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Regional cooperation in space: policies, governance and legal tools (1)

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AN ASSESSMENT OF GOVERNANCE STRUCTURES AND SPACE STRATEGIES IN MEMBER STATES OF THE EUROPEAN SPACE AGENCY (ESA)

Abstract

The European Space Agency (ESA) has twenty Member States with a variety of governance structures and strategic priorities regarding their space activities. A number of countries engage in space activities exclusively though ESA, while others have also their own national space programme. Some consider ESA as their prime space agency and others have additionally their own national agency with respective programmes. The main objective of this paper is to provide an up-to date overview and a holistic assessment of the national space governance structures and strategic priorities in twenty ESA Member States. A link is made between the governance structure and the main strategic objectives. The paper is structured into two parts. The first part of this paper provides a categorisation of national space governance structures in ESA Member States. Different governance models are identified depending on the responsible ministries for space. These can typically vary from the more traditional ministry of science and/or education, the ministry of industry and/or innovation to the more recent ones being the ministry of economy and the ministry of transport. Recognising the transverse nature of space and its potential as a tool for a number of policies like agriculture, environment, maritime, disaster management, etc., other ministries are more and more getting involved in space activities. The development and implementation of the space strategy and policy of a Member State is realised though the engagement of an implementing entity. The type, role and activity vary from Member State to Member State. The second part of the paper focuses on the content and analysis of the national space strategies and indicates the main priorities and trends in ESA Member States. The priorities are categorised with regards to technology domains, the role of space in the areas of sustainability and the motivators that boost engagement in space. These vary from one Member State to another and include with different levels of engagement in technology domains amongst others: science and exploration, navigation, earth observation, human space flight, launchers, telecommunications, and integrated applications. Member States allocate a different role of space as enabling tool adding to the advancement of sustainability areas including: security, resources, environment and climate change, transport and communication, energy, and knowledge and education. The motivators motivating reasoning which enhances or hinders space engagement also defers. The motivators identified are industrial competitiveness, job creation, technology development and transfer, social benefits, international cooperation, and European non-dependence.