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Policy and economic aspects of space weather (2)

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ECONOMIC AND POLICY CONSIDERATIONS FOR THE DEVELOPMENT OF A COORDINATED
EUROPEAN SPACE WEATHER INFRASTRUCTURE

Abstract

The overall objective of the Space Situational Awareness (SSA) of the European Space Agency (ESA) is to support the European independent utilisation of and access to space research or services. This will be performed through providing timely and quality data, information, services and knowledge regarding the environment, the threats and the sustainable exploitation of the outer space surrounding the planet Earth. SSA serves the implementation of the strategic missions of the European Space Policy based on the peaceful uses of the outer space by all states, by supporting the autonomous capacity to securely and safely operate the critical European space infrastructures.

The space weather segment of the SSA preparatory programme builds on work supported by the Agency in the area of space weather applications from 1996 onwards. Recently this work has focussed on a space weather applications pilot project which included a wide ranging economic assessment of the potential costs and benefits for Europe of embarking on such a system.

In order to achieve reliable services, the key measurements required must be supported by a clearly defined infrastructure. The SSA preparatory programme currently underway includes an analysis of existing space weather assets, identification of capability and/or measurement gaps and requirements in order to lay the groundwork for the development of a space weather segment constituting space weather services with sufficient availability and reliability to be included in decision making processes by end-users.

This presentation will describe the main outcomes of the space weather pilot project cost and benefit analysis study and implications for developing a European service infrastructure for space weather as part of a coordinated SSA programme. International cooperation will also be discussed.