



## CONCLUSIONS AND RECOMMENDATIONS

of the EURISY/IAF Symposium  
held at UNESCO Headquarters, Paris, February 2005 on

### **New Space Services for Maritime Users: The Impact of Satellite Technology on Maritime Legislation**

The conference on “The Impact of Satellite Technology on Maritime Security” organized by EURISY and INTA in Vigo, Spain (July 2003), addressed a series of recommendations to decision makers of the European Union, its Member States and other relevant international organisations. To report on the progress of the Vigo recommendations, a symposium on “New Space Services for Maritime Users: the Impact of Satellite Technology on Maritime Legislation” was held at UNESCO HQ in Paris from 21 to 23 February 2005, jointly organised by EURISY and IAF.

Significant progress has been made on two programmatic aspects between the Vigo and Paris conferences. First, at European level, the Global Monitoring for Environment and Security (GMES) initiative has initiated a number of projects, which have reached a high operational level on the use of integrated space and in-situ observations for maritime applications. Secondly, at the international level, the Third Earth Observation Summit has adopted a 10 Year Implementation Plan for the establishment of a Global Earth Observation System of Systems (GEOSS). Both initiatives have high relevance to the subject of this conference.

In addition, the establishment of the European Maritime Safety Agency (EMSA) has been an important step at the institutional level to address some of the recommendations raised at the Vigo conference.

Over one hundred and fifty scientists, engineers and legal experts as well as authorities concerned with space and maritime activities have jointly explored the possibilities to enhance the relevance of space services in support of maritime activities. Participants have underlined the importance of promoting joint initiatives among sectorial stakeholders stressing the need to involve user’s communities.

Over the last two decades, data from remote sensing satellites have shown the capabilities of space-based techniques for improving scientific knowledge. Nowadays, a new range of needs are demanding more adequate attention at both institutional and business oriented sides. There is a clear trend of interoperability, integration and operative approach combining technologies such as navigation, communication, airborne sensors and meteorology. Operational oceanography is now used throughout all environment and safety activities.

A variety of vessel tracking systems are at present operated or in development; most of port and coastal traffic management, fisheries control, traffic safety and security rely on space services for navigation and communication.

Regulatory matters are identified as a key aspect of the sectorial strategy for maritime monitoring. Appropriate regulations involving both the space and maritime sector should offer a common legal framework.

The Symposium addresses the following conclusions and recommendations to responsible decision makers of the European Union, its Members States, and of relevant International Organizations:

1. The coordination of policy, management and regulatory mechanisms will improve both institutional and market oriented aspects of maritime activities. Governments, space agencies and relevant international organizations have to take a more pro-active role in addressing the institutional dimension for an enhanced use of space-based Earth Observation for maritime activities.

2. The International Maritime Organization (IMO) in cooperation with international and intergovernmental organizations are urged to work towards the establishment of operational services, which incorporate full use of space technologies for maritime safety and security and provide information to users in near real time.
3. Security is a trans-sectoral issue. All maritime activities should incorporate the dimension of security aspects which have evolved as an important new dimension due to recent threats. Institutional aspects of security issues require a strong coordination at both national and international levels.
4. The European Commission should promote regulations regarding the use of space technologies for maritime activities including law enforcement to better integrate institutional capabilities of space-based services.
5. The European Commission in general and the European Maritime Security Agency (EMSA) in particular, should invite the European Space Agency to develop -in close coordination with national space agencies - operational maritime information services – to support the implementation of Europe’s policy and legal framework.
6. The European Commission and the European Space Agency, as co-leaders of the GMES initiative, shall ensure the operational long-term continuity of required satellite observations through appropriate technical and financial support. The EU and ESA Member States are encouraged to go along with these proposals, as appropriate, at both political and funding levels.
7. National and international regulations on maritime activities should be reviewed to better use the capabilities of new space services. This should also consider the interests of the various stakeholders and end users. A common legal environment should be developed to match offer and demand promoting competitiveness and further integration.
8. It is recommended to promote European and international initiatives in the field of capacity-building, technology transfer and training, aimed at making maritime users aware of what space has to offer them within and outside Europe, in particular less-developed countries.
9. An increasing number of maritime applications require guaranteed positioning through the use of satellite-based navigation systems. The European Geostationary Navigation Overlay Service (EGNOS) and the future Galileo system satisfy most of those requirements regarding integrity. Hence, its use for maritime applications should be promoted and regulated by the European Union.
10. Maritime and Space communities are proactive to work towards the sector benefits. Networking actions are to be adequately performed to build up a mutual understanding. Improving maritime activities with space based solutions should be well structured at RTD programmes, including strategic, financial, legal and operational aspects.
11. The European Commission should consider to set up an organism to provide the space component as well as the ground segment to ensure operational availability of spaceborne earth observation data.
12. The participants express the need to follow up and to facilitate consensus on the above recommendations and to review progress within the next two years. Participation of the major worldwide actors in the maritime domain has to be strongly encouraged.