



The new NATO Space Centre of Excellence

A Newcomer in the World of Space Expertise for NATO's Benefit

Over decades, Space has taken an increasingly important role in all the aspects of our daily life. As a result, we are now permanently connected to and through 'Space'. The strategic features of Space have evolved from being very important at the early stages of the adventure, especially in terms of power credibility, to being vital. Our societies' progress is definitively interlaced with Space.

Moreover, new technological and industrial developments have created a so-called 'new space' environment. It is more affordable and, as a result, allows for easier access to Space becoming open to more customers, service and solution providers, and new lucrative businesses, including Space tourism. These extraordinary factors along with increasing strategic concerns have drastically transformed the environment now commonly described as congested, contested, and competitive. What is more, it is likely only the beginning of a new era.

Following this evolution, allies and NATO have developed their own vision for Space. Consequently, NATO declared

publically in December 2019 that Space, which 'is increasingly important for the Alliance's and Allies' security and prosperity';¹ must now be addressed 'as an operational domain to ensure a coherent approach for integrating Space into NATO's overall deterrence and defence posture'.²

Within this new framework, NATO has developed an ambitious Overarching Space Policy that begins with a five to six year ramp-up period. There is a significant amount of work to be carried out to achieve the ambitious objectives. A wide range of activities must be developed, including but not limited to: collective space awareness, framework and guidance, concept, doctrine development, education and training, etc.

In this context, France has offered to support NATO's Implementation Plan by creating and establishing a Centre of Excellence (COE) dedicated to Space on its territory. In response, the NATO Military Committee has accepted the French proposal on 29 January, 2021.

To help establish the NATO Space COE, a roadmap has been developed by France in coordination with the NATO Military Committee. Only two years have been allocated to stand up the COE and, eventually, acquire NATO accreditation. There are four major milestones on this roadmap. Two of them are represented by the Establishment Conferences, which gather all prospective Sponsoring (NATO) Nations. The first one occurred in Paris (in November 2021) and the second one took place in Toulouse (in March 2022). These conferences enabled the development of the concept for the COE, the operational Memorandum of Understanding (MOU) describing the future relationships between Sponsoring Nations, and the functional MOU addressing relationships between the NATO Space COE and Allied Command Transformation (ACT). Besides, during the second Establishment Conference, nations shared their intent to fulfil some of the COE's positions, giving tangible breadth to the project.

The third milestone is the signing of the operational MOU. This key event will mark the dawn of NATO Space COE's history. At this stage, the COE will have an International Military Organization status.

The second half of 2022 will be devoted to acquiring NATO accreditation. This period will culminate with the final milestone, an in situ accreditation assessment led by ACT. Eventually, a NATO staffing process should conclude with the COE's accreditation and the signing of the functional MOU. Thereupon, the NATO Space COE build-up will continue over a three-year period, to reach full operational capability, by mid-2025.

As far as its mission framework is concerned, the COE will provide knowledge, analysis, and products covering Space operational functions as described by NATO (to Space, in Space, from Space). It will promote Space expertise sharing and interoperability and establish a bridge between NATO and all relevant national and international Space organizations from all sectors (Defence, Civil, Industry, and Research).

The NATO Space COE will focus on key roles of NATO pertaining to Space. By design, the COE will address NATO requirements through the four core pillars:

- Education, Training, Exercise, and Evaluation;
- Analysis and Lessons Learned;
- Doctrine and Standardization, and
- Concept Development and Experimentation.

The COE will be located in Toulouse at the heart of a valuable Space ecosystem, which will offer the ability to take advantage of world-class Space resources and expertise. It will facilitate monitoring of the latest trends, detection of technological breakthroughs and educated assessment of the consequences to identify risks, threats, and benefits for NATO and the allies.

The Joint Air Power Competence Centre (in Kalkar, Germany) is and will remain an essential partner for the NATO Space COE for several reasons. Firstly, JAPCC has developed a Military Space Doctrine. As NATO Space COE is embracing the Space domain, a handover of the Space subject matter expertise between the two COEs is already ongoing. Hence, the NATO Space COE will capitalize on the JAPCC's work to enhance, develop, and expand its Space doctrine roots to cover the whole Space domain. Secondly, the Air domain has a unique, historical, and natural connection with the Space domain. Finally, the JAPCC, as an experienced COE, can provide advice in terms of organization and relationship within the COE world.

1. 'NATO's overarching Space Policy', 2019, https://www.nato.int/cps/en/natohq/official_texts_190862.htm?utm_source=linkedin&utm_medium=nato&utm_campaign=20220117_space#:~:text=This%20overarching%20NATO%20space%20policy,of%20the%20Alliance's%20overall%20posture%3A&text=The%20free%20access%2C%20exploration%20and,common%20interest%20of%20all%20nations (accessed 23 Feb 2022).

2. Idem. 1.

© 2022 JAPCC

Author: Colonel Thierry Chapeaux, FR AF. Colonel Chapeaux joined the French Air Force in 1993. A fighter pilot by trade, he has balanced his career between fighter squadrons, fighter training units and the general staff. He served as Commander of French Guyana Air Base before becoming the head of the NATO Space COE Establishment Team. During his service, he contributed to numerous NATO and national operations, mainly in Air C2 positions. Colonel Thierry Chapeaux holds 2700 flight hours.

Disclaimer: This document is a product of the JAPCC. It does not represent the opinions or policies of the North Atlantic Treaty Organization (NATO) and is designed to provide an independent overview, analysis and food for thought regarding possible ways ahead on this subject. This document is releasable to the public. Portions of the document may be quoted without permission, provided a standard source credit is included. Published and distributed by The Joint Air Power Competence Centre, von-Seydlitz-Kaserne, Römerstraße 140, 47546 Kalkar, Germany.

Contact: Visit us on www.japcc.org, write us an e-mail at contact@japcc.org.

Follow us on Social Media:

