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MISSILES PROLIFERATION AND ITS CHALLENGES

A CURA DI ISTITUTO DI RICERCHE INTERNAZIONALI ARCHIVIO DISARMO - IRIAD

MISSILES PROLIFERATION IN A NEW GLOBAL SCENARIO

- New generation of missiles
- Intensification of use of both cruise and ballistic missiles and drones:
 - New risks from new technologies and new actors.
- At international level, the proliferation of vehicles of delivery of MDM receives less attention than the so-called weapons of mass destruction.

INTERNATIONAL INSTRUMENTS AGAINST MISSILES PROLIFERATION

The global efforts can be summarized in 3 international instruments

- **THE MISSILE TECHNOLOGY CONTROL REGIME (MTCR) (1987)** – 35 members. Multilateral export control regime : **goal**: Rockets and unmanned aerial vehicles capable of delivering weapons of mass destruction
- **HAUGE CODE OF CONDUCT (2002)** – 144 members. Transparency and confidencebuilding instrument; **goal** : Ballistic missiles and space launch vehicles
- **UN SECURITY RESOLUTION 1540 (2004)** – 193 members UN security Council Resolution, goal:proliferation of CBN weapons and their delivery systems to non –state actors

THE MISSILE TECHNOLOGY REGIME

The Missile Technology Control Regime (MTCR) was founded in 1987 by the G7 industrial nations with the aim to prevent the proliferation of nuclear weapon delivery systems. These include ballistic missiles or unmanned aerial vehicles (cruise missiles and drones) with a payload starting from 500 kilograms and a range of 300 kilometres.

Since 1992, the MTCR has also controlled delivery systems suitable for biological and chemical weapons.

In 2002, the MTCR also took measures to prevent the transfer of delivery systems and technology to terrorists.



THE MISSILE TECHNOLOGY REGIME

The MTCR is based on:

- **Export Controls:** The regime rests on adherence to common export policy (the Guidelines) applied to an integral common list of items (the MTCR Equipment, Software, and Technology Annex.)
- **Meetings:** MTCR Partners regularly exchange information about relevant missile non-proliferation issues in the context of the Regime's overall aims.
- **Dialogue and Outreach:** The MTCR Chair and MTCR Partners undertake outreach activities to non-Partners in order to keep them informed about the group activities and to provide practical assistance regarding efforts to prevent the proliferation of WMD delivery systems.



THE MISSILE TECHNOLOGY REGIME

The export control measures coordinated by the MTCR are regulated in:

- **GUIDELINES:** The purpose of these Guidelines is to limit the risks of proliferation of weapons of mass destruction (i.e. nuclear, chemical and biological weapons), by controlling transfers that could make a contribution to delivery systems (other than manned aircraft) for such weapons.
- **ANNEX:** consists of two categories of items, which term includes equipment and technology which are controlled by MTCR Partners and volunteer adherents.



THE MISSILE TECHNOLOGY REGIME

STRONG POINTS

- The MTCR is an informal political understanding among states that seek to limit the proliferation of missile and missile technology.
- It helps to stop or better slow missiles programs.
- Moreover, the MTCR is a unique forum which assembles the experience of technical, licensing and enforcement experts in the missile technology domain and constantly assesses new missile technologies and their non-proliferation implications.



THE MISSILE TECHNOLOGY REGIME



WEAK POINTS

- The MTCR is not a treaty and so it does not impose any legal binding obligations among partners (members)..
- The expansions in membership and the growing political divisions among partners has led some experts to argue that the MTCR and other regimes can no longer serve their original purpose .

UN SECURITY COUNCIL RESOLUTION 1540

United Nations Security Council unanimously adopted Resolution 1540 (April 2004) under Chapter VII of the United Nations Charter which affirms that the proliferation of nuclear, chemical and biological weapons and their means of delivery constitutes a threat to international peace and security.

- The resolution obliges States, inter alia, to refrain from supporting by any means non-State actors from developing, acquiring, manufacturing, possessing, transporting, transferring or using nuclear, chemical or biological weapons and their means of delivery.
- It imposes binding obligations on all States to adopt legislation to prevent the proliferation of nuclear, chemical and biological weapons, and their means of delivery, and establishes appropriate domestic controls over related materials to prevent their illicit trafficking.

THE HAUGE CODE OF CONDUCT

Entered into force in **2002**

Number of members: **144** (updated in August 2023)

The Hcoc is one of the very few existing multilateral instrument in the field of ballistic missile proliferation.

MISSION

To prevent and curb the proliferation of BMS, capable of delivering WMD

The Code does not prohibit ballistic missiles possession nor the devopment of ballistic missiles programs, but it tries to cause for maximun possible restraint..

It fills an important gap in arms control, disarmament and proliferation architecture, in absence of a legally binding treaty.



THE HAUGE CODE OF CONDUCT

WEAK POINTS

- There is no international ban or nonproliferation treaty establishing a norm proscribing the acquisition, development, production, testing, transfer, deployment or stockpiling of ballistic missiles.
- The Hcoc has the ambition of the universalization, but actually it is a still modest instrument, even if it is the most multilateral it
- The Hcoc does not include cruise missiles
- No visibility of the Code



THE HAUGE CODE OF CONDUCT

CHALLENGES

- There is a worrying proliferation of ballistic missiles: an increasing number of states are engaged in a new arms race and able to produce or modernize existing systems with increased range, precision and striking power.
- The development and deployment of hypersonic glide vehicles (HGVs): Russia, China and the United States are among the states developing these systems.
- South Korea, India and Japan are also among the states investing in HGVs.
- The greater availability of technical knowledge to develop ballistic missiles.

BALLISTIC MISSILES

- Before launch: hard to spot
- After launch: difficult to detect, track and intercept
- Cheaper than manned aircraft
- Propaganda, publicity value, and cognitive advantage (perception of unstoppable weapon)
- Off-the shelf acquisition



MISSILES PROLIFERATION: SOME EXAMPLES - IRAN

- Domestically-produced missiles are the core element of its military arsenal. It was influenced by its limited access to foreign arms. Iran's diverse arsenal consists mainly of ballistic missiles with a range up to 2000 km.
- Iran used Short-Range Ballistic Missiles SRBM in retaliatory attacks against the Islamic States in 2017 and against US forces in Iraq in January 2020.
- Iran has also supplied missiles or related technology to Hezbollah in Lebanon and the Houti rebels in Yemen.



MISSILES PROLIFERATION AND EMERGING TECHNOLOGIES

- Several states have active Hypersonic Cruise Missiles (HCM) and Hypersonic boost-glide vehicles (HGV) programmes.
- The alleged benefits of this emerging technology could act as a catalyst to acquire or develop high speed systems.
- Russia's invasion of Ukraine in 2022 might accelerate missile proliferation in Europe, either through the indigenous development of these systems by European states or their deployment in Europe by NATO allies, particularly by the USA.
- With the collapse of the INF Treaty in 2019, there are no legally binding arms control agreements in Europe and all over the world.

MISSILES PROLIFERATION AND EMERGING TECHNOLOGIES

Russia has developed two types of Hypersonic Missiles:

1. the Air Launched KINZHAL (Used against Ukraine)
2. the Sea- Launched TSIRKON.

The USA does not have such missiles but it is working on them and is expected to complete programs for ground-and-air launched hypersonic missiles in few years; some of them will be deployed in Europe. (Nikolai Sokov, May, 2022)

Russia reports use of hypersonic missile

Kinzhal missile (Kh-47M2)

Highly manoeuvrable, air-launched ballistic missile fired from MiG-31 - hypersonic means can fly 5x speed of sound (Mach 5)



Type: Conventional or nuclear-capable

Range: 2000km approx

Missile length: 8m

Speed: Possibly to Mach 10 (12,350 kmh or 7,674 mph)

Source: CSIS. BBC research Image: Planetpix/Alamy Live News



MISSILES PROLIFERATION: SOME EXAMPLES - NORTH KOREA

North Korea continues to enhance its military nuclear program as a central element of its national security strategy.

North Korea continues to pose the most pressing risk to regional and global security through its unconstrained development of nuclear weapons and missiles. It has persistently sought confrontation and may still embroil the region in a war that would likely involve nuclear weapons. (SIPRI, 2023)



CONCLUSIONS

- Missile proliferation is a serious concern for global security and peace especially for the inability to keep up with the technological development, particularly in relation to “emerging technology”
- Both the MTCR and HCoC are weak compared to the nowadays challenges: new technologies, geopolitical challenges, loss of trust between nuclear powers and the increasement of a new dangerous arms race which involves several States and non states.
- Arms control and risk-reduction measures should be sought in order to manage and reduce the possibility of uncontrolled arms cascades in times of competitions and to lower the risk of miscalculation in the event of a conflict.