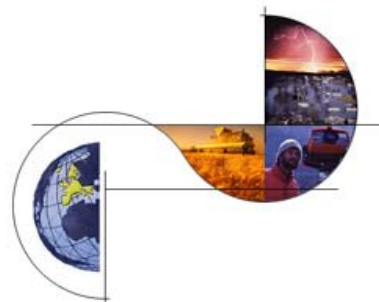


Global Monitoring for Environment and Security (GMES)

GMES is a joint initiative of the European Commission (EC) and the European Space Agency (ESA), designed to establish a European capacity for the provision and use of operational information for Global Monitoring of Environment and Security (GMES). The Initial Period (2001-2003) was completed in 2003. The GMES Initial Period report makes recommendations for action during the next Period, the Implementation Period 2004-2007, based on information needs that have been identified by user communities. The objective is to have a functional GMES System by 2008 that guarantees independent access to information of strategic value through 3 modules:

- the production and dissemination of information in support of EU policies for Environment and Security;
- the mechanisms needed to ensure a permanent dialogue between all stakeholders and in particular between providers and users;
- and the legal, financial, organisational and institutional frame to ensure the functioning of the system and its evolution.



Starting as a set of unconnected networks and services, the GMES information system will evolve over time into a fully integrated system including in-situ monitoring and the continuous measurement of several key parameters at various scales and resolutions (1 to 5 m spatial resolution observations, wide-swath radar observations with interferometric capability, 10 to 200m resolution, wide-field, multi-spectral and multidirectional observations, atmospheric chemistry measurements and ocean surface observations).

It is planned to offer elements of GMES as the European contribution to any coordinated global Earth observing system (GEOSS), though specific levels of data access have yet to be determined.

A GMES Steering Committee consisting of the ESA and EU member states (including the 10 accession countries) was created to advise and guide the activities during the Initial Period with the support of five Working Groups (on Gaps in knowledge, technology and tools; Adequacy of monitoring networks; Data policy; Socio-economic and institutional issues; and Security). So far more than 30 projects have been initiated by ESA (10 projects) and the EC (more than 20 projects). The budget of 415 M Euros until the end of the Implementation period is shared by ESA (72%) and the EC (28%).

According to the GMES Initial Period report a C-band satellite represents the most urgent element to meet operational requirements and continuity with ERS and Envisat. Canada is considering cooperating with ESA to develop a coordinated program.

Much more definition and instrument pre-development work will be required for the other satellite (wide-swath, multi-spectral, atmospheric chemistry, ocean sensors) and will therefore start at Phase A.

A program proposal covering the full extent of the space component (2004-2012) will be submitted to the Program Board EO in fall 2004.

References:

GMES Website <http://www.gmes.info>

Final Report for the GMES Initial Period (2001-2003)

http://www.gmes.info/library/files/Events%20documents/IP_Report_100204_final.pdf