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Acronyms

NPR	Nuclear Review Posture	
CEF Treaty	Conventional Armed Forces in Europe Treaty	
NPT	Non-Proliferation Treaty	
СТВТ	Comprehensive Test Ban Treaty	
START	Strategic Arms Reduction Treaty	
FMCT	Fissile Material Cutoff Treaty	
PSI	Proliferation Security Initiative	
CSI	Container Security Initiatives	
ICBM	Intercontinental ballistic missile	
SLBM	Submarine-Launched Ballistic Missile	

Introduction

President Obama's famous Prague speech on nuclear issues was understandably given much attention by those concerned. At the April 2010 Nuclear Security Summit, all the participant countries endorsed his concern and agreed to work together to eliminate nuclear smuggling and terrorism. This was part of the overall agenda to strengthen nuclear safety and security standards according to international safeguards and secure all susceptible nuclear material under the Nations Security Council Resolution 1887.

Global peace can be accomplished through arms control and disarmament.

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The step taken by the US with major powers like Russia, France and the UK towards disarmament and a New Start Treaty is positive in this respect. All these countries are nuclear power states and adhere to the Non Proliferation Treaty as a guide to a world free of nuclear weapons. And they committed themselves to share peaceful nuclear technology with non-nuclear weapon states.

The aim of this new nuclear doctrine is to reduce the number of nuclear weapons and to strengthen the US national security strategy. The reason for cooperation between Moscow and Washington is to combat global nuclear proliferation, support peacekeeping and conflict prevention in conflict zones, and formulate a coordinated strategy against international terrorist threats.

Thus, the Obama administration placed disarmament on the global agenda and the most significant part of this is the The Obama administration placed disarmament on the global agenda and the most significant part of this is the START treaty signed with Russia. The US considered the New Strategic Arms Reduction Treaty (or START) as an essential instrument to its national security.

START treaty signed with Russia. The US considered the New Strategic Arms Reduction Treaty (or START) as an essential instrument to its national security. On April 8, 2010, at the signing ceremony for the New Strategic Arms Reduction Treaty (New START), President Barack Obama stated:

While the New START treaty is an important first step forward, it is just one step on a longer journey. As I said last year in Prague, this treaty will set the stage for further cuts.¹

The primary issue is to enhance national and international capabilities to identify smuggled nuclear materials, advance security initiatives like Proliferation Security Initiative (PSI) and Container Security Initiatives (CSI), and set up radiation detectors at seaports, airports and on borders to prevent nuclear theft incidents.²

The US aims to ensure security commitments to its non-nuclear allies and partner countries and stresses that they do not need to develop their own nuclear weapon capabilities. Its new legal document's prominence is to promote strategic stability by reducing the role of nuclear weapons in international affairs and reverse the misconception that the US intends to increase its nuclear arsenal. As per the doctrine, nuclear weapon states need to move towards global disarmament, and keeping in view the energy crises in many countries, enable access to peaceful nuclear energy under effective verification standards.³

Subsequently, this study aims to explore the US nuclear doctrine in the current global security environment.

Obama administration's approach towards global security

The Obama administration brought the concept of Global Zero and a world free from nuclear weapons. This was too broad and carried many gaps and led to many questions. In the April 2009 speech in Prague by Obama speech and the Nuclear Security Summit in 2010, the emphasis was on the US comprehensive agenda towards the global security. The ambition is to stop dependence on the spread of nuclear weapons, reduce nuclear arsenal, and secure nuclear material.⁴ The administration's new nuclear policy focuses on peace and stability through global cooperation, negotiation, and persuasion rather than confrontation. The US strategy will be based on a multilateral approach to security challenges i.e. countering extremism, securing nuclear material and weapons of mass destruction, sustaining global economic growth, reducing the danger of cyber threats, and combating climate change. Its highest priority is to disrupt, dismantle

and defeat al-Qaeda and its affiliates. A key component of the strategy is to take balanced steps domestically and internationally to sustain global economic stability.⁵

President Obama's vision of nuclear-free world compelled US strategists to restructure their nuclear policy and meet the security challenges anew.

New Nuclear Doctrine

The new nuclear doctrine summarizes US policies for the next five to ten years

and assesses the current and future nuclear threats to its national security by nuclear terrorism and proliferation. As long as nuclear threats exit, it is essential for the US to maintain its nuclear weapon capability by pursing the safety, security and effectiveness of its nuclear stockpiles while at the same time continuing research efforts that would help in reducing nuclear arsenal without comprising its national security objectives. The agenda is to reduce the risk of nuclear threats, and highlights five key objectives of the US:

- 1. Preventing nuclear proliferation and nuclear terrorism;
- 2. Reducing the role of nuclear weapons in the US national security strategy;
- 3. Maintaining strategic deterrence and stability at reduced nuclear force levels;
- 4. Strengthening regional deterrence and reassuring US allies and partners;
- 5. Sustaining a safe, secure, and effective nuclear arsenal.⁶

President Obama's vision of nuclear-free world compelled US strategists to restructure their nuclear policy and meet the security challenges anew. To counter the threat of nuclear material getting into the wrong hands, the US is

seeking smooth strategic ties with Nuclear Weapon States (NWS). Its nuclear policy is based on (1) strengthening NPT and IAEA safeguards and adherence to compliance, (2) discouraging offensive nuclear ambitions of North Korea and Iran, (3) promoting peaceful uses of nuclear energy, (4) endorsing initiatives to secure vulnerable nuclear material worldwide in the next five years and supporting arms control efforts through New START, (5) special focus on the Global Threat Reduction Initiative and the International Nuclear Material Protection and Cooperation Programs, (6) entry into force of Comprehensive Test Ban Treaty (CTBT), and (7) negotiating the Fissile Material Cutoff Treaty (FMCT). Moreover, the US is strengthening its Negative Security Assurance by accentuating that it will never use or threaten to use nuclear weapons against non-nuclear weapon states and remain in the sphere of NPT obligations.⁷

Another central aspect of the US policy is cooperation with Russia in the reduction of operationally deployed strategic nuclear weapons to their lowest levels with the intent to reduce the threat of nuclear war.⁸ Obama's doctrine focuses on nuclear terrorism and the proliferation of nuclear weapons by the non-state actors. The availability of sensitive equipment and technologies in the nuclear black market is thus a major concern. Another important aspect for the US is the doubtful nuclear ambitious of Iran and North Korea,⁹ whose attitude towards nuclear technology and non-compliance with NPT obligations weakens the NPT regime and has severe security implications for the international community.

One more challenge for the US is to ensure good relationships with Russia and China in order to maintain strategic stability. Relations with Russia have changed drastically and it seems that they are no more adversaries; however the policy differences still exist. Both countries are in agreement on the emerging threats of nuclear terrorism and proliferation and are moving towards disarmament. The relationship with China is growing towards global security threats like Weapons of Mass Destruction (WMD), proliferation and terrorism. China has a much smaller nuclear arsenal compared to Russia and the US, but its future strategic intentions are seen as suspicious by them both.

The new nuclear doctrine of the US envisages shaping nuclear weapons policies and forcing structures which enable it to combat the emerging security challenges and to strengthen the NPT obligations of nuclear disarmament, as mentioned in Article IV of the NPT. It also focuses on the improvement of United Nations Security Council Resolution (UNSCR)1540 to assist countries to strengthen their national export controls, strategic trade controls and improve targeting and inspection at border crossings to prevent non-sate actors from getting access to WMD related material and technology.

Another outstanding issue is the US missile defense and conventionally-

armed missile programs. The US and Russia continued their commitment on the "open-ocean targeting"¹⁰ missiles of all intercontinental ballistic missile (ICBM) and Submarine-Launched Ballistic Missile (SLBM) in order to maintain credible nuclear deterrent and gain regional security. Since the end of the Cold War, the strategic environment has changed drastically and Russia is no more threat to US and has become an active member in combating the emerging threats of proliferation and terrorism.

The new doctrine thus introduces three elements i.e. the threshold for nuclear use; nuclear targeting and international law; and the role of conventional and defensive forces, which is an addition to the 1995 doctrine.

The new doctrine thus introduces three elements i.e. the threshold for nuclear use; nuclear targeting and international law; and the role of conventional and defensive forces, which is an addition to the 1995 doctrine.¹¹ The new doctrine maintains an aggressive nuclear posture and the policy of preemption against adversaries armed with WMD. The visible change is in the role of conventional and defensive capabilities under nuclear planning.

Compared to the 2001 NPR report in which nuclear offensive forces offered a deterrent strategy, the new doctrine is also different in that it aims to reduce the role of nuclear weapons and increase the role of non-nuclear and missile defense capabilities. It clearly underlines the concept of pre-emption with nuclear weapons if an adversary intends to use WMD against the US, its allies, civilian populations, or its command and control infrastructure.¹²

STRATCOM drew up the Contingency Plan (CONPLAN) 8022 in 2003. It was formulated to combat WMD use, and to implement the pre-emption policy of the Bush administration. The new nuclear doctrine endorses it. One concern in this is the increasing risk of strategic weapons being used in regional conflicts as in South Asia where both India and Pakistan are armed with nuclear weapons and have a history of war. On many occasions they reached a nuclear threshold, thus reducing the role of non-strategic weapons. The new US doctrine now aims to reduce the capabilities of rogue states and non-state actors to eliminate chances of the use of strategic weapons against the US and its allies, and unlike the previous doctrine, it focuses on increasing the survivability and capabilities of nuclear and offensive forces.

The US has stressed its adherence to laws of war and international law and abolished the concept of "Countervalue Targeting". However, important aspects of international law are ignored. The International Court of Justice (ICJ) on the

Legality of the Threat or Use of Nuclear Weapons applies treaty law and customary law generally deems it illegal and even in extreme circumstances, there is an obligation to conclude negotiations on complete nuclear disarmament.¹³ NPR 2010 underlines the international security environment with emphasis on preventing nuclear proliferation and nuclear terrorism, which is discussed in detail as under.

a) Nuclear terrorism and proliferation (Iran and North Korea)

After the 9/11 terrorist attacks, threat perceptions of the US have changed drastically. Fears that nuclear material may be stolen by terrorist organizations are often recounted, and the US and Russia are consequently focusing on transnational security threats of nuclear terrorism and trafficking.

According to the 'Vienna 1980 Convention on the Physical Protection of Nuclear Material of Article 7(1)' nuclear terrorism is seen as any act of possessing, using, transferring, alteration, disposal or dispersal, theft or robbery of nuclear material outside legal authority that may result in serious injury or deaths, or substantial property damage.¹⁴ Nuclear terrorism was under the limelight also in the Nuclear Security Summit of April 2010 where participant states reinforced existing agreements such as Proliferation Security Initiative (PSI) and Container Security Initiatives (CSI). The risk of nuclear terrorism remains, but steps are being taken to ensure that it is not realized.

As far as nuclear proliferation is concerned, the cases of Iran and North Korea cannot be ignored. The apprehensions regarding their nuclear objectives have developed a critical environment as both states have violated the non-proliferation regime and United Nations Security Council 1540 obligations and declined international efforts to resolve issues through diplomatic channels.¹⁵ Their provocative attitude has increased regional and international instability.

Relations between North Korea and the US are rapidly deteriorating after the two nuclear tests by North Korea on October 9, 2006 and May 25, 2009. The first nuclear test device was made from plutonium, and the plutonium stockpile is only sufficient to produce weapons. North Korea's quest to upgrade its missile and weapon capabilities would violate UNSC resolutions.¹⁶

Iran's attitude towards the acquisition of nuclear weapons escalates apprehensions regarding the intentions of its nuclear programme. On February 21, 2012, Mohammad Hejazi, the Deputy Chief of Iranian Armed Forces said, "Our strategy now is that if we feel our enemies want to endanger Iran's national interests, and want to decide to do that, we will act without waiting for their actions." The European Union and the US imposed sanctions on companies involved in Iran's nuclear industry and to cut Iran off from the international financial system in order to thwart its efforts at developing nuclear power.

IAEA's nuclear inspectors' recent visit to Iran ended in failure because Tehran didn't allow them to access its nuclear sites. It alleged that the visiting delegation was in the country with other purposes, and its refusal further intensifies tensions with the western world and IAEA.¹⁷

b) Maintaining strategic deterrence

The second major issue emphasized in NPR 2010 is strategic deterrence and stability at reduced nuclear force levels. Nuclear deterrence has several paradoxes. It aims to prevent unwanted action by an adversary by convincing it that resultant costs would involve a nuclear strike. Nuclear deterrence is used as a threat of massive retaliation ranging from the threat of nuclear retaliation against military targets, the threat of nuclear retaliation against an opposing state, the deployment of sub-strategic or tactical weapons for battlefield use, the use of nuclear weapons in response to a conventional attack or to destroy the weapons of an opponent in pre-emption, and last but not least, extended deterrence and existential deterrence.¹⁸

In order to ensure regional deterrence, the US goal is to avoid limitations on missile defenses and heavy bombers and long-range missile systems in conventional roles.¹⁹ By signing the New START Treaty the president and his senior civilian and military advisors conclude that the US can maintain an effective deterrent at a number below 1550 strategic warheads. The US aims to see nuclear disarmament as a security-building process, moving from a narrow mindset to a co-operative one where nuclear weapons are recognized as a lethal liability.²⁰

Global security environment

i) New Strategic Arms Reductions Treaty (New Start Treaty) and its contours

The US-Russia strategic relationship through the New Start Treaty will be a concrete step towards strengthening NPT obligations of nuclear disarmament. This is the most significant arms control agreement in nearly two decades, and will result in both countries reducing their nuclear arsenals.

According to the Russian Deputy Prime Minister, "We are convinced that the Treaty makes controlled and transparent reductions of offensive weapons irreversible, enhances the security of Russia and the United States and makes a substantial contribution to global stability."²¹ The US and Russia both agreed to New START limits of 1,550 strategic warheads down from the current ceiling of 2,200; 700 deployed strategic delivery vehicles; and a combined limit of 800

deployed and non-deployed strategic launchers. The US has tried to maintain its nuclear triad of ICBMs, SLBMs, and nuclear-capable heavy bombers under New START within seven years.²²

Bureau of Arms Control, Verification and Compliance Fact Sheet

Category of Data	United States of America	Russian Federation
Deployed ICBMs, Deployed SLBMs, and Deployed Heavy Bombers	822	516
Warheads on Deployed ICBMs, on Deployed SLBMs, and Nuclear Warheads Counted for Deployed Heavy Bombers	1790	1566
Deployed and Non-deployed Launchers of ICBMs, Deployed and Non-deployed Launchers of SLBMs, and Deployed and Non-deployed Heavy Bombers ²³	1043	871

The two countries have also agreed to exchange information about the numbers, locations and characteristics of \weapons and inspecting each other's arsenals. This treaty will help to increase international stability and promote Russian-American cooperation, and has been central to Obama's visionary goal of a nuclear weapons-free world.

However, Russia's unwillingness to discuss the issue of its tactical nuclear arsenal - estimated at 2000-4000 warheads - is troublesome for the US. The Obama administration is interested to initiate negotiations, but Russia deems it too early to talk about limiting tactical nuclear weapons.

In promoting global security and strategic stability, New START is a responsible partnership between the two largest nuclear powers that will expand bilateral cooperation on a range of issues.²⁴ It will strengthen US non-proliferation goals by convincing other nations that the United States is serious about its obligations under the NPT.

ii) Role of France and the United Kingdom in global security

France became the fourth country to test a nuclear device by detonating its first atomic bomb in 1960, after being prompted by the WWII experience. Its stance on nuclear deterrence was highlighted in a speech by President Nicolas

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Sarkozy on March 21, 2008 in which he stated that France's nuclear policy is more towards disarmament. France is the only nuclear power state to have dismantled its testing site and fissile material production installations. The President claimed that the French approach is based on "realism and lucidity" and is moved towards complete nuclear disarmament, including significant reduction in weapons, missiles and aircraft.²⁵ The French nuclear doctrine is based on the possible threat or use of nuclear weapons in international or regional conflicts. The role of nuclear weapons has been integral to France's military doctrine, and their purpose is stated to be maintaining peace and security.²⁶

The United Kingdom has supported the concept of the elimination of nuclear weapons through multi-lateral negotiations. Its stance is that the US and Russia reduce nuclear stockpiles to the level of other states under NPT and the UK defense department has begun to work on studying the possibility of eliminating nuclear weapons.

The UK and France are proponents of security and defence, and both countries signed a Defence & Security Co-operation Treaty to develop cooperation in November 2010 in order to share technology associated with nuclear stockpiles, armed forces, the building of joint facilities, industrial and technological cooperation including in research and technology, cyber security and counter-terrorism.²⁷ France and the UK have a policy of nuclear restraint, and expect other states to take the same approach.²⁸

iii) Russia and the revival of CEF Treaty (Conventional Armed Forces in Europe)

Russia has taken the initiative to convene a conference to discuss the implementation and problems in the ratification of the CEF treaty, which aims to strengthen security, stability and predictability in Europe. Parties to the treaty are Armenia, Azerbaijan, Belarus, Belgium, Bulgaria, Canada, Czech Republic, Denmark, France, Georgia, Germany, Greece, Hungary, Iceland, Italy, Kazakhstan, Luxembourg, Moldova, the Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Turkey, Ukraine, United Kingdom, and the United States. Russia is concerned about NATO's eastward expansion and US missile defense plans for Europe. The treaty has so far been ratified only by Russia, Ukraine, Belarus and Kazakhstan. It is however a cornerstone of European security and Russia imposed a unilateral moratorium on the CEF in December 2007 as the treaty played a central stabilizing role during the breakup of the Soviet Union and its city state states. The Russian stance is that if NATO countries ratify the adapted treaty signed on November 19, 1999, Russia will resume its participation in the CEF.²⁹

iv) Munich Conference 2011 - combating current and future security challenges

The 47th Munich Security Conference is considered a sign of change in Euro-Atlantic security due to the aforementioned Russian and American cooperation. The conference not only highlighted nuclear security aspects such as military deployment and disarmament, but also drew attention to the non-traditional security issues like energy, food, migration, cyber war, climate change, and export bans. The Munich Conference is the beginning of a new phase in global security by getting together defense experts from all over the world to discuss questions of war and peace.³⁰

Challenges to NPR 2010: South Asian context

NPR 2010 talks about the ambitious goal of a world without nuclear weapons and promotes the US agenda for reducing nuclear dangers and enhancing broader security interests. A major challenge is maintaining deterrence with reduced arsenal or moving towards disarmament in South Asia. There are many differences between the India-Pakistan and other cases such as US and Russia. The latter are distant and one-time adversaries, have no bilateral conflicts and had Europe as the theater of war, while India and Pakistan are nuclear neighbours with multiple issues and territorial conflicts, and cannot afford a conventional war. As Pakistan developed its nuclear weapons in response to India, it is likely to follow India if it goes ahead with Obama's global disarmament agenda.

However, while on the one hand the US is talking about global disarmament, it is giving strategic leverage to non-NPT India by signing a strategic partnership and giving it access to the Nuclear Suppliers Group (NSG) and nuclear energy cooperation with a range of countries. This disturbs the strategic equivalence in South Asia and involves India and Pakistan in an arms race rather than compelling them to move towards arms control.

a) New US doctrine - Arms Control for South Asia

The question to be asked is that if the US and Russia can reduce warheads, then why not India and Pakistan? There are important differences between the two nuclear relationships. The arsenals in South Asia are much smaller, and the US and Russia were on opposite sides of the globe and viewed as unpredictable adversaries.³¹

Pakistan and India have supported comprehensive disarmament proposals at the UN and the Conference on Disarmament. They have come up with a number of bilateral confidence building measures including an eight point agenda of

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composite dialogue and an agreement not to attack each other's nuclear power facilities. No precedence can be set between the two case studies as the security environments are entirely different.

New US doctrine: implications for Pakistan:

Pakistan is peaceful and responsible nuclear weapon state but is blamed for being a safe haven for terrorists. It has a tense relationship with India and the two countries share a hostile history. Pakistan continues to perceive threats from India.

a) Indo-US nuclear deal

The Indo-US civil nuclear deal would allow India to buy dual-use nuclear technology, including materials and equipment that could be used to enrich uranium or reprocess plutonium, potentially creating material for nuclear bombs. It would also receive imported fuel for nuclear reactors. The Indo-US deal and the NSG exemption have changed Pakistan's threat perceptions and they have a bearing on its position on FMCT. These two developments place India in a position to increase its fissile material stocks both qualitatively and quantitatively. It will be able to divert most of its indigenous stocks to its weapons programme. Dr Maleeha Lodhi articulates Pakistan's stance as:

Over the past decade Pakistan played an active diplomatic role in the FMCT process. Its position evolved in the context of shifts in the global disarmament agenda, but more substantively regional security developments. It agreed in the mid-nineties to join the negotiations when the US abandoned its efforts between 1990 and 1995 to press Pakistan to accept a unilateral cap on its nuclear programme. Pakistan's present position on the negotiating process stems from the concern that, as currently envisaged, the proposed treaty could upset the strategic equilibrium in the region by limiting its deterrent capability at a time when India has been offered other means to escape a similar cap on the size of its nuclear arsenal.³²

This discriminatory attitude intensifies the rivalry between India and Pakistan. Now the question is whether the global security environment as per Obama's speech at Prague would compel both them to go for arms control and disarmament on nuclear and conventional weapons.

b) India's international agreements

India is strengthening its defense relationship by signing defense deals with Russia. The Indo-Russia deal in December 2010 is the world's biggest defense deal worth \$30 billion for the development of fifth generation warplanes. India would also get research and development, manufacturing and marketing activities

and at least 250 warplanes in 2020-30. The fighters will have advanced features such as stealth, super cruise, ultra-maneuverability, lightly integrated avionics suites, enhanced situational awareness, internal carriage of weapons and network-centric capabilities. Russia's MiG Corporation, under a contract of \$900 million with the Indian Air Force, has upgraded all of its 69 operational MiG-29s aircrafts.³³

Modern high technological advancements in military equipment and conventional weaponry would increase the arms race in the region, particularly between India and Pakistan particularly. Advancement in weaponry would boost regional insecurity and pose threats to smaller states like Bangladesh, Nepal, Bhutan and Sri Lanka.³⁴

Conclusion

The US and Russia are proponents of non-proliferation, and continue to support multilateral initiatives and regimes on this front. They aim to reduce nuclear terrorism and secure, consolidate, reduce, and where possible, eliminate nuclear weapons and fissile material to achieve the goal of Global Zero. The US must take its allies in Europe and East Asia into confidence in decision-making and reviewing security threats, thus engaging them in a program of mutual strategic reassurance.³⁵

The new nuclear doctrine of the US talks about nuclear disarmament, terrorism and proliferation. The US also assures the world that it will not use nuclear weapons against any non-nuclear weapon state. NPR has helped to move this debate towards a positive direction for international cooperation in nonproliferation and disarmament.

The pragmatic way forward to fight nuclear terrorism and proliferation is to use:

- a) Political and diplomatic instruments,
- b) Economic incentives to discourage states from supporting terrorists, and
- c) Cooperation among international organizations and government agencies.

The US commitment to improve nuclear security and prevent terrorism is clearly defined in NPR 2010. The responsibility cannot be taken by the US alone. In order to combat global security challenges, the minimum standards for security initiatives must be taken into account. These include security agreements such as the PSI (Proliferation Security Initiative) and international counter proliferation efforts by military, customs, law enforcement, and other security experts working with specific partner states to improve cooperation in non-

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proliferation and approve new restrictions on the shipment of WMD materials such as atomic matter, missile components and biological agents.

Moreover, the CSI (Container Security Initiative) is also important as it aims to enhance border security and secure global trade in every potential CSI port by noting that:

- Seaport must have regular, direct, and substantial container traffic to ports in the United States.
- Customs must be able to inspect cargo originating, transiting, exiting, or transshipping through a country.
- Non-intrusive inspection (NII) equipment (gamma or X-ray) and radiation detection equipment.

Potential CSI ports must also commit to establish an automated risk management system; share critical data, intelligence, and risk management information with US Customs and Border Protection; conduct a thorough port assessment and commit to resolving port infrastructure vulnerabilities; and maintain integrity programs and identify and combat breaches in integrity.³⁶

Such measures are ongoing in many countries but are still far from being practiced in their entirety, particularly in the case of South Asia.

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