

Space-Weather Awareness Dialogue

Location: Charlemagne Building, Rue de la Loi, Brussels

Date: 25-26 October 2011

Duration: 2 days

Objectives: Extreme space-weather events such as geomagnetic storms are natural phenomena caused by solar activity that can have a serious impact on modern technological infrastructures such as electrical power grids, telecommunication, global satellite navigation (GNSS) and banking. In view of the upcoming solar maximum expected in 2013 the “Space-Weather Awareness Dialogue” aims at raising awareness of the potential impact of space weather on critical infrastructures in view of the growing risk of technological catastrophic events. The dialogue aims to identify related operational and policy challenges for disaster prevention, preparedness and mitigation and to make recommendations for concrete actions. The final outcome of the event will be to establish a roadmap to go *from awareness to action* at the EU policy level in order to secure EU critical infrastructures in the presence of extreme space-weather events

Format The event is structured into six sessions organised as panel discussions supported by moderators and rapporteurs. The panellists, who are all invited high-ranking representatives and experts from the various stakeholder groups, will discuss different aspects of space weather and its impact on critical infrastructures from a variety of operational and organisational perspectives.

Contributors and Participants: Invited policy makers and experts from industry, research organizations, infrastructure operators and government agencies.

Programme (Day 1) - 25 October 2011

Opening of the Space-Weather Awareness Dialogue

Duration: 1 hour (10:00 – 11:00)

The opening session will set the scene of the event, outlining its objectives in the context of the EU policies and industrial landscape.

Session 1: Space Weather Today – Introduction

Duration: 1.5 hours (11:00 – 12:30)

Objective: This session will give an introduction to space-weather phenomena that give rise to events such as geomagnetic storms and their potential impact on critical infrastructures on and around the Earth. The session will take a broad view of the subject, including taking stock of related initiatives around the world.

Lunch (12:30 – 14:00)

Session 2: Impact on Space-Based Services and Infrastructures

Duration: 2 hours (14:00 – 16:00)

Objective: This session will discuss the potential impact of space-weather phenomena on various space-based infrastructures e.g. satellite navigation, communications, and broadcasting, meteorological services, earth observation, space exploration etc. Resilience of these infrastructures to space-weather events will also be addressed.

Coffee break (16:00 – 16:30)

Session 3: Impact on Ground-Based Infrastructures

Duration: 2 hours (16:30 – 18:30)

Objective: This session will discuss potential direct or indirect impact of space-weather phenomena on various ground-based infrastructures e.g. the electrical power grid, telecommunication systems, railways, aviation, banking. Technological sensitivities of these infrastructures as well as their resilience will also be the subject of discussion.

Dinner (20:00) on invitation by the host

Programme (Day 2) - 26 October 2011

Session 4: Early Warning

Duration: 1.5 hours (9:00 – 10:30)

Objective: This session will address the challenges in forecasting space weather events including their severity, time of impact and geographical coverage. The session will address needs for early warning to allow the operators of space-weather sensitive infrastructures to take appropriate measures to protect their assets and guarantee continued services. Discussion will explore the scope of international cooperation in responding to these needs.

Coffee break (10:30 – 11:00)

Session 5: Risk Management and Preparedness

Duration: 1.5 hours (11:00 – 12:30)

Objective: Led by experts in risk management and government authorities in disaster management, this session will address the consequences of and preparedness for severe space-weather events. Experts will discuss potential risk exposure of infrastructure operators and public services to suffer losses due to space-weather events. They will explore short-term and long-term strategies for effective risk management that will allow operators and EU/MS authorities to prevent service disruptions due to extreme space-weather events or to plan for mitigating their consequences so as to ensure business continuity.

Lunch (12:30 – 14:00)

Session 6: From Awareness to Action

Duration: 1.5 hours (14:00 – 15:30)

Objective: The final session will focus on the key messages from the foregoing dialogue. The aim of this session is to establish a road map to go from awareness to action at the EU policy level in order to secure EU critical infrastructures in the presence of extreme space-weather events. On the one hand, responsible actors for these actions will be identified ranging from research organisations to infrastructure/service operators and public authorities. On the other hand, the scope of actions will be identified from national to EU level and beyond including international cooperation in successfully meeting the challenges posed by space-weather events.

Closing of the Space-Weather Awareness Dialogue (15:30-16:00)