Issue #2 November 2023



# **NEWSLETTER**











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### LATEST HCOC NEWS

# SÃO TOMÉ AND PRÍNCIPE JOINS THE HCOC

In August 2023, São Tomé and Príncipe became the 144th subscribing state to the Hague Code of Conduct.

The total number of African states that have subscribed to the HCoC now stands at 42.

The FRS held a seminar dedicated to <u>African countries</u> just a few weeks before this decision, on 22-23 June 2023 in Abuja, Nigeria. During that meeting, regional representatives, the Nigerian Chair, the ICC (Austria) and FRS experts had a chance to exchange with representatives of São Tomé and Príncipe.

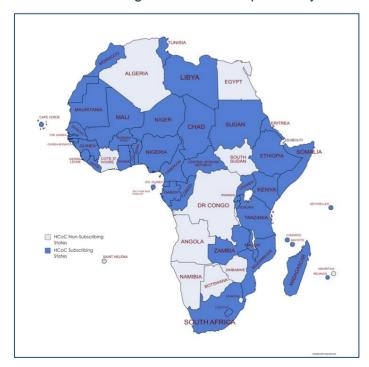
São Tomé and Príncipe's decision shows the <u>relevance for African</u> <u>states</u> to join these confidence-building measures and to increase their participation in non-proliferation and disarmament instruments.



# THE HCOC AND AFRICAN STATES



Ballistic missile programmes and the threats posed by these systems remain very low in Africa. South Africa dismantled its indigenous programme in the 1990s. Egypt conserved an <u>arsenal</u> acquired during the Cold War, while Algeria acquired SS-26E/Iskander short-range missiles from Russia in 2017. Even though the risk is therefore limited to a few countries, ballistic systems have been used by states and non-state actors in Africa (Libya, 2011) or neighbouring regions (Houthis in Yemen). Moreover, the risks these weapons entail on a global level could potentially affect African states both directly and indirectly.



Through HCoC, African states can gain access to information shared via the restricted platform by other subscribing states on their missiles and launchers policy, and on launches. As space capabilities have increased in Africa, the HCoC can provide a relevant framework to establish the peaceful nature of space development. Finally, by implementing CBMs in the field of weapons of mass destruction and their delivery vehicles, African states can also develop best practices and build capabilities to deal with other priorities such as the fight against the proliferation of small arms and light weapons. With 42 subscribing states, 78% of African states have subscribed to the HCoC, and 5 out of the 6 most recent HCoC subscribing states are African: Lesotho (2017), Togo (2019), Equatorial Guinea (2020), Somalia (2020), and São Tomé and Príncipe (2023).

### **INTERVIEW WITH THE HCOC SECRETARIAT**

Mr George-Wilhelm GALLHOFER, Head of Nuclear Disarmament and Non-Proliferation / Executive Secretariat of the Hague Code of Conduct and Ms Lioba BAMMER, Ministry of European and Foreign Affairs, Austria





#### CAN YOU DESCRIBE AUSTRIA'S INVOLVEMENT IN SUPPORT OF THE CODE?

As agreed in the Conference in the Hague in 2002 when the Hague Code of Conduct was signed and entered into force, Austria serves as Immediate Central Contact/Executive Secretariat of the Code to this day. As the Secretariat, Austria coordinates information exchange within the HCoC framework and organises the Annual Regular Meeting as part of its national contribution to the Code. Furthermore, we provide support to the Chair, assist States in accessing and using the eICC, the platform for information exchange, and brief interested States on the Code. We also coordinate outreach activities.

#### WHAT ARE THE MAIN MISCONCEPTIONS ABOUT THE HCOC AND WHAT EFFORTS HAVE BEEN MADE TO MAKE IT MORE EFFICIENT AND LESS BURDENSOME FOR STATES?



We have heard the misconception that the Code is not relevant for countries that currently do not possess capabilities/programmes for ballistic missiles or space vehicles. This is not the case. In fact, the benefit goes both ways: The Code benefits from universalisation and is meant to be a trust- and confidence-building instrument that all States can benefit from. States signing up gain important knowledge and confidence-building information about other States' programmes and impending launches of relevant missiles.

Another misconception we have heard is that the Code prevents States from developing ballistic missile capabilities or space programmes. As mentioned above, it is a politically binding Code of Conduct that does not contain any prohibitions but is meant to enhance information sharing, trust and confidence. Next to the MTCR – which is a smaller group of states and has a very different mandate - the HCoC is the only multilateral instrument concerning the spread of ballistic missiles.

Lastly, joining the Code is not as burdensome as some States might fear. In fact, it is usually a very small commitment for countries without relevant programmes and launches, consisting mainly in submitting an annual report. This has also been helped by the development of a Nil form, a standardised format for the Annual Reports and easy uploading into the online information exchange system that all subscribers gain access to. We as the secretariat stand ready to support states in their reporting.

#### ➤ WHAT ARE THE MAIN CHALLENGES FACING THE CODE TODAY AND WHAT DO YOU SEE AS THE WAY FORWARD?



The whole multilateral disarmament, non-proliferation and arms control regime is currently under pressure. Proliferation concerns and growing tensions also impact the Hague Code of Conduct, which relies on Subscribing States' political will and implementation. So far, we are happy to see that States continue to see the value of the Code as a confidence-building tool and use it to share information - in fact, many see it as more important than ever at a time when other instruments are under pressure. This is certainly how we see it.

Another challenge is implementation, regarding the timely submission of Pre-Launch-Notifications and Annual Reports. Standardised formats, assistance by the Immediate Central Contact and access to previous reports and notifications are resources that States can make use of to meet their obligations.

As in other fields, new developments and new technologies also may impact the Code. Space is an increasingly important domain, where multiple actors, also private ones, engage. It remains to be seen whether heightened attention on this domain and new advancements may be reflected in the further development of the Code.



### **NEWS ABOUT THE PROJECT**

# YOUTH GROUP FIRST MEETING IN PARIS



At the international level, delivery vehicles proliferation may be given less attention than the question of WMDs *per se*. However, the proliferation of missiles is a key concern today, with states developing programmes despite of sanctions or pursuing transfers prohibited by international law. For this reason, FRS created a <u>Youth Group</u> of young professionals and students in the field of disarmament and non-proliferation. This group aims to develop expertise on missile-related issues and raise knowledge about the Code by ensuring that representatives from the younger worldwide generation involved in disarmament and non-proliferation are familiar with the specificities of missile dissemination.

Composed of 17 fellows, the Youth Group aims at ensuring that:

- Adequate awareness is raised about the risks posed by missile proliferation around the world
- More stakeholders can contribute to global thinking about how to address the issues created by missile proliferation
- Relevant information is shared about existing mechanisms that aim at curbing missile proliferation, in particular the Hague Code of Conduct
- More diverse voices can raise their specific concerns linked to the proliferation of missiles and be provided the opportunity to share views and exchange on these concerns
- The new generation of experts on these subjects can meet and create informal links that will add value to their careers.

The <u>first meeting</u> of the Youth Group took place in <u>Paris from 25 to 27 October 2023</u>. During these three days of meetings and visits, the fellows had a chance to develop their understanding of missile proliferation. Various interactive meetings with renowned experts were organised on the important technical elements to take into consideration to analyse missile proliferation.

The workshop was kicked off with an exchange with **Amb. Marjolijn van Deelen**, EU Special Envoy for NPD who noted that 'it's important that the new generation is involved in the issue of non-proliferation and disarmament as it will help to contribute to the challenges that we face to come up with new ideas and new energy and put them forward.'

Experts focused on tools available for analysis, and in particular open-source intelligence. They elaborated on how these new assets can be used to increase the information available on missile programmes around the world. Presentations allowed the fellows to better understand the evolution of missiles in regions such as North Korea and the Middle East. The agenda also considered trends in the space sector, with a session dedicated to the emergence of 'New Space' and its impacts on the global efforts to curb missile proliferation.

In addition to these discussions, the fellows were invited to meet with diplomats at the French Ministry of Foreign Affairs and with officers from the French Ministry of Armed Forces. These meetings were an opportunity to better understand how a subscribing state to the Code, particularly concerned by missile as well as space issues, perceives the challenges posed by the spread of missiles today.





### **NEWS ABOUT THE PROJECT**



Finally, the group was invited to visit one of the main production sites of Ariane Group in Les Mureaux. On this site, located 42 km out of Paris, the company integrated the Ariane 5 cryogenic main stage and currently prepares the Ariane 6 launchers. The site is equipped with powerful computing, simulation, production (machining, forming and surface treatment), testing and inspection systems. Production includes large metallic structures, pyrotechnic and fluidic systems and lay-up manufacturing of composite structures. As the site is also involved in the production of the French M51 ballistic missile, the fellows had a chance to discuss with the company's executives on the technical and political considerations linked to the production of these systems.

The Youth Group is now going to start working on a joint paper dedicated to the dynamics of missile proliferation in the next ten years, with the help of the technical advisors involved in the project.















### **NEWS ABOUT MISSILE PROLIFERATION**

## **EVOLUTION OF THE HOUTHI MISSILE ARSENAL**





Over the years, the Houthi movement in Yemen has relied on ballistic missiles ranging from short-range (SS-21/Tochka, Hwasong-6, Qaher-1, Qaher-M2, Burkan-1) to medium-range (Burkan-2). From 2017 to 2021, the use of ballistic missiles was extensive with hundreds of strikes in Yemen, but also in Saudi Arabia and the United Arab Emirates. During that period, <u>cruise missile and UAV</u> strikes against UAE and Saudi Arabia became also prominent. This strategy proved efficient as shown during the strike in 2019 against Saudi with its <u>Quds-1 cruise missile</u>, and the strike against Abu Dhabi with <u>Samad-3 UAV</u>. Moreover, the focus of the attacks <u>evolved</u> with heavy civilian targeting.

That being said, the Houthi continues to expand its ballistic missile arsenal. In <u>September 2022</u>, the group paraded three different solid-fuel missiles, the Karar (similar to the Iranian Fateh-110), the Aasif (looking like the anti-ship Khalij Fars) and the Hatem/Hatim, an apparent copy of the recent Iranian system Kheibar Shekan. On <u>21 September 2023</u>, Houthi staged a parade in Sanaa showcasing new ballistic missiles, from apparent <u>Iranian origin</u>, including the Tankeel (potential copy of the Raad 500), a Qiam variant known as Aqeel, and the Toufan (visibly inspired from the Ghadr). In <u>October 2023</u>, ballistic missiles were reportedly fired from Houthi-control territory towards Israel, but intercepted.

With Iranian assistance, the Houthis managed to build up an array of precision-guided rockets, ballistic missiles, land-attack cruise missiles, and anti-shipping capabilities in a short period of time, indicating the remarkable advancement of capabilities and diversity in their missile arsenal.



### **BALLISTIC MISSILES & THE WAR IN UKRAINE**

Ever since the beginning of its attack over Ukraine, Russia has relied on ground-launched missiles (SRBMs) and air-to-surface missiles (aero-ballistic missiles). While ballistic missiles are much less used than <u>cruise missiles</u> and drones, they are still a high priority in Moscow. The most commonly used is the 9M723 Iskander (SS-26) SRBM. As of January 2023, Russia launched nearly <u>750 Iskander</u>. Russia also employs the Kh-47 Kinzhal aero-ballistic missile, a modified Iskander launched from a MiG-31K fighter, which Russia claimed as a <u>hypersonic missile weapon</u>. In 2022, Russia used a dozen Kinzhal in <u>3 different Ukrainian regions</u>. From <u>April to June 2023</u>, Kinzhal and Iskander made up respectively about 1% and up to 2% of all Russian missile attacks in Ukraine. However, research shows that from May to June 2023, Ukraine successfully <u>intercepted</u> 79% of Russian ballistic missiles, with the <u>Patriot batteries</u> shooting down around 34 Iskander and Kinzhal.

On the Ukrainian side, Kyiv asked the United States to be equipped with SRBMs as well and requested in particular the Army Tactical Missile System (ATACMS). Washington was initially reluctant to agree to this transfer to avoid the risk of further escalating the conflict, but eventually relented and delivered the first batch of ATACMS to Ukraine in October 2023. The ATACMS was used for an attack on Russian air assets on 17 October 2023.





## **NEWS ABOUT BALLISTIC MISSILES & LAUNCHERS**

# **SELECTED MISSILE TESTS**



#### AGM-183A:

• 22/08/2023 and 12/10/2023

The US Air Force reported the successful flight test of the <u>AGM-183A</u>, an air-launched hypersonic glider coupled with a ballistic booster. Among the five previous live tests, two resulted in failure, one was a partial success, and two have been described as successful.

#### **Ababeel and Ghauri:**

18/10/2023 and 24/10/2023

The Pakistani Army confirmed the successful flight test of liquid-fuel MRBM <u>Ababeel</u> (2,200 km range) and <u>Ghauri</u> (1,500 km range) within a span of one week. Both missiles are capable of carrying conventional and nuclear weapons.



#### Minuteman III:

01/11/2023

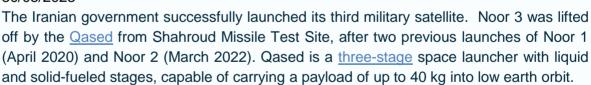
The US Air Force launched a <u>Minuteman III</u> ICBM from a test silo at Vandenberg Space Force Base, but had to terminate the missile shortly after due to a technical problem. This is the third time Minuteman III fails to launch, following a launch abort in 2021 and an explosion in 2018.



# **SELECTED SPACE LAUNCHES**

#### Qased:

30/05/2023





#### **LVM-3**:

14/07/2023



The Indian Space Research Organization (ISRO) <u>launched</u> an <u>LVM-3</u> rocket, as part of the Chandrayaan-3 mission. The LVM-3 successfully carried the Vikram lander into an Earth orbit, which landed on the lunar south pole of the Moon on <u>23 August 2023</u>. The Pragyan rover completed its mission in September 2023.

#### Soyuz Luna-25:

11/08/2023



Russia successfully <u>launched</u> a <u>Soyuz 2.1b</u> rocket from Vostochny Cosmodrome with a Fregat-M upper stage, carrying the Luna-25 lander. This was Russia's first lunar mission after nearly 50 years, but the mission failed as the spacecraft crashed into the moon.





### **END NOTE**

# SELECTED PUBLICATIONS

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- Vann Van Diepen, 'Don't Judge a Book by Its Cover: North Korea's HS-18 Is Not a Russian ICBM,' Military Affairs, 38 North, 21 August 2023.
- Farzin Nadimi, 'The Next Generation of Iranian Ballistic Missiles: Technical Advances, Strategic Objectives, and Potential Western Responses,' Policy Notes 138, The Washington Institute for Near East Policy, 25 July 2023.
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- Bashir Ali Abbas, 'The Agni Prime Missile: Shifts in New Delhi's 'missile thought'?,' Expert Speak, ORF, 11 July 2023.
- Decker Eveleth, 'People's Liberation Army Rocket Force Order of Battle 2023,' Report, CNS, July 2023.
- Ian Williams, 'Russia Isn't Going to Run Out of Missiles,' Commentary, CSIS, 28 June 2023.

# **INFORMATION AND CONTACTS**



- Organisation website: Fondation pour la Recherche Stratégique.
- Further information on the project implementation available here.
- Project website: <u>Supporting the Hague Code of Conduct.</u>

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