



*When the challenges raised by global climate change are daunting, when huge amounts of money can be saved with a better management of risks and crisis and when a sound management of natural resources **is crucial for growth and competitiveness...***

CAN THE EU AFFORD TO OPERATE BLINDLY IN A GLOBALISED WORLD?

Global Monitoring for Environment and Security (GMES) is an Earth monitoring initiative led by the European Union and carried out in partnership with the Member States and the European Space Agency (ESA). Its primary objective is to provide, under the European Union control, information services which give access to accurate data and information in the field of environment and security and are tailored to the needs of users.

The GMES initiative started 12 years ago with the goal to bring the benefits of space derived information to the citizens of Europe. The backing of the EU to a long-term programme has been a critical factor in convincing both industry and users to invest in the use of this new technology.

However, today **the EC proposes to finance the GMES programme outside the EU budget! This approach is jeopardising this European programme** and is in contradiction with the EU2020 Strategy, recent messages from the EU Council, as well as the continuous support of the Parliament. The GMES project is running on-time and in-cost and there is no reason to believe that this will change. The EC is using specious arguments to take a major backward step on GMES.

Delay and uncertainty now will undermine the value from existing investments (more than 3 Billions € of public funds!) and, much worse: without GMES, **regional and national authorities will be far less able to deliver the required services laid down in numerous EU Directives, presaging a wider failure of Commission societal and economic policies.**

A key premise of GMES has been that it will provide uniform levels of services and opportunities for exploitation to all the Member States of the European Union. However without sustained funding for GMES, European users of operational services will be left with limited and fragmented services. And without European funding, it is likely that such services will be ill-suited to and unaffordable for most national and regional authorities.

GMES will provide essential data and services required by national and regional authorities for the implementation of the wide range of directives imposed by European Union legislation passed down via the national governments. GMES will provide European treaty negotiators with access to independent information (without which they will be dependent on data from those with whom they negotiate). You will find overleaf, a few examples of what the EU and its citizens will lack without an adequate funding of the GMES programme.

More information can be obtained by contacting:

- NEREUS, the Network of European Regions using Space technologies - http://www.nereus-regions.eu/NEREUS_Position_paper
- EARSC, the trade association representing the European EO Geo-information Services industry - secretariat@earsc.org
- Eurospace, the trade association representing the European Space Industry - letterbox@eurospace.org

A FEW EXAMPLES OF WHAT THE EU – AND ITS CITIZENS – WILL MISS WITHOUT GMES

Air Quality Services

GMES provides daily (3-day) air quality forecasts and historical records for ozone, nitrogen dioxide, sulphur dioxide and aerosols for the major cities and regions of Europe. The forecasts form the basis for managing health risks to vulnerable citizens from air pollution. The historical data records support the regulation of the EU's Air Quality Directives that are imposed on regional authorities by national governments. A fully operational Air Quality Service cannot be sustained without GMES.

Climate monitoring and adaptation

The GMES CC service will enable DG CLIMA to fulfill its mandate as a policy driver for climate relation actions. Europe will not have the means to participate to the establishment of reliable Climate prediction scenarios and thus to take the necessary measures for adaptation and mitigation.

Community Water Policy

The Water Framework Directive (2000) and the Ground Water Directive (2006) define the Community water policy. GMES is a major data source for seasonal mapping of snow and glacier coverage in mountain regions, contributing to regional hydrological GIS services for managing water resources. Loss of a GMES operational service undermines the Ground Water Directive.

INSPIRE

The Infrastructure for Spatial Information in Europe, is a major deliverable of the Lisbon agenda and a key source of integrated geospatial information for regional planning and territorial management. GMES is the principle data source of the required high resolution spatial data, without which INSPIRE will be seriously impaired.

Emergency Services and Civil Protection

The pre-operational GMES Emergency Response Service has been in use around the world for the past three years. In the past 12 months alone, there have been 91 emergency rapid responses supported by this service, of which 60% have been in the European regions. Crisis events such as flooding are frequently supported by this service. The floods in Poland and Hungary in the Spring of 2011 perfectly illustrated the need for support during the crisis and for evolution monitoring as the flooding subsided, neither of which could have been supported without GMES. Loss of this GMES service will increase the risks to lives and livelihoods of European citizens.

Agricultural Services

Without the provision of the GMES Sentinel satellites, Europe's industrial service provider will lose its leadership role to international competition, in providing commercial services for precision farming and monitoring illegal de-forestation, with regional SMEs to lose out the most.

Marine Environment Services

GMES provides information on the state of ocean and marine ecosystems in the form of forecasts and analyses for the global ocean and European regional waters. The application areas of these services include maritime safety, the marine environment and coastal region monitoring, marine resource monitoring, seasonal meteorological forecasting and climate monitoring.

Controlling illegal activities

Future GMES Security services are currently being validated through exercises tackling illegal immigration and trafficking. From 2014 onwards, GMES will be an important tool for controlling the number of illegal immigrants entering the EU via its coastal regions from North Africa as well as reducing the death toll of illegal immigrants at sea.

Energy Management:

GMES technology provides data on wind strengths and direction needed for identifying preferred sites for renewable energy wind farms and, using near-real-time wind forecasting for optimising wind turbine outputs. Night mapping of light emissions from cities, monitoring of energy reflection from surfaces (pavements, facades, roofs) and thermal emissions from buildings all support urban energy conservation policies.

Maintaining the Urban Atlas

One of the successes of EU coordinated action, the Urban Atlas, continues to require high resolution remote sensing data to supplement other more conventional mapping data sources. The identification of urban hot-spots as a causal link with high death rates among the elderly during heat waves further supports the need for an urban mapping service, including temperature monitoring, to be supported by GMES.