



TECHNICAL CHALLENGE



«Space Constellations»

How can the Ministry of Armed Forces benefit from this new kind of space infrastructure?

Nearly half of the satellites in orbit are part of the constellations used for telecommunications (such as Star Link and OneWeb), navigation (GPS, Galileo, Glonass, Beidou) and Earth observation (BlackSky, Planet, etc.). These constellations are expanding and new ones are being deployed (Kuiper, GW, IRIS², IRIDE), which leads to a growing number of objects in orbit, sometimes up to tens of thousands.

This situation raises many questions notably concerning orbital crowding, competition between players for access to different resources such as the orbital spectrum and helio-synchronous orbits, as well as access to heavy launchers. These elements have the potential to transform economic models and the space landscape.

From a security and defence perspective, it is critical to understand how to benefit from this new paradigm without giving up on developing distinctive operational advantages. How can this situation be exploited while guaranteeing the security of space assets and meeting defence requirements?

You have 24 hours to brief us about the opportunities provided by these new civil constellations and their associated services in complement to the space services and resources of the Ministry of Armed Forces .

TO DO THIS, YOU SHOULD :

- ▶ Tell us about existing constellation projects and their associated services as well as those under development which you think are the most promising for the Ministry of Armed Forces through direct, combined and adapted usage in order to :
 - Improve our knowledge of the space situation on behalf of the Armed Forces, both for in-orbit surveillance and early warning.
 - Optimize the use of our sovereign satellites (telecommunications, intelligence) and maximize production, exploitation and dissemination of data produced on board..
- ▶ Present an action plan which would allow us, depending on the military use cases you have identified, to quickly deploy an initial interface capability with these infrastructures and services on behalf of the Ministry of Armed Forces, using "off-the-shelf" technological bricks.

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