



EU joint contribution to the report of the UN Secretary-General following the UNGA Resolution 77/251 on “Transparency and confidence-building measures in outer space”

The European Union and its Member States consider the UN General Assembly Resolution 77/251 on transparency and confidence-building measures in outer space activities, adopted by the General Assembly on 30 December 2022, to be a key instrument for the promotion and strengthening of international cooperation in the free exploration and use of outer space for peaceful purposes. TCBMs can reduce, or even eliminate, misunderstandings, mistrust and miscalculations with regard to the activities and intentions of States in outer space and are an important stepping-stone, a middle ground, towards reaching a more comprehensive agreement on the sensitive issue of preventing an arms race in outer space.

The EU and its Member States support the 2013 report of the Group of Governmental Experts on Transparency and Confidence Building measures in Outer Space Activities, which was agreed by consensus. The EU and its Member States consider that States should fully implement the recommendations and improve transparency and remain convinced that TCBMs can make an important contribution to the security, safety and sustainability of activities in outer space. Efforts to pursue political commitments, through a comprehensive approach, dealing with both civil and military aspects of space activities, and as a complement to existing international law, remain relevant.

Outer space is an area where security challenges have increased in recent years, risking not only the sustainability of the space environment, but also the safe and secure operations of space activities and access to services on which the global community rely, and it therefore merits our full attention. The rapid growth of human activity, coupled with the increased diversity of space operators makes it increasingly necessary to further develop international norms and standards, guidelines, best practices, principles of responsible behaviour and TCBMs related to human activity in space, while ensuring compliance with existing international law.

Enhancing the transparency of outer space activities

Trust and confidence are at the centre of any security-building process. Thus, we are convinced that fostering mutual trust and strengthening transparency between States is key to enhance space security and to avoid a conflict in outer space. The EU and its Member States consider that publishing and sharing information about space doctrines, policies and strategies is a responsible behaviour and would help create confidence between different actors. Such measures will help reduce the risks of misperception, miscalculation, and unwanted conflict escalation.

Against this background, the EU and its Member States acknowledged in the Strategic Compass¹ adopted in March 2022 that they need to be prepared for a more competitive and contested space environment. Due to our increasing dependency on space systems and services, we are more vulnerable to irresponsible and threatening behaviour by strategic competitors. The freedom of action of the EU and its Member States depends on safe, secure and autonomous access to the space domain. An EU Space Strategy for security and defence will help the EU and its Member States build a common understanding of space-related risks and threats, communicate on what they perceive as threatening behaviours, develop appropriate measures, including response measures to protect their interests, and also make full use of the benefits and opportunities linked to the space domain. This strategy, adopted and published in March 2023 implements the actions comprised in the Strategic Compass and complements the 2016 Space Strategy for Europe². Making it public ensures transparency on the Union’s activities and intentions, in accordance with the suggested TCBM on information exchange on space policies. The objective is for the EU

¹ <https://data.consilium.europa.eu/doc/document/ST-7371-2022-INIT/en/pdf>

² <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016DC0705&from=EN>

to take stock of the existing security environment and adapt to contingencies as a responsible space actor, to contribute to preventing miscalculation and misinterpretation.

The EU and its Member States consider that the existing United Nations Treaties on Outer Space contain several transparency and confidence-building measures of a mandatory nature and that accepting the rights and obligations contained in these treaties and abiding by their provisions is a major TCBM. As a responsible, rising space actor, the EU is working on possible ways by which it could accept the rights and obligations under the relevant United Nations Treaties on Outer Space, in particular the Rescue Agreement, the Liability Convention and the Registration Convention.

Non-legally binding transparency and confidence-building measures for outer space activities should complement and/or further clarify the existing international legal framework pertaining to outer space activities, and not undermine existing legal obligations or hamper the legal use of outer space.

- **Information exchange on space policies and related outer space activities**

The EU and its Member States consider that the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) and its Subcommittees are unique platforms for international cooperation in the peaceful uses of outer space, including on the development of international space law, international norms and standards, guidelines, best practices, and other transparency and confidence building measures regulating space activities. The Committee's important role for global space governance was also recognised by the UN Secretary General in his report "Our Common Agenda".

The EU and its Member States co-sponsored and strongly supported the preamble and the 21 Guidelines for the Long-term Sustainability of Outer Space activities, adopted by the UN General Assembly in 2019 and welcomed the establishment of the Working Group on the Long-term Sustainability of Outer Space Activities (WG-LTS) under the Scientific and Technical Sub-Committee, and its progress since then.

The European Union has submitted a joint contribution consisting of the contributions of the EU institutions and EU Member States, providing information on how they have implemented the LTS guidelines or what their plans are, taking into consideration the fast development of space activities at both European and national levels.

In this way, the European Union is making a broader commitment to ensure the actual implementation of the principles contained in the LTS guidelines, which in practice resonate with several categories of TCBM on Information Exchange on Space Policies (A) and Space Activities (B), and Risk Reduction (C):

In practical terms, the EU has set-up specific instruments managed by the European Commission for the promotion and awareness raising activities, both in the EU and in non-EU countries.

Thus, the Foreign Partnership Instrument funds the 'Global Action on Space' (2021-24) to enable new opportunities for the EU space ecosystem worldwide. Through this Action, the European Commission deploys a wide number of outreach activities worldwide, including, inter alia: the provision of targeted space market reports on more than 40 countries around the world; space diplomacy activities and training and individualised coaching to both the public and private sectors wishing to engage into cooperation on space with partners from all 5 continents.

The Galileo Information Centres in Latin American countries provide information on European Global Navigation Satellite System, enable local capacities and promote academic and business-to-business cooperation between EU space actors and relevant counterparts in Latin America.

The Copernicus Relays and Academies are two well-established networks. They contribute to create local expertise and boost knowledge sharing on Copernicus both in the EU and in non-EU countries.

Furthermore, the EU and its Member States underline the important role of ITU in the management of the radio frequency spectrum and geostationary orbital slots. In the context of transparency and confidence-building measures, the ITU Radiocommunication Bureau plays a key role in addressing harmful radio-frequency interference, as provided for in article 45 of the ITU Constitution and article 15 of the ITU Radio Regulations. The EU and its Member States emphasise the importance of commitments to establish and implement policies and

procedures to minimize any form of harmful radio-frequency interference with the peaceful and free exploration and use of outer space.

From this perspective, The EU Space Programme (EUSP) adheres to the relevant rules and procedures laid out in the international Radio Regulations. For space systems, this requires as a first step the submission of a satellite network filing to the ITU to establish the frequency rights of the space system. As EU institutions have only regional organisation observer status at the ITU, all matters concerning frequencies used by the EUSP have to go via a MS as the submitting country (FR, IT, DE in the past). The MS then usually delegates operational matters to the Commission, but retains overall responsibility for the rights and obligations of the satellite network filing. The filings are coordinated under the ITU rules and procedures, which ensures that the concerned EUSP is used so “as not to cause harmful interference with the reception and transmission of radio signals”.

The EU and MS actively follow the rules and procedures defined in the Radio Regulations for space systems within their responsibility. The Commission is also actively engaged in promoting appropriate and responsible spectrum management, primarily to protect spectrum used by GNSS.

- **Risk reduction notifications**

The operational pillar of the EU STM approach is the EU Space Surveillance & Tracking (EU SST), which has been operational since 2016 and is now part of the EU Space Programme’s Space Situational Awareness component. Implemented by a Partnership of by now 15 EU Member States³ that cooperate and contribute their sensor and operational capabilities, EU SST has been providing operational 24/7 services for a growing community of users through dedicated Operational Products, a shared Database and a Front Desk. This includes collision avoidance service for more than 300 satellites as well as re-entry and fragmentation analysis services. The collision avoidance service is, as of the first quarter of 2023, open to non-European users. Through these efforts, the EU implements TCBMs on exchanges on orbital parameters of space objects and conjunctions (B.39.a) and thus supports risk reduction for scheduled manoeuvres (C.42), uncontrolled high risk re-entries (C.43, C.44) and orbital breakups (C.45).

EU SST, with data from its own sensor network and through its dedicated operational centres, also offers a Re-entry service free of charge, which currently serves more than 125 registered users, including civil protection authorities from EU Member States. The EU and its Member States believe that increasing cooperation between States regarding their Space Surveillance and Tracking and their Space Situational Awareness services would also be helpful.

Further SST services are envisaged, such as the development of activities in preparation of space debris mitigation and remediation, contributing to the implementation TCBMs related to risk reduction. This EU Approach will actively contribute to ongoing work strands on the long-term sustainability of outer space activities and future multilateral discussions on STM, in view of cooperation for space safety in fulfilment of TCBMs.

In addition to risk reduction notifications, the EU and its Member States consider that the whole behavioural approach can be in itself a TCBM.

In this regard, the EU and its Member States fully supported the establishment of the Open Ended Working Group on reducing space threats as a pragmatic step in a cooperative and comprehensive process that helps to build a common understanding of what can be considered responsible and irresponsible behaviours.

The EU has made several joint contributions, and several EU Member States have submitted national or cross-regional working papers. We welcome the active engagement demonstrated during this process, which shows the commitment of United Nations Member States and relevant organisations to address the issue of reducing space threats through norms, rules and principles of responsible behaviours.

- **Contact and visits to space launch sites and facilities**

The EU and its Member States concur with the 2013 GGE report in emphasising the important role of the Hague Code of Conduct against Ballistic Missile Proliferation (HCoC). The HCoC is the sole existing instrument aiming

³ Austria, The Czech Republic, Denmark, Finland, France Germany, Greece, Italy, Latvia, The Netherlands, Poland, Portugal, Romania, Spain and Sweden

at universality and fostering confidence building and transparency between States in the field of ballistic missiles. Even though the non-proliferation objective of the HCoC is paramount, as reflected in its title, it also addresses the question of space, with Article 2f recognising that “States should not be excluded from utilising the benefits of space for peaceful purposes, but that, in reaping such benefits and in conducting related cooperation, they must not contribute to the proliferation of Ballistic Missiles capable of delivering weapons of mass destruction”. In addition, sharing information on space launch vehicle programs, including pre-launch notifications, is already established practice under the HCoC. Universal subscription by all UN Member States to the Code remains a key EU objective for achieving its full potential. The EU and its Member States encourage all States to subscribe to the HCoC.

Since 2008, the EU has provided significant support for the universalisation and implementation of the Code, in cooperation with the [Fondation pour la Recherche Stratégique](#). Through four consecutive CFSP actions, the Fondation pour la Recherche Stratégique has organised numerous expert missions, regional and sub-regional seminars and outreach events with non-subscribing states. In June this year, the EU, France and the Netherlands, in partnership with the Fondation pour la Recherche Stratégique, organised an outreach event open to all UN Member States in Vienna to mark the occasion of the 20th anniversary of Hague Code of Conduct. In addition, over the years they have organised visits of the launching sites, in particular the spaceports in French Guiana (twice), Japan and Norway.

International cooperation

The EU discusses space related topics, including experiences and best practices, in space dialogues with international partners. These dialogues can take place in the framework of the political dialogues with third States, in the dialogues on disarmament and non-proliferation and/or in the context of civilian space dialogues.

Further, in 2022, the EU committed to tackling the global challenge of Space Traffic Management (STM)⁴ through developing capabilities, regulatory aspects and partnerships. Our EU approach for STM foresees multilateral engagement in the context of the United Nations, and bilaterally with international partners in view of interoperability and data-sharing, building on regional contributions. Our regional contribution will be based on the further development of Space Situational Awareness (SSA) capabilities contributed by the members of the EU SST Partnership. In publishing the policy, providing regular updates on its activities and engaging increasingly with external partners, the EU implemented TCBM measure on Information Exchange on Space Policies (A. 37).

The EU Space Programme’s Space Situational Awareness component also includes efforts on the development of services related to Space Weather and Near Earth Objects, which will support the implementation of measure B.40 on natural hazards.

Outreach

In September 2019, the EU has launched the 3SOS campaign – Safety, Security and Sustainability of Outer Space. This is a public diplomacy campaign to build support for a safe, secure and sustainable outer space, promoting a sustainable approach to space by avoiding collisions, reducing the creation of long lived orbital debris and promoting transparency and confidence-building measures, in an effort to reduce the risk of mishaps, misperceptions, and mistrust in the area of space security and stability. It aims at building awareness and creating a fertile soil for concrete measures to be negotiated at worldwide level.

In this framework, we have organised one ad-hoc seminar in December 2019 on Security, Safety, Sustainability: Promoting Good Behaviour in Outer Space, one workshop in two separate sessions, in July and in October 2021 focusing on a Common Understanding of the risks and threats to safety, Security and sustainability in Outer Space, and a workshop in October this year devoted to presenting the 3SOS public diplomacy campaign, focusing on aspects of space security in addition to space safety and sustainability through Space Traffic Management (STM).

⁴ https://commission.europa.eu/system/files/2022-02/join_2022_4_1_en_act_part1_v6.pdf

In conclusion, the European Union and its Member States emphasise that all EU initiatives are developed in the spirit of the international cooperation for the peaceful uses of outer space and we will continue to implement, to the greatest extent possible, the TCBMs contained in the 2013 Report of the GGE, in order to advance outer space issues in multilateral fora.
