This was accomplished at the Washington and London Naval Conference in the 1920s. The other attempts related to 'general and complete' disarmament. Examples of this include denying Germany, the

right to maintain an 'air-force', as a disarmament measure. Other efforts were also initiated to limit the size of armies to specific levels.

These initiatives only underlined the conviction during the inter-war period that armaments as a cause of war should be controlled. However, with the rise of fascism and Nazism in the third decade of the 20th century, rearmament, not disarmament, became a reality in Europe.

The compulsion of disarmament re-manifested after the World War II with the appearance of the atomic bomb on the scene and the advances in weapons technologies like jet-propelled long-range missiles. These developments led to the UN adopting disarmament as a high priority item in discharging its primary function of maintaining peace and security in the world.

9.3 ARMS CONTROL

While disarmament is based on the assumption that the existence of weapons is the fundamental cause of uncertainty and conflicts, arms control approach is based on the assumption that the existence of weapons is not a cause but a consequence of inter-state conflicts. While the former seeks to eliminate armaments, the latter seeks to regulate the armament race for the purposes of creating a measure of stability.

Typically, arms control policies aim at negotiating limits on the development, stockpiling and use of weapons. These policies can be broadly divided into three categories: arms reduction, arms limitation and arms freeze. Arms reduction policies seek to lower the arms level. This is sometimes called partial disarmament. Arms limitation policies attempt to limit the scope and destructiveness of warfare and to prevent its accidental outbreak. Arms freeze policies aim at placing a ceiling on the growth of certain categories of arms so that rival state can feel comfortable in their military parity.

Along with this way of controlling new weapons, another concept also emerged. This relates to the regulation of deployment of nuclear weapons systems, so that the overall use of these weapons will on the whole be less destructive or even avoided. Broadly, known by the name of nuclear strategic theory-this dominated the thinking of the superpowers during the Cold War period. For example, the well-known theory of nuclear deterrence that gained common currency during the Cold War years is a part of this thinking. It is generally believed that the very possession of nuclear weapons by a country will deter an enemy from attacking that country first. The fear of suffering unacceptable damage from the nuclear weapons country would restrain an enemy. From this flowed other complicated strategic theories like the first and second-strike capability and the doctrine of Mutually Assured Destruction (MAD). This doctrine is based on the idea that since advanced nuclear weapons can inflict unspeakable extent of damage, rival nuclear weapons powers should 'deliberately' open themselves for destruction reciprocally (mutual destruction) so that this will keep the balance of nuclear terror among the enemies from unleashing nuclear war on each other. In its turn, this doctrine led to the bizarre, but arguably realistic hope, that 'arms control' should aim at limiting defensive weapons on both sides of the nuclear divide so that each side can remain open for an enemy offensive, if any one side is foolishly tempted to attack first. If such an attack was indeed to take place, then the 'victim' of

this first **strike** will retaliate with its offensive **capability** with such severity that the 'initiating' party will be totally destroyed. It is this prospect of total destruction that will not tempt the initiating country with its foolhardy initial strike. Accompanying this strategic doctrine is the theory that the superpowers should plan to destroy population centres (counter-city) rather than the centres where the weapons and forces of the enemy (counter-force). Many such theories and sub-theories emerged as arms control **prescriptions**. Strategic theorists like, Scheolling, Herman Kahn, Bernard Brodies, mainly from the US, advocated such 'arms control' measures. In this manner, arms controls supplemented disarmament as a device to control the incidence, or more realistically, the escalation of war in the nuclear war context.

The dominance of nuclear strategic theories does not, however, imply that nuclear disarmament, that is **disarming** the countries from nuclear weapons, was given up. But the point is that as the number of nuclear weapon countries increased, abolishing nuclear bombs was regarded as utopian. The US was the first to show its disillusionment with nuclear disarmament. The Soviet Union, on the other hand, from the start laid its hopes on complete nuclear disarmament. It is open to question how sincere the Soviet Union was in this regard.

The shift from disarmament to **arms** control is analysed by Lawrence Freedom in his *The Evolution of Nuclear Strategy* thus: "The drastic surgery of disarmament was rejected as being over-simple theorizing and a certain innocence as to the strategic facts of life. Once the opportunity to abolish atomic bombs...had passed it only became a matter of time before policy makers stopped pretending that they had any confidence in complete disarmament.... American negotiations accepted the bomb as a fact of international life whose influence must be controlled, rather than as an evil to be abolished...Unfortunately the lack of movement in disarmament negotiations renewed the terms associated with futility.... The term 'arms control', came to be adopted indicating a move away from attempts at total elimination of nuclear weapons with balanced reduction of conventional areas to the strengthening of deterrence and the guarding against surprise attack".

The continuing relevance of Disarmament

However, it is not as though disarmament is given up as 'futile'. For that matter, the attempted abolition of the nuclear bomb fondly hoped for under the Baruch Plan and followed up by the Eisenhower administration in the late 1945s, though failed, finally took the shape of nuclear Non Proliferation Treaty (NPT), in the 1960s. A very much watered down regime for nuclear disarmament, the NPT nevertheless is to be regarded as a vintage disarmament measure than an arms control measure. Similarly, the various nuclear test ban agreements and the regional 'nuclear weapons free zone' pacts are in the nature of disarmament devices. In the following pages, the important disarmament and arms control treaties will be briefly mentioned.

9.4 A BRIEF HISTORY OF ARMS CONTROL AND DISARMAMENT

Under the aegis of both the League of Nations and later under the United Nations, arms control and disarmament measures have been pursued and implemented with varying degrees

of success. Efforts at arms control and disarmament during the inter world war period did not yield any significant result. However, after the World War II, hopes about general **disarmament** increased. Initial efforts related to the control of atomic weapons and technology under the auspicious of the United Nations. In 1946, the US proposed the **Baruch Plan** for an international Atomic Development Authority involving inspection of all phases of production of fissionable materials, exclusive rights to conduct atomic tests and promote peaceful uses. This was to be followed by relinquishing of atomic power by states in stages. The Soviet Union rejected the plan and proposed the Gromyko plan for prohibition of nuclear weapons. This was rejected by the US. In 1952, the sixth General Assembly of the UN established the UN Disarmament Commission to prepare a draft convention for regulation, limitation and balanced reduction of all armed forces and all armaments and elimination of weapons of mass destruction. In 1953, President Eisenhower put forward the 'Atoms for Peace' proposal and suggested the creation of an international agency to promote the peaceful uses of atomic energy and to inhibit its use for military purposes. Following prolonged negotiations, the Ninth Session of the UN General Assembly adopted a unanimous resolution for the establishment of the International Atomic Energy Agency (IAEA). During much of the Cold War, both arms control and disarmament measures have been opted for by the rival superpowers, the USA and the Soviet Union, to reduce tension and for strategic stability.

The following section delineates and discusses the **arms control** and disarmament efforts that have been made both by the UN and the two superpowers since 1945.

9.5 ARMS CONTROL AND DISARMAMENT AGREEMENTS

Ever since the use of the atomic bomb in 1945, nations world over have been making efforts to control the arms race. However, due to the mutual suspicion and mistrust between the two superpowers, all disarmament efforts proved futile until the early 1960s.

The Antarctic Treaty was the first disarmament treaty to come into force in 1961. Signed by 26 states in 1959, the treaty bans military use of Antarctica and specifically prohibits nuclear tests being conducted there and nuclear waste disposal or storage in the Antarctic. The treaty declares that the Antarctic will be used exclusively for peaceful purposes. It prohibits establishment of military bases and fortifications or testing of any type of weapons in the area. The treaty entered into force in 1961

Soon after the Cuban missile crisis (1962), the first breakthrough in arms control efforts was achieved in August 1963, when UK, USA and USSR signed the **Partial Test Ban Treaty** (PTBT) also known as the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Underwater. The treaty came into force on October 10, 1963. These states expressed their determination to achieve discontinuance of all test explosions of nuclear **weapons** for all time and to put an end to the contamination of man's environment by radioactive substances.

The parties to the treaty undertook to prohibit, prevent and riot to **carry out** nuclear weapon test explosions at any place **under** its jurisdiction or control, viz, in the atmosphere, beyond its **limits**,

including outer space or underwater, including territorial waters or high seas or in any other environment if such explosion caused radioactive debris to be present outside the territorial limits of the state under whose jurisdiction or control such explosion is conducted. The treaty, however, did not ban underground explosions unless they caused radioactive debris to be present outside the territory of state where such explosion was conducted.

The treaty was made open to all states and also contained a withdrawal clause. it was to be of unlimited duration. By 1987, the number of signatory states had risen to 116.

Outer Space Treaty was signed in 1967 by 83 states. Officially known as the 1967 Treaty on Principles Governing the Activities of States in the Exploration and use of Outer Space, including the Moon and other Celestial Bodies, the Outer Space Treaty banned nuclear weapons in earth's orbit and their stationing in Outer Space. It prohibited other kinds of weapons of mass destruction from being installed on celestial bodies or stationing them in outer space in any other manner.

The Outer Space Treaty propounds in effect, a first code of space law. Other agreements like the 1979 Moon Treaty augment the Outer Space Treaty.

Tlatelelco Treaty, also known as the Latin American Nuclear Free Zone Treaty, was signed in 1967, by 22 states, which bans testing, possession, deployment of nuclear weapons and requires safeguards on nuclear facilities. All Latin American states, except Argentina, Brazil, Chile and Cuba are parties to the treaty. The treaty provides for verification and inspections by IAEA. The peculiarity of the treaty relates to a provision for peaceful nuclear explosions under notification and supervision of the IAEA.

With the passage of PTBT in 1963, it was expected that other arms control measures would soon follow. One measure that has been discussed over five years and at last agreed upon by the nuclear powers participating in the Eighteen Nation Disarmament Commission (ENDC) of the UN was the treaty on the non-proliferation of nuclear weapons.

The treaty of non-proliferation of nuclear weapons, also refereed to as **the Nuclear Non-proliferation Treaty** (NPT), obligates the five acknowledged nuclear weapon states (the US, Russian Federation, the former USSR, UK, France and China) not to transfer nuclear weapons, other nuclear explosive devices, or their technology to any non-nuclear weapon state. Non-nuclear weapons state parties undertake not to acquire or produce nuclear weapons or nuclear explosive devices. This must be done in accordance with an individual safeguards agreement, concluded between each non-nuclear weapons (NNW) state party and the International Atomic Energy Agency (IAEA). Under these agreements, all nuclear materials in peaceful civil facilities under the jurisdiction of the state must be declared to the IAEA, whose inspectors have routine access to the facilities for periodic monitoring and inspections. If inspections are not sufficient to fulfil its responsibilities, the IAEA may consult with the state regarding special inspections within or outside declared facilities.

The treaty was opened for signature on July 1, 1968, and signed on that day by the US, the UK, the Soviet Union, and 59 other countries. The treaty entered into force on 5 March 1970.

The NPT is the most widely accepted arms control agreement. As of early 2000, a total of 187 states have become parties to the NPT. Cuba, Israel, India and Pakistan were the only states that remained non-members of the NPT. North Korea that once signed the Treaty withdrew from it in 2003.

The NPT was originally entered into force with a time limit of 25 years and periodic reviews of the treaty taking place every five years. At the NPT Review and Extension Conference held in New York in 1995 and 2000, the parties agreed to extend the treaty indefinitely without conditions. The NPT remains as an important framework for controlling the spread of nuclear weapons and expertise.

The treaty on the limitation of Anti-Ballistic Missile systems, ABM Treaty of 1972, is a bilateral treaty, between the United States and the Soviet Union, signed in Moscow on 26 May 1972, and entered into force on 3 October 1972.

The ABM treaty prevented either side from using a ballistic missile defence as a shield to launch a first strike. In the Treaty, the two superpowers agree that each may have only two ABM deployment areas, so restricted and so located that they cannot provide a nationwide ABM defence or become the basis for developing one. Each country thus leaves unchallenged the penetration capability of the others retaliatory missile forces.

The treaty permits each side to have one ABM system to protect its capital, and another to protect one of its ICBM launch area. The two sites defended must be at least 1,300 km apart, to prevent the creation of any effective regional defence zone or the beginnings of a nationwide system.

Precise quantitative and qualitative limits have been imposed on the ABM systems that may be deployed. At each site there may be no more than 100 interceptor missiles and 100 launchers.

Both parties agreed to limit qualitative improvements of their ABM technology, for example, not to develop, test or deploy ABM launchers capable of launching more than one interceptor missile at a time or modify existing launchers to give them this capability. Systems for rapid reload of launchers are prohibited.

As more and more states acquired ballistic missiles, the United States planned development of a defensive system against ballistic missile. To facilitate the development and testing of such weapons, the United States withdrew from the ABM treaty in mid-2002. President Bush called the ABM treaty a relic of the Cold War. The ABM treaty thus, stands demolished. Russia and China have expressed serious concern over this development.

SALT-I or the first series of Strategic Arms Limitation Talks extended from November 1969 to May 1972. In a summit meeting in Moscow, after more than two years of negotiations, the first round of SALT was concluded on 26 May 1972, when the US President Nixon, and the General Secretary of Communist Party of Soviet Union Brezhnev, signed the ABM treaty and the Interim Agreement on strategic offensive arms. SALT represents the high point of 'detente' between the superpowers.

SALT-I is mainly a quantitative arms control agreement. The agreement essentially limits

the number of strategic ballistic missile launchers, (operational or under construction) on each side and also limits SLBM launchers and modern ballistic submarines to the numbers existing on the date of signature of the interim agreement. In view of the many asymmetries in the two countries forces, imposing equivalent limitations require rather complex and precise provisions. The US is to have no more than 710 ballistic missile launchers on submarines and no more than 44 modern ballistic missile submarines. The Soviet Union is to have no more than 950 ballistic missile launchers on submarines and no more than 62 modern ballistic missile submarines.

Considered as one of the most outstanding of the **arms** control measures adopted by the superpowers, the SALT-I is referred to as 'freeze' agreement. The first part of the treaty, an agreement of ABM was for **unlimited** period. The Interim Agreement on Inter-Continental Ballistic Missiles (ICBM) and Submarine Launched Ballistic Missiles (SLBM) was for a five-year period.

The agreement on offensive weapons merely deals with long-range ballistic missiles and not the medium range ballistic missiles. SALT -I did not include nuclear warheads, which both the superpowers possessed in sufficient quantities, but only included launchers and ABM systems. The two superpowers agreed on a set of Basic Principles of Negotiation on further limitation of strategic **arms**.

SALT-II negotiations began in November 1972. The primary goal of SALT-II was to replace the Interim Agreement with a long-term comprehensive treaty on strategic offensive weapons systems. The principal US objective, as the SALT-II negotiations began, was to provide for equal numbers of strategic nuclear delivery vehicles for both sides to begin the **process** of reduction of these delivery vehicles, and to impose restraints on qualitative developments, which could threaten future stability.

At the Vladivostok meeting in **November** 1974, between President Ford and **General** Secretary Brezhnev, both sides agreed to a basic framework for the SALT-II Agreement. On 18 June 1979, President Carter and General Secretary Brezhnev signed the completed SALT-II Agreement in Vienna. The US Senate ratification was stalled following the Soviet invasion of Afghanistan in December 1979. In May 1982, President Reagan stated he would do nothing to undercut the SALT agreements as long as the Soviet Union showed equal restraint. The Soviet Union also agreed to abide by the unratified treaty. Subsequently, in 1984 and 1985, President Reagan declared that the Soviet Union had violated its political commitment to observe the SALT-II treaty.

The agreement called for placing an overall ceiling of 2,400 (to be reduced to 2,250 by end of 1981) on the number of ICBM launchers, SLBM launchers, heavy bombers and **ASBMs** with over 6000 km range on each side. Within this overall ceiling, several sub-ceilings specified additional restrictions on particular types of **nuclear** systems. The first sub-ceiling limited each superpower to 1,320 launchers equipped with MIRVs (multiple independently re-targetable vehicles) plus heavy bombers equipped with long-range cruise missiles. The second sub-ceiling limited the total number of launchers of **MIRVed** ballistic missiles to 1200 and the third sub-ceiling restricted each nation to the deployment of no more than 820 **MIRVed** ICBMs.

Besides this, the accord also banned the construction of additional fixed ICBM launchers. It also limited the number of warheads permitted on ICBMs and anti-satellite ballistic missiles to ten and submarine-launched ballistic missiles to fourteen. This restriction would have the effect of inhibiting qualitative improvements in the payload delivery capabilities of the superpower missiles.

This treaty was to **remain** in force for five years. It still remains.

The treaty on the limitation of underground nuclear weapon tests, also known as the **Threshold Test Ban Treaty (TTBT)** was signed in July 1974 in Moscow. It establishes a nuclear threshold by prohibiting tests having a yield exceeding 150 kilotons (equivalent to 150,000 tons of TNT).

For many years, neither the US nor the Soviet Union ratified the TTBT. However, in 1976, each party separately announced its intentions to observe the Treaty limit of 150 kilotons, pending ratification. Agreement on additional verification provisions, contained in new protocols substituting for the original protocols, was reached in 1990. The TTBT and the PNET entered into force on 11 December 1990.

Negotiations on the peaceful nuclear explosions treaty, contemplated in Article III of the **TTBT**, began in Moscow in October 1974, and after six negotiation sessions over a period of 18 months, resulted in the Treaty on Underground Nuclear Explosions for Peaceful Purposes (popularly called the **Peaceful Nuclear Explosions Treaty** or PNE Treaty) in April 1976. The US and the Soviet Union exchanged instruments of ratification and the treaties entered into force on 11 December 1990.

The PNE Treaty governs all nuclear explosions carried out at locations outside the weapon sites specified under the **TTBT**. The parties agreed not to **carry out** any individual nuclear explosions having a yield exceeding 150 kilotons, and not to carry out any group explosion (consisting of a number of individual explosions) having an aggregate yield exceeding 1,5000 kilotons.

Talks between the United States and the Soviet Union on limiting and reducing intermediate range nuclear forces (INF) began in Geneva in December 1981. The talks were stalled in 1982 when the Russians walked out. They were resumed in March 1985. After two unsuccessful summits in Geneva (1985) and Reykjavik (1985), the **INF treaty** was finally signed at the Washington summit meeting of President **Reagan** and Soviet General Secretary Gorbachev on 8 December 1987.

The INF treaty entered into force on 1 June 1988, eliminated all nuclear-armed ground-launched ballistic and cruise missiles with ranges between 500 and 5,500 km (about 3000 to 3400 miles) and their infrastructure.

The INF treaty is the first nuclear arms control agreement to actually reduce nuclear arms, rather than establish ceilings that could not be exceeded. Although it resulted in the elimination by May 1991 of 846 longer and shorter range US INF missile systems and 1846 Soviet INF missile systems, including the modernized US **Pershing II** and Soviet SS-20 missiles.

Negotiated and concluded during ~~the~~ Cold War, the INF treaty contains the most

comprehensive verification regime ever achieved upto that point. The on-site Inspection Agency was set up in 1988- to implement the treaty's unprecedented on-site inspection and escort inspection provisions, including baseline data inspections, inspections of closed-out facilities, short-notice inspections of declared sites and inspections to observe eliminations of the missile systems. It also established the first ever continuous monitoring operations at the portal and perimeters of former missile production facility in each country to confirm that production of prohibited missiles had ceased.

Both the United States and the Soviet Union have conducted hundreds of INF inspections since 1988. The INF treaty assumes significance as a concrete step towards actual reduction of the nuclear weapon stockpile.

Strategic Arms Reduction Treaty or START negotiations began in 1982. The United States sought a treaty that would provide for deep reductions' in US and Soviet strategic offensive nuclear forces, equal limits on the two sides and 'effective verification'. Talks were suspended in 1983, when the Soviet walked out in protest over US intermediate range missile deployments in Europe; they resumed in 1985 and concluded in 1991. The strategic arms reduction treaty I called for reducing the superpower's strategic arsenal by about 30 percent.

The central limits in START-I are a limit of 1,600 strategic offensive delivery systems (launchers for ICBMs, SLBMs and heavy bombers) and 6,000 attributed warheads, with sub-limits of 4,900 warheads attributed to ballistic missiles, 1,540 warheads attributed to heavy ICBMs, and 1,100 warheads attributed to mobile ICBMs.

START-I is a very complicated and comprehensive arms control agreement to be negotiated. In addition to this treaty, there are agreed, joint and other statements, an extensive data exchange, a definitions annex, six protocols-all of which are related to verification and related agreements.

Shortly after the START-I treaty was signed in July 1991 the Soviet Union began to collapse. Many observers, called for far deeper cuts in strategic offensive weapons than those mandated by the START-I treaty. The Bush Administration agreed and START-II negotiations between the US and Russia began in early 1992.

To this must be added the May 1992 protocol signed between the United States and the four Soviet successor states that have weapons covered by START-I- Russia, Belarus, Kazashstan and Ukraine. Taken together, these documents outline complex and often costly procedures that the nations must follow to remain in compliance with START-I.

The Strategic Arms Reduction Treaty (START) II is the most recent product of the bilateral arms control effort between the United States and Russian Federation. Presidents Bush and Boris Yeltsin signed it in June 1993, during the summit in Moscow. A protocol to the original text was negotiated at the Helsinki summit in March 1997, which was signed in New York City, after ratification by both parties, in September 1997.

Both the parties agreed on complete elimination of all land-based ICBMs with MIRVs, and that by December 2003. each side should deploy no more than 3000-3500 strategic nuclear warheads.

The Helsinki protocol provides for extension of the implementation deadline from 31 December 2003 to 31 December 2007. It also provides for an agreement to begin negotiation of START-11, limiting deployed forces to between 2,000 and 2,500 warheads by December 2007, immediately following START-11's entry into force. The protocol also stipulates 'deactivation' of all delivery vehicles to be eliminated by 31 December 2003.

The UN General Assembly adopted the **Comprehensive Nuclear Test Ban Treaty (CTBT)** on 10 September 1996. A comprehensive nuclear test ban was prefigured in a pledge embodied in the **PTBT** (1963) and was repeated as a goal in the preamble of the NPT. The Conference on Disarmament (CD) in Geneva negotiated the CTBT over a period of two and half years.

The treaty prohibits any nuclear explosion whether for weapons or peaceful purposes. The treaty establishes an organization to ensure implementation, which includes a conference of states parties, an Executive Council and a Technical Secretariat, which includes the International Data Centre. The treaty includes a protocol, which details the International Monitoring System (IMS), On-site Inspection (OSI) and Confidence Building Measures.

To date, all but three of the 44 nations (**India**, Pakistan and North Korea) have signed the CTBT and of the states that have signed, but not ratified the treaty, the United States and China are notable exceptions. The CTBT however, while banning both full-scale and low yield nuclear tests including hydro-nuclear tests would not curtail sub-critical experiments which would involve chemical rather than nuclear explosions.

The CTBT provides for an extensive verification regime. The treaty is of unlimited duration. Any treaty party may withdraw from the pact, giving six months notice. Review conferences will be held every ten years (or more frequently if a majority of parties agree) to examine the operation and effectiveness of the treaty and to consider new technological developments.

The Biological and Toxic Weapons Convention (BTWC) aims to ban biological weapons and their manufacture and stockpiling. It is officially known as the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction of 10 April 1972. The BTWC, which was opened for signature at Washington, London and Moscow on 10 April 1972, came into force in March 1975. Since then 168 nations have become signatories to the agreement. The BTWC prohibits the development, production and stockpiling of biological and toxic weapons. This is the first disarmament agreement within a multilateral framework that provides for elimination of an entire category of weapons of mass destruction under universally applied international control.

At the second review conference in September 1986, the parties agreed to implement data exchange measures to enhance confidence and to promote cooperation in areas of permitted biological activities. The third review conference in September 1991 created an Ad hoc Group of Governmental Experts to evaluate potential verification measures. The special conference, held in September 1994, established an Ad Hoc Group to draft proposals to strengthen the convention. In all five review conferences have been held, the last in 2002.

The parties undertake not to develop, produce, stockpile or acquire biological agents or toxin 'of types and in quantities that have no justification for prophylactic, protective and other peaceful purposes'. as well as weapons and means of delivery.

The convention on the prohibition of development, production, stockpiling and use of chemical weapons and their destruction adopted the treaty at Geneva in September 1992. Popularly known as the **Chemical Weapons Convention (CWC)**, the treaty is unprecedented in scope and stringency of its verification regime. The agreement was opened for signing in 1993.

There is a provision for a permanent **implementation** agency viz. the **organisation** for the prohibition of chemical weapons (OPCW) with its headquarters at the Hague. When the Chemical Weapons Convention entered into force on 27 April 1997, 87 countries had ratified it. The number of countries, which ratified the **CWC**, rose to 161 by **March** 2004. The CWC commits all parties to destroy stockpiles of chemical weapons by 2007. So far, **OPCW** has overseen the destruction of nearly 10 percent of the world's stockpile.

It has always been held that reducing world's military **arsenals** may or could tend to reduce war. However, this seems not to have been borne out by facts. Disarmament has in most cases been imposed, while there are very few voluntary cases. Arms control efforts in contrast are several in numbers. Summit talks and meetings between the superpower antagonists during the Cold War led to several arms control agreements. While it is true that there has been unprecedented **progress** in arms control in the post-Cold War period both the old antagonists continued modernizing **their** armaments. In spite of several measures, states still do not opt for significant controls on the growth of armaments. The obstacles to the control of **arms** continue to be formidable. The possibility of conflict and the reliance of states on weapons for security will, however, tend to keep alive the fear of war. Arms control continues to be one of the methods of reducing the possibilities of war and reduction of conflict.

9.6 DESCENT IN HOPES

One point relating to the scaling down of mankind's expectations of peace and abolition of war needs to be highlighted. As the ideal of a peaceful world has become unattainable, the lesser ideal of limiting wars, in its turn, has also come to escape humanity's grasp. In its place is posited the even more 'realistic' goal of disarmament, which again yielded place to arms control, which is believed to be the most viable method. In this descent **from** aspiring to the pinnacle of peace to the crude and craggy valleys of **arms** control, distrust amongst the nations is the chief obstacle for attempts to even minimally limit the destructive potential of weapons, leave aside abolishing war itself. Even earlier, it used to be said, Disarm and Verify; now it has turned out to be attempts at arms control hedged with complicated systems of verification, inspection regimes with pervading suspicion all around.

9.7 SUMMARY

In this unit we have seen **when** and how concerns over quantitative and qualitative increase of weapons **technology** emerged as cause for concern. As we saw, the advances in science and technology which directly fed into the arms race in the post war period led to major initiatives, both bilateral and multilateral, to control and avoid war. We have seen that although the two terms, arms control and disarmament are often used interchangeably and both have the common goal of military stability, they are two distinct approaches. In the words of **Morgenthau**, the difference between the two concepts is that "while disarmament

is the reduction or elimination of armaments, arms control is concerned with regulating the armament race for the purpose of creating a **measure** of military stability". In a world where **complete** disarmament is still a distant dream, arms control, by regulating the development, stockpiling and deployment of seeks to limit the arms race and makes the efforts toward disarmament somewhat easier.

9.8 EXERCISES

- 1) What are the **significant** differences between the concepts of arms control and disarmament?
- 2) Trace the early efforts toward disarmament in the post cold war period. Why did these efforts fail?
- 3) Bring out the **significance** of **INF** treaty as an arms control measure.
- 4) Write a short note on Nuclear **Non-Proliferation** treaty.
- 5) As the ideal of a **peaceful** world has become unattainable, the lesser ideal of limiting wars, in its **turn**, has also come to escape humanity's grasp. Comment.