Analyzing the Effectiveness of Missile Technology Control Regime

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Abstract

The advancement of military technology and sophisticated weapons and missiles, gave birth to unprecedented threats to international peace and security. By the end of cold war, the spread of missiles and nuclear technology posed new challenges to world peace. To address apprehensions and roll back this trend, the Group of Seven (G-7) initiated the Missile Technology Control Regime (MTCR). With the aim to halt the proliferation of nuclear weapons, ballistic missiles and missile technology, the world powers attempted to limit the nuclear and missile technology in few hands. The birth of MTCR provided an opportunity to many like-minded countries to unite in the defense of their own strategic interests. However, the MTCR failed in its prime objective to restrict the transfer of missile technology. At the same time, many observers believe that the success of MTCR remained limited to documents. Therefore, this report sheds light on brief background and development of MTCR, clarifies its objectives and goals, and analyzes its success and failures. In conclusion the report offers recommendations to further improve the worthiness of this Regime.

Keywords: Ballistic Disarmament Missiles MTCR WMD
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1. Introduction

The Missile Technology Control Regime (MTCR) is a non-binding international accord. It is a non-treaty association of states that have an established policy for limiting the spread of missiles and missile technology. It was established by the G-7 industrialized countries (Canada, France, Germany, Italy, Japan, Great Britain, and the United States) on April 1987. The main reason behind the creation of MTCR was to restrain the spread of unmanned delivery systems for nuclear weapons, particularly delivery systems that are capable of carrying a minimum payload of 500kg and minimum of 300 km.

In 1983 France, Germany, Italy, the United Kingdom, and the United States initiated the formal discussions on controlling missile proliferation. Later Japan and Canada also joined them and they reached an agreement to control the proliferation of ballistic missiles capable of carrying nuclear warheads. It was that point when a nuclear-capable missile was defined as one capable of delivering at least 500 kilograms to a range of 300 kilometers or more. Eventually these events led G-7 countries to formally announce the Missile Technology Control Regime on 16 April 1987.¹

Since MTCR was constructed at the end of the Cold War, it principally focused on the curb the spread of missiles capable of delivering nuclear weapons. In order to deal with the escalating proliferation of nuclear weapons, some like-minded countries initiated the MTCR, mainly to curb the proliferation of ballistic missile, nuclear weapons and missile technology by addressing the most destabilizing delivery system for such weapons. At the annual meeting in Oslo in 1992, it was agreed to enlarge the scope of the MTCR’s, and its original focus on missiles for nuclear weapons delivery was extended to a focus on the proliferation of missiles for the delivery of all types of weapons of mass destruction (WMD), including nuclear, chemical and biological weapons. Such proliferation has been recognized as a threat to

¹ Missile Technology Control Regime (MTCR), Inventory of International Nonproliferation Organizations and Regimes, Center for Nonproliferation Studies, February 11, 2013.
international peace and security. The regime found a way to counter this threat by keeping a close observation over the transfer of missile equipment, material, and related technologies usable for systems capable of delivering nuclear weapons.

2. Member States

Today the MTCR membership has grown to 34 nations, in addition to formal members, Israel, Romania, and the Slovak Republic who have agreed to voluntarily follow MTCR Guidelines. Whereas China has agreed to abide by the original 1987 Guidelines and Annex, but China's application for membership still remains under review. In November 2010, US president Barack Obama announced US support for India's bid for permanent membership to UN Security Council, as well as his support for India to join the Missile Technology Control Regime.²


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³ Membership of Nonproliferation Export Control Regimes, HCOC and PSI, Inventory of International Nonproliferation Organizations and Regimes, July 31, 2012.
In order to review and evaluate the MTCR’s activities, and to reaffirm their support and reensure the continuity of exchanging information and views on missile programme developments, member states hold Plenary Meeting each year.\textsuperscript{4}

\section*{3. Objectives and Goals of MTCR}

The primary goal of MTCR is to limit the risks of proliferation of weapons of mass destruction (i.e. nuclear, chemical and biological weapons) by controlling the transfers that could contribute to make unmanned aircraft delivery systems for such weapons. MTCR Partners recognize the importance of controlling the transfer of missile-related technology without disrupting legitimate trade and acknowledge the need to strengthen the objectives of the Regime through cooperation with countries outside the Regime.

MTCR partners stick to its guidelines for export control policy, to which all countries are encouraged to adhere unilaterally. The regime guidelines consist of national control laws and procedures; a two-category common control list; information-sharing on any denied cases to ensure no commercial advantage; no impediment to national space programs; presumption of denial of any transfers in terms of nuclear weapon delivery systems development; and no retransfers without authorization.\textsuperscript{5}

The Regime's Annex - list of controlled items - including virtually all key equipment, materials, software, and technology needed for missile development, production, and operation. The Annex is divided into two parts: Category I and Category II items.

\textsuperscript{5} Regime Goal and Guidelines, Missile Technology Control Regime (MTCR), Inventory of International Nonproliferation Organizations and Regimes, Center for Nonproliferation Studies, February 11, 2013.
Category I items include complete rocket and unmanned aerial vehicle systems (including ballistic missiles, space launch vehicles, sounding rockets, cruise missiles, target drones, and reconnaissance drones), capable of delivering a payload of at least 500 kg to a range of at least 300 km, their major complete subsystems (such as rocket stages, engines, guidance sets, and re-entry vehicles), and related software and technology, as well as specially designed production facilities for these items. Pursuant to the MTCR Guidelines, exports of Category I items are subject to an unconditional strong presumption of denial regardless of the purpose of the export and are licensed for export only on rare occasions. Additionally, exports of production facilities for Category I items are prohibited absolutely.

Category II items include propulsion and propellant components, launch and ground support equipment, less-sensitive and dual-use materials for the construction of missiles, as well as other complete missile systems capable of a range of at least 300 km, regardless of payload. Their export is subject to licensing requirements taking into consideration the non-proliferation factors specified in the MTCR Guidelines. Exports judged by the exporting country to be intended for use in WMD delivery are to be subjected to a strong presumption of denial. The transfer of Category II items is less restricted, but still requires end-use certification or verification where appropriate.6

MTCR partners regularly exchange information about relevant national missile non-proliferation export licensing issues in the context of the Regime's overall aims. A Plenary Meeting is held annually and chaired on a rotational basis. In addition, inter-sessional consultations take place monthly through Point of Contact (POC) meetings in Paris, while Technical Experts Meetings are held on an ad hoc basis. The MTCR has no secretariat; distribution of the Regime's working papers is carried out through a "point of contact" the functions of which are performed by the Ministry of Foreign Affairs of France.7

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When it comes to assessing the legality of exports of certain controlled items, the Missile Technology Control Regime require the intended recipient to pledge not to transfer the goods or their replicas to a third country without prior permission from the country originally transferring the goods. The MTCR also identifies five guidelines that should be taken into account when assessing the legality of exports.\(^8\)

1. The recipient must not be pursuing or must not have any ambitions of acquiring WMD.

2. The intended recipient should clarify their purposes and capabilities of missile and space programs.

3. The proposed transfer should not make any possible contribution to the development of delivery systems for WMD

4. The recipient should have well established credibility of the stated purpose for the purchase.

5. The potential transfer should not conflict with any multilateral treaty.

### 4. Success and Failures of MTCR

Just two weeks after the MTCR established in 1987, Iraq conducted its first successful flight test of extended-range ballistic missile. Later Israel conducted its "The Jericho II" missile test in 1987, 1988 and 1989, during the same time India also conducted its own missile tests (Prithvi in 1988 and Agni in 1989), the course was followed by Pakistan's Hatf II missile test in 1989, and then North Korea's the Nodong in 1993. In late 80s and early 90s, China also transferred its CSS-2 missiles to Saudi Arabia and M-9 and M-11 missiles to Pakistan. MTCR was facing serious challenges and was unable to tackle the situation. Even the most enthusiastic supporters of MTCR acknowledged that not only did the MTCR fail to slow

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down the missile programs of India, Iran, Israel, North Korea, and Pakistan but may have in fact provided an incentive for weakening domestic support to their indigenous programs.

The case of Iran reveals one of the major failures of MTCR. Even after joining the regime, Russia continued to supply advanced technology, components, and personnel to Iran for its missile program. Despite clear evidence of Russian violations of the MTCR, the United States as well as other member states failed to invoke the sanctions against Russia for violations or to restrain the proliferation.

MTCR met another failure, when China supplied missile-related technology to Iran. Although Chinese government pledged to accept the regulations of MTCR, yet the violations and transfer of missile technology have continued, and MTCR failed to take action against China or impose sanctions. Consequently, the Iranian missile program progressed rapidly and Iran enhanced its capabilities for developing and producing local long-range missiles.\(^9\)

Despite the regimes’ limitations and incapability to restrain India, Iran, Israel, North Korea, and Pakistan to develop their missile programs, the MTCR has shown some progress in slowing down or stopping several ballistic missile programs. According to the Arms Control Association, “Argentina, Egypt, and Iraq abandoned their joint Condor II ballistic missile program. Brazil, South Africa, and Taiwan also shelved or eliminated missile or space launch vehicle programs. Some Eastern European countries, such as Poland and the Czech Republic, destroyed their ballistic missiles, including some Soviet-era Scuds, in part, to better their chances of joining MTCR in 1993.”\(^10\)

When Iraq conducted its first flight test "Al-Hussein", their missile program was heavily dependent on foreign procurement and, hence, it was vulnerable to a supply cut-off. Although,


Iraqis were able to develop Al-Hussein, but due to MTCR efforts, and limitations Iraq was unable to achieve its ultimate missile objective.

Disarmament of Argentina's Condor II project, the cancellation of two Brazilian systems (Avibras's SS series and Orbita's MB series), delaying India's missile program, delaying China's sales of M-9 and M-11 missiles to Pakistan and encouraging Germany to improve its export control enforcement legislation are considered to be great achievements by MTCR.

So it appears that the MTCR played a decisive role in reducing ballistic missile programs capable of delivering nuclear, chemical, and biological weapons in some non-MTCR countries.

Although some of the countries such as Egypt, Iraq, and Syria have given up their ballistic missile programs capable of delivering chemical and biological weapons, but they are still believed to be seeking to acquire these weapons through other means.

On the other hand, India, Pakistan, Iran, North Korea and Israel with varying degrees of foreign assistance, have been continuously deploying medium-range ballistic missiles with more than 1,000 kilometers range. Some of the MTCR non-member countries are also transferring their missile technology to other countries. North Korea is considered as the primary source of ballistic missile proliferation. Iran has supplied missile technology to Syria. Sometimes events such as these put a question mark in the effectiveness of the MTCR. At the same time, some non-member countries also believe that Missile Technology Control Regime is sometimes used to benefit its founding members, and globalize their agendas.
5. Conclusion

Since the establishment of MTCR, the membership of the group has expanded to 34 countries and five other states have unilaterally pledged to adhere to the guidelines of MTCR. Though, the expansion of membership led to the diffusion of goals and statements of the MTCR. As membership grows, the Regime loses focus and core objectives are often being sacrificed. The consensus is also increasingly difficult to achieve on many politically sensitive issues.

The Regime has successfully slowed down the pace of development of missile technology, however due to its duplicity of approach it has largely failed to prevent its spread to other countries and has often ignored the cruise missile technology prevention efforts.

At the same time, MTCR is often being criticized by the observers for being an exclusive club and serving the interests of some major powers, especially the United States.

The Missile Technology Control Regime has definitely slowed down or delayed the proliferation process of nuclear and missile technology, and reduced the rate and size of the flow. Nevertheless the Regime clearly failed to accomplish its stated goal, which is to stop the proliferation of missile and nuclear technology, especially to the unstable and chaotic regions.

As more and more countries successfully developing and advancing their missile programmes with foreign assistance, the MTCR might face serious challenges in the years to come. The Regime also lacks the required regulatory framework to check the development of unmanned aerial vehicles (UAVs).

At the same time, many other non-member states have continuously remained involved in selling and transferring missile technology to other countries. Due to the lack of regulatory structure and its voluntary nature, the MTCR cannot mandate any forceful action against member countries violating its guidelines. With rapidly increasing threat of the missile technology proliferation, The MTCR urgently needs to improve its mechanism and equip
itself to address all the concerns and tackle new challenges.

6. Recommendations and Suggestions

- The MTCR needs to establish an efficient panel or mechanism, in order to address the security concerns, as well as to encourage the peaceful talks and negotiations for missile reductions.
- As the MTCR is a voluntary arrangement, it does not have the ability to sanction member states that violate its guidelines. For that reason there should be a legally binding instrument and effective punishment and sanctions.
- Since MTCR is not a treaty-based regime, therefore it merely acts as a supplier cartel and is often considered ineffective to address the missile proliferation problem, and lacks formal international legal standing.
- The MTCR should strictly compliance and abide with its original outline and policies. As in October, the Republic of Korea and the United States agreed to extend the range of the South Korea’s ballistic missiles to 800km. This range is beyond the guidelines set down in the MTCR. 11
- Nowadays a chemical or biological warhead could weigh less than 500-kilogram payload, therefore MTCR can also amend its original payload or range limits.
- The regime should further make efforts to expand the international effort to discourage missile proliferation and support peaceful uses of technology.
- There is an urgent need for the member states to create a just and effective export control law and enforcement.
- The MTCR should impose increased transparency in the exports of sensitive technologies.

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