Opinion of the scientific committee of the European Environment Agency on GMES (Global Monitoring for Environment and Security)

- 1. The scientific committee stresses the importance of GMES to supporting European policy on the environment and security over the coming decades.
- 2. If GMES is to be effective, however, it must do more than merely add to the collection of environmental data through Earth observation from space and *in situ* monitoring. It must also act decisively to ensure that these and other data are brought together, translated into policy-relevant information, and delivered to policy-makers within the environmental domain via the application of robust assessment methods. Moreover, it must aim at a balanced representation of drivers, pressures, states, impacts and responses, reflecting the needs of various target groups/data users.
- 3. This involves strengthening and improving the whole policy information chain. The SC reaffirms the objectives and actions to this regard of the European Commission [COM (2004) 65]. The SC stresses that to be successful, GMES must ensure that the following requirements are met:
 - A. Interoperability of all GMES components
 - Effective and dynamic linkage of both existing and new monitoring systems;
 - Effective systems for data linkage, exchange, management and reporting;
 - Capability to link and integrate models across different scales and themes.
 - B. Use of modelling techniques for policy support
 - Developing integrated modelling techniques, cutting across policy sectors and scientific disciplines
 - Improving systems for calibration, validation and intercomparison of models and analysis methods.
 - C. Better utilisation of existing and new technologies for monitoring and survey
 - Enhance data quality and the implementation of more robust monitoring and data standards;
 - Adjust data collection on the basis of validation and feedback from users;
 - Provide facilities and procedures for open access to data.
 - D. Response to the needs of users
 - Develop mechanisms to reflect better user requirements, to detect gaps in coverage, and to adapt flexibly to changing user needs as environmental/sustainability policies evolve over time;
 - Enhance opportunities and procedures for capacity building, training and investment throughout the information chain;

- Help data analysis and interpretation, and the generation of indicators and other policy-relevant information;
- Provide coherent information services to deliver additional, non-routine products to users.
- 4. The EEA has a statutory function to deliver reliable and timely information to support environmental policy in the EU. It thus has responsibilities for, and well-established experience in, managing and overseeing this entire information chain, including analyses and assessments. As such, the EEA is the major artery by which environmental data in all its forms enters the policy process.

The EEA must consequently be seen as performing a central, coordinating role in GMES. Responsibilities should include:

- · advising on priorities for environmental monitoring and survey;
- contributing to the development and implementation of the monitoring and data standards required to ensure consistency and comparability of environmental information across the EU;
- providing the main gateway to environmental data sources, information and services;
- collating, integrating and holding core EU-wide environmental data sets needed to support policy on an ongoing basis;
- maintaining and delivering policy-related information and indicators at the EU level;
- maintaining models and tools that can be used for policy assessments;
- maintaining links with other international initiatives and institutions involved in gathering and delivering policy-relevant information on environment and security;
- maintaining close links with research developments (including methodological, basic and applied research) and advising on research needs.
- 5. Once operational, GMES will also have significant implications for the operation of the EEA, not least because of the increased volumes of data and demands for information that will be generated as a result. Additional capability will also need to be developed, especially in the areas the use of policy tools, security and humanitarian aid (e.g. natural hazards, environmental health). Resources sufficient to manage, integrate and interpret these data, to identify and meet these demands for information, and to deliver the level of integration essential to the success of GMES need to be provided.

Adopted by the EEA scientific committee at its 31st meeting Copenhagen, 6 October 2004