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**"Space technologies in fisheries and
maritime affairs: facing the future with
confidence"**

Check Against Delivery
Seul le texte prononcé fait foi
Es gilt das gesprochene Wort

Conference "The Ambitions of Europe in Space"

Brussels, 16 October 2009

Distinguished guests, Colleagues, Ladies and gentlemen,

I would like to congratulate Business Bridge Europe for organising this conference.

It is a fact that space technologies are becoming ever more pivotal in every sector of life. It would be fair to say that this is true also of fisheries and maritime policy where space technology supports a number of very vital services. In the next few minutes, I would like to illustrate the many facets of space technologies already at work in fisheries and maritime policy. I will also look to the future by outlining some of the strategies that we are currently considering for their further application.

Allow me to address fisheries first.

Space technologies have a positive track record in the fisheries domain.

The Vessel Monitoring System (or VMS) - a system used to detect and identify vessels – has been a cornerstone of the Common Fisheries Policy. The CFP, as it is often referred to, is the policy used to manage European fisheries or the fisheries carried out by European vessels both in European or other waters.

In 1998, fishing vessels of a certain length began to be prohibited from engaging in fishing activities unless they had on board a device enabling them to be detected and identified by remote monitoring systems. This requirement was progressively extended to cover smaller vessels. The VMS allows authorities to track the position, course and speed of vessels within their waters at one- to two-hour intervals.

It employs satellite navigation technology to identify a vessel's position and secure satellite communications to transfer the information from ship to shore.

Fishermen accept that information on their whereabouts is necessary in helping stamp out illegal fishing practices, but are rather less keen when the information they transmit also reveals the location of good fishing grounds. This is understandable. And this is why the system has to be secure.

Alongside VMS, fisheries authorities also use a tool called the Vessel Detection System which relies on polar-orbiting satellites carrying Synthetic Aperture Radar instruments and which can detect vessels at sea under most conditions. For example, while vessel monitoring systems can be switched off or manipulated to give a false position, radar satellites can detect all boats of a certain size within a swathe up to 300km wide. They show up as spots on a chart. In addition, fisheries control is also dependent on the Automatic Identification System which is VHF-based and on electronic recording and reporting systems as well as other 'traditional' traceability tools.

Through a combination of control instruments, fisheries authorities are thus able to better access information that can in turn, be used, for example, to increase the effectiveness of inspections. This results in less costly control.

Satellite technologies thus play a crucial role in improving the maritime picture available to fisheries authorities. And the Commission's Joint Research Centre has spearheaded the use of such satellite images in maritime surveillance, making satellite technology now a central feature of fisheries management.

The available technologies for fisheries monitoring and control that I have just outlined are not interoperable, they are nevertheless complementary. They can be linked and fused together with data from other surveillance tools and in so doing help to identify vessels that are, for one reason or another, not transmitting their position.

The Commission and Member States have used this approach quite extensively in the North Atlantic and the Mediterranean during the relatively short but very intense blue fin tuna fishing season which takes place in the early summer months each year. Such monitoring has been essential in order to control and seek to eradicate illegal fishing.

Similar to the Vessel Monitoring System is the Long Range Identification and Tracking system which has recently been implemented to boost maritime security, maritime safety, search and rescue operations and the protection of the marine environment.

In 2007, the EU decided to build an EU Long Range Identification and Tracking Data Centre which would be managed by the European Maritime Safety Agency in Lisbon. The European Maritime Safety Agency, or EMSA, receives position reports from all vessels registered in EU Member States and can request reports from foreign vessels that are close to, or approaching, the European shore.

This information is then distributed to the maritime administrations of the Member States concerned in a secure manner. The Long Range Identification and Tracking Data Centre in Lisbon is the largest in the world. It covers up to 25% of the world's fleet. EMSA also uses the data it receives to provide EUNAVFOR with information that can be used in the fight against piracy in the Gulf of Somalia.

Since 2007, EMSA has also been using space observation to monitor marine pollution and to track illegal discharges into European waters as part of CleanSeaNet. In 2008, more than 2,500 satellite images were processed and more than 3,000 possible oil spills reported to the Member States with the respective polluters subsequently being fined. In the future, the agency will add additional features to CleanSeaNet to help facilitate the identification of polluters.

In this context, the Global Monitoring for Environment and Security, or GMES, could contribute to support EU external actions and the surveillance of the EU's maritime borders. Building upon numerous scientific missions that are implemented through the European Space Agency and national space agencies, the development of GMES will provide Europe with its own operational capability for Earth observation. As far as safety is concerned, the future Search and Rescue service of Galileo will also provide for an improved accuracy when searching for seafarers at sea.

More recently, we have started looking into the possibility of using satellites to pick up VHF signals from the Automatic Identification System. The Automatic Identification System is a ship-to-ship anti-collision system, which provides the identification, position, course and speed of a vessel – at virtually no cost.

We are still looking into the performance of this system in terms of availability, reliability and data security. That said, from a technological point of view, our initial impressions are that, in the very near future, it could be an additional cost-effective tool for maritime surveillance.

Ladies and gentlemen,

The timing of this conference is extremely appropriate as it coincides with yesterday's adoption, by the Commission, of a Communication on the Integration of Maritime Surveillance. In this Communication, we are proposing to create a common information sharing environment for the European maritime domain. Once again, space technology will be pivotal for the integration of maritime surveillance across the Union.

By interlinking different user communities, by building a technical framework for interoperability, by sharing information between civilian and military authorities, and by identifying and removing legal obstacles we aim to enhance general maritime situational awareness for all user communities. This will be done through the best use of existing systems and, in particular, the best use of space assets.

We are confident that this will create effective interoperability among different sector-specific systems and will ensure that the collection, fusion, analysis and dissemination of data and information can be put to good use. In this respect, we aim to eliminate the unnecessary, and often very costly, duplication of effort.

I believe that the Community data exchange system SafeSeaNet – developed by the European Maritime Safety Agency – should be the main platform to exchange non-classified information among different user communities. There would be significant value-added in having different user communities being able to extract non classified information from the SafeSeaNet database, which will go a long way towards completing their maritime awareness picture.

As regards classified information, this should be available to competent Member State authorities on the basis of strict access rights and on a need-to-know basis. There is growing consensus for the need to make better use of surveillance tools among civilian and military users. This two-directional information exchange will obviously be subject to common standards and agreed rules in the respect of each community's remit.

On the practical front, the results of two Pilot projects on integrated maritime surveillance – one in the Mediterranean and its Atlantic approaches, and one in the Northern sea basins, which are in the process of being launched – will feed into the process by providing practical integration know-how. These two-year projects will test the capacity of Member States to exchange surveillance information relating to border control, combating of narco-trafficking, fighting terrorism, combating smuggling of illegal goods and preventing marine pollution. They will also teach us a lot about where we should best concentrate our energies.

This regional approach to our sea basins is a fundamental building block in our integrated maritime policy.

In the same vein, we are working with the Swedish Presidency to organise a conference on the Arctic and Space later this month. Increasing levels of human activity, a warmer climate, melting ice caps and the promise of untapped mineral resources pose a challenge to the unique Arctic ecosystem and the way of life of its indigenous people.

Space systems would normally be used to help us understand this relatively unknown corner of the globe, however in this particular area, such systems face a number of challenges. For instance, satellite communications based on geostationary satellites along the equator cannot reach high latitudes. We will therefore have to adopt a different approach to address our needs in this area. Despite these challenges, I am convinced that space-generated data will be fundamental in helping ensure that the increased level of activity in the Arctic can be both safe and sustainable.

Ladies and Gentlemen,

Be it for fisheries enforcement or border control, for general law enforcement or the prevention of marine pollution, it is clear that the integration of maritime surveillance systems holds the key to important synergies. Pivotal in this process is the collection and sharing of space-generated data and information.

The way ahead towards the better rationalisation of our assets and capabilities also relies on the availability of services that are reliable, cost effective and within well-defined performance limits. We are confident that, through space, we can together define a better future for our oceans and seas, as well as here on land.

Thank you.