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# COMMISSION IMPLEMENTING DECISION (EU) 2025/469

## of 12 March 2025

## laying down rules for the application of Regulation (EU) 2021/696 of the European Parliament and of the Council as regards the selection of the Union space weather service for the space weather event sub-component of the Union Space Programme

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) 2021/696 of the European Parliament and of the Council of 28 April 2021 establishing the Union Space Programme and the European Union Agency for the Space Programme and repealing Regulations (EU) No 912/2010, (EU) No 1285/2013 and (EU) No 377/2014 and Decision No 541/2014/EU [1], and in particular Article 60(2) thereof,

After consulting the Programme committee established under Article 107(1) of the Regulation (EU) 2021/696,

Whereas:

(1) Risks of extreme and major space weather events may threaten the safety of citizens and disrupt the operations of space-based and ground-based infrastructure. In response to these risks, the Space Weather Event ('SWE') sub-component has been established as part the Space Situational Awareness component of the Union Space Programme.

(2) In accordance with Article 60 of Regulation (EU) 2021/696, the Commission is to select the SWE services to be provided at Union level.

(3) Article 60(2), point (b) of Regulation (EU) 2021/696 lists the different domains that might be considered for the Space Weather service, which are the space, transport, Global Navigation Satellite Systems (GNSS), electric power grids, and communications. In line with Article 45(2), point (c) of Regulation (EU) 2021/696, the Galileo component of the Union Space Programme will provide space weather information relevant to GNSS, via the GNSS Service Centre.

(4) In accordance with the contribution agreement between the Commission and the European Space Agency (ESA) on the implementation of parts of the Union Space Programme and Horizon Europe under the Financial Framework Partnership Agreement, ESA launched a study to assess the needs to each SWE user, the technological readiness of the services and a risk assessment in accordance with the criteria listed in Article 60(2), point (a). Based on that assessment, the services that was selected included power systems, telecommunication, and space domains. Furthermore, the study showed that the space domain service had the most amount of technical mature service products, and the ability to best reduce the risks linked to extreme space weather events.

(5) Based on this study, the Commission has prioritised the space domain service as best suited to be selected for the SWE service. Due to budgetary constraints, only one service could be selected.

(6) The SWE risks to the space domain include radiation storms that can damage spacecraft electronics leaving them unusable in the worst case, and geomagnetic storms that can dramatically increase drag, hereby affecting the predicted trajectory of space objects, consequently complicating spacecraft operations and Space Traffic Coordination temporarily. The users of a space domain SWE service should therefore include spacecraft operators, and Space Traffic Coordination entities, such as Space Surveillance and Tracking entities.

[1] OJ L 170, 12.5.2021, p. 69, ELI: http://data.europa.eu/eli/reg/2021/696/oj.

HAS ADOPTED THIS DECISION:

*Article 1*

The space weather event service is the space domain service.

*Article 2*

This Decision shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

Done at Brussels, 12 March 2025.

*For the Commission*
*The President*
Ursula VON DER LEYEN