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HOW SPACE ORGANISATIONS ADAPT TO CHANGING ENVIRONMENTS OVER TIME

Abstract

On 7 September 2018, the French Minister of the Armed Forces delivered an address about space and defence that augured a substantial change in doctrine. The speech had a heavy focus on how to deal with the new reality of space becoming a contested domain. Other main topics included New Space, space traffic and debris management, and reorganising space structures. A task force reported to President Macron, expected to present soon the new defence space strategy. Not only space is regarded as a vital strategic asset for defence (operating through space), but new modes of action are considered (operating in space), to react to threats and maintain an unrestricted access to space. “Outer space has become the scene of rivalries between the great powers, and a field of operations as such.” Strengthening Europe’s strategic autonomy in the space sector is strongly advocated. Will this be achieved through multilateralism, multi-bilateralism or both? Should Member States agree, safety and security would be a major pillar of the proposal currently developed by the European Space Agency, in view of the upcoming ministerial meeting. This would constitute a significant evolution, as ESA’s purpose shall be for “exclusively peaceful purposes”. The European space endeavour dates back to 1964, when the Conventions of ELDO and ESRO entered into force. ESA took over from these two organisations in 1975. Looking at the history of this collaborative effort, the Agency can be seen as an evolving organism that has successfully adapted to repeatedly changing environments. This adaptation has not been arbitrary. ESA has a backbone made up of the national ministries that fund it, of the firms that build its hardware, and of the scientists, engineers, and administrators who integrate its parts into a whole, and define its primary goals. In the late 1990s, a new actor entered the space domain: the European Union. Satellite navigation and Earth observation affected multiple areas of daily life, and so fell within the Commission’s extended range of competence. ESA has redefined the meaning of its commitment to the peaceful use of outer space to allow Galileo to be used for certain types of armed intervention on Earth. Looking back over the history of ESA, one is struck by the frequency with which the same themes re-emerge. They take on different forms, and demand different responses. Through specific examples, this article intends to investigate which mechanisms led to ESA’s evolution over time.