#### OEWG on reducing space threats through norms, rules and principles of responsible behaviours

#### - FRANCE working document -

## Threats that states pose or may pose to space assets, as well as actions, activities and omissions that could be deemed irresponsible

The strategic context appears to have deteriorated today, with the strengthening of strategic competition between space actors, illustrated by the multiplication of dangerous and potentially destabilizing behaviours. These developments, which are favoured by the lack of a shared understanding of the norms, rules and principles of responsible behaviour, are conducive to the risk of misunderstandings and are likely to provoke an uncontrolled rise in tensions in space. They are all the more problematic as dependence of our societies, economies and ways of life on space continues to grow, whether or not we are so-called "space powers".

This working group on the reduction of space threats through norms, rules and principles of responsible behaviour is, in itself, and insofar as it allows a real dialogue between actors, a confidence-building measure. It will allow States to exchange in a frank and direct way on their concerns, their visions of threats and of the strategic context, and will thus improve the common understanding of the space environment.

### 1. Space is a domain where the detection, characterization and attribution of threats remain complex

Space is a largely dual-system environment where knowledge of the environment is inherently difficult. Harmful actions faced by governments and private actors can be difficult to detect and characterize, due to the inherent characteristics of the space environment, the difficulty of tracking and monitoring end-to-end space activities, and the possibility for states to use these private actors as proxies to develop malicious activities. This difficulty in detection, characterization and attribution, as is the case in other areas such as cyberspace, makes the risk of misinterpretation and misunderstanding high.

In practice, it is extremely difficult today, even for major space powers, to detect all space events, to foresee the risks and threats they may face and to detect potentially unfriendly or aggressive intentions behind a certain behavior. Developing and implementing norms, rules and principles of responsible behaviour, agreed by all, will therefore make it possible to objectify intentions, to better understand the space environment and to reduce the risks of misunderstandings and misinterpretations.

### II. Today we are confronted with the problem of dual purpose and often ambiguous space threats, which are mostly located in a gray zone.

States and different actors are facing a multiplication and intensification of hybrid strategies, harassment methods, and show of force. These current and recurrent threats, playing under the threshold of the use of force, are to be considered as a priority considering their potential consequences on the space environment and the international stability. In this context, earth-to-earth, earth-to-space, and space-to-space threats are the most imminent and urgent to address.

Moreover, the fact that our economies grow increasingly interdependent, that our societies rely more and more on space activities and that space cooperations expand is likely to provoke, in the event of space attacks, consequences and domino effects whose extent is difficult to assess and cannot be

controlled in any case. The indiscriminate nature and the potentially uncontrolled and unpredictable effects induced by certain behaviours observed in recent months, such as destructive anti-satellite launches or cyber attacks, which do not always allow for accurate attribution, are dangerous and pose a risk to international security.

Another area of concern is the dual purpose of space capabilities: those necessary to maintain free and viable access to space, such as in-orbit servicing and active debris removal capabilities, for example, can be diverted from their primary use and potentially used for unfriendly or even aggressive purposes. Diverting an object from its original function can thus make it a "weapon by destination" when it is used by a malicious actor.

# III. In the long run, lack of common standards and transparency, as well as continuation of current coercive strategies would be disastrous for the space environment and international security as a whole

Today we observe a lack of transparency from certain space actors, both with regard to their space capabilities and to their doctrines and strategies. This lack of transparency inevitably leads to a form of mistrust and does not allow the creation of conditions for peaceful cooperation. In the same way, this lack of transparency can lead to a form of "overreaction" that feeds suspicion and mistrust. If such strategies and opacity were to persist, they would bear the seeds of destabilization and threats to international security. France has done its part in this fundamental exercise of transparency while presenting its national defence space strategy publicly and before the Conference on Disarmament.

The number of space nations, limited in the past, has continued to increase and will continue to increase in the future, as the uses of space systems become more widespread. France defends and encourages this free access to space for all, in the interest of the prosperity of all nations. Viability of space activities and sustainable use of orbits are therefore an issue for international society as a whole. There can be no interest for anyone to deploy any harmful or sabotaging action targeting space systems - such as the intentional creation of multiple debris - without degrading the security of all. Resorting to such actions is irresponsible and must be prohibited.

### IV. <u>Characterization of responsible, irresponsible or threatening actions with regard to their consequences on international security</u>

In light of the above, several behaviors appear, for France, as potentially irresponsible:

- Behaviours that lead or could lead to the kinetic destruction of satellites, insofar as they increase risks of damaging the space environment and provoking domino effects: these concern in particular intentional actions, such as anti-satellite launches that could lead to the creation of multiple pieces of debris and threaten the freedom of access to and the use of space. These space threats can result from ground-based or co-orbital ASAT capabilities. These launches, when conducted from the ground, are more easily observable and attributable;
- Behaviours leading to the disruption of space systems when there is a high risk of misunderstanding and uncontrolled escalation: some proximity manoeuvres can appear as a threat since, in the absence of confidence-building measures and transparency, a state cannot know the intention associated with this operation. In this case, the State cannot know if it is a simple error, or if the objective is to disrupt the operation of its satellite, to destroy it or to deorbit it for example under the cover of an active debris removal mission;

Behaviour whose effects can have consequences for the safety of people and property: for example, anti-satellite launches, dazzling, jamming, usurpation or cyberattacks, when used against certain space systems, can lead to a risk for the safety of property and people, for example by causing disruptions to aircraft navigation systems, collisions of ships (attacks on satellite navigation systems), preventing rescue and emergency services, or even prediction of certain natural disasters and meteorological phenomena.

#### V. Conclusion

In conclusion, this OEWG is an opportunity for all to express their concerns and to exchange on their perceptions of space threats, what they see and observe on a daily basis and what they foresee. The very fact that this discussion is taking place is an exercise in transparency insofar as it allows for an understanding of what is considered to be irresponsible or threatening behaviors. The search for common solutions can only be achieved through this exchange on the current situation.