

**March 2011**

**EARSC Position Paper**

**on**

**Exploiting GMES Operational Services**

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## **Introduction**

As GMES moves to provide an operational service, a close relationship between the institutional stakeholders and the EO services industry is of paramount importance if Europe is to maximise the return from the investments already committed. This paper identifies three issues that the EO services industry considers need to be addressed if this goal is to be achieved.

## **Leveraging Public Investments**

GMES is a European flagship programme aimed at ensuring access to key geo-information for governments and institutions. Such information will support decision making in many areas of policy at European and national levels e.g. environment, climate change, external affairs etc. Investments made by the public sector into the programme will bring significant socio-economic benefits to the whole European Community and Member States<sup>1</sup>.

In addition, the GMES infrastructure developed for European public use could also offer significant opportunities to consolidate and expand the levels of existing commercial business already developed over the last 25 years by the European service industry with private and public sector clients both inside and outside of Europe. Through these capabilities and experiences, industry is best placed to be able to exploit such opportunities and to leverage the public investment to achieve broader economic benefit through employment and tax revenues. GMES opens up these opportunities by providing the basic essentials required for sustainable, commercial provision of EO-based information services; namely access to suitable data with global coverage, good quality and appropriate timeliness.

## **Industrial Role and Benefits**

A strong European EO services industry is a pre-requisite to derive maximum benefit from the GMES programme. A strong satellite-based information services industry can:

- Exploit opportunities in commercial sectors such as oil & gas, insurance, energy, mining, agriculture/forestry, telecommunications, geohazards and disaster management, etc.
- Deliver products and services to national and international organisations outside of Europe. GMES products of proven value for EU policy makers can also be delivered to other public sector clients in export markets.
- Ensure efficient and effective delivery of products and services to the European public users.

Furthermore, industry and academia are the engines of innovation for EO services with industry taking the lead in customising and developing new capabilities to meet continually evolving customer needs within today's changing world.

European EO service industry aims to achieve a leading position in operational EO-based downstream services generated as a result of GMES. Our goal is that by 2020 we should deliver to a wide market within and outside Europe and achieve at least 40% of the overall global revenues of EO-based downstream services.

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<sup>1</sup> PwC report: *Socio-economic Benefits and Impact of GMES, 2005.*

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## **Market Development**

A number of factors drive or constrain the ability of industry to achieve this goal and hence the possibility to deliver the maximum economic benefit for Europe.

GMES products are being developed by partnerships of public and private sector actors where R&D know-how and expertise has been shared through collaborative projects. Industry has been investing alongside the public sector with the view to serve GMES users within Europe and to exploit GMES products and services in new markets. A pre-requisite is that products and services are first successfully introduced into the European Community and national public users to give confidence to other customers that the services are effective and sustainable.

Today, industry is concerned that the functioning of the future market in Europe for the GMES products is still unclear for a number of reasons:

- The future take-up of GMES products and services will largely rely on legislation and regulation coming from the EC and Member States and until the form and timing of this becomes clear it undermines the rationale for industrial investment.
- It is not clear today what defines a GMES product or service; those using some element of raw Sentinel data or all EO-based geo-information used by European policy makers or even geo-spatial products using only in-situ data and no EO component? A specific quality mark is required for GMES products and services which should be defined and monitored.
- Which policy makers will be recognised as users of GMES products and services? Will this include all public sector organisations and does this extend to partially-public agencies that may compete with industry? Does this include existing public users of geo-spatial data, currently not considered part of GMES such as those involved in agriculture monitoring programmes?
- Will GMES products and services be procured at national or European levels or both? Clarity in the market is essential.
- Where a mix of data sources is to be used, that may include data coming from commercial operators, the licence conditions under which GMES products and services will be made available should reflect the underlying data sources.
- GMES products and services may be strongly stimulated by giving free and open access to the raw Sentinel data. Basic data products from the Sentinel's and potentially the core services for GMES should be delivered to all European users free of charge.
- European private satellite operators<sup>2</sup> have invested in satellite systems providing imagery on a commercial basis. In the future they face strong competition from US companies offering similar products on the world market. A future data policy should seek to ensure there is fair competition for data coming from EU private and public infrastructure and non EU service providers as well as for downstream products and services. Raw data from future GMES public infrastructure should not compete with that from the private operators.
- Continuity of service is essential for users to commit resources towards integrating new products into their operational procedures. Clear conditions must be put in place for long-term access to data from the European GMES infrastructure.
- GMES services are being developed and could be delivered operationally by a mix of both private and public sector actors. In some cases, industry is concerned that it could face competition from some of the

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<sup>2</sup> *Cosmo-Skymed, Pleides, TerraSAR-X, Deimos, DMCii, Rapideye.*

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large governmental, national and multi-national agencies and R&D organisations. A fair tendering system should be mandatory as recommended in the EARSC position paper<sup>3</sup>.

- Overall, it is recommended that the functioning of the market for GMES products and services should be reviewed on a regular basis once the initial infrastructure is in place and operating.

Only a stronger involvement and more visible and recognized position of industry will produce the full benefits for the GMES programme.

### **Recommendations:**

The clear, first priority is to ensure financial support in the multi-annual European Budget to continue the GMES programme, including sufficient funding allocated to the GMES Services component.

In addition, EARSC recommends three steps to be taken to enable the European EO services industry to develop a strong international position on behalf of Europe.

1. Develop greater clarity over the GMES products and services and how these will be made available to the public sector. A stable and clearly identified legislative environment in which business can be built must be put in place to allow industry to invest and operate.
2. Establish a clear data policy, with appropriate procurement budgets for satellite data, core GMES services and GMES value-added, downstream services:
  - Raw data from Sentinels should be free and open.
  - Data from commercial satellite operators should be procured under appropriate license conditions.
  - Core services to be freely and unconditionally available to all users and downstream partners.
  - Downstream services should be procured commercially on a fair and competitive basis.
  - A registration system for GMES users should be put in place to ensure that basic quality conditions are met and licensing conditions are respected as well as achieving fair competition on the international market.
3. Define a clearer boundary between the roles and responsibilities of the public and private sector service providers.

EARSC as the EO-services industry representative body is fully ready to support the EC, ESA and Member States in developing the appropriate policy lines in these critical but challenging areas and would welcome opportunities to present and discuss these views.

*EARSC represents the Earth Observation geo-information services companies in Europe. Today EARSC has 70 members coming from 17 countries in Europe and including nearly 50% of the total number of European EO service companies. Over 60% of these are small or medium sized enterprises. Our members include both commercial operators of EO satellites and downstream, value-adding companies. The sector plays a key role in providing value-added geo-spatial information to its customers in Europe and the world. In 2010, the revenue of EARSC members is estimated to be around €700m and giving work to around 2600 highly skilled employees. The industry is growing at around 10% per annum.*

<sup>3</sup> EARSC Position Paper “Tendering Recommendations for Operational GMES Services”; May 2010.