

**CONFERENCE OF THE EUROPEAN SATELLITE OPERATORS ASSOCIATION,  
23 MAY 2007  
SPEECH BY COMMISSIONER M. KYPRIANOU**

I am delighted to have the opportunity to address you today on the exciting issue of space-based communications.

As you may know, an overarching policy theme for this Commission is the Lisbon Strategy, with its goal of making Europe the most competitive, knowledge-based economy by 2010.

Whatever we do in Europe today will be viewed and assessed against the direct or indirect, short-term or long-term impact it has on competitiveness, growth and jobs.

Space-based communications clearly fit into this strategy, as they can contribute to the further development of the EU's knowledge-based innovative potential, as well as increasing external competitiveness when EU-based industries sell that technology to third countries.

Why should the European Commissioner, responsible for Health, be interested in the satellite business? Well, because my work entails ensuring the highest level of public health and protection of Europe's 500 million citizens.

This means managing the expected and the unexpected. Both require planning and information.

What do you do in an emergency situation? Land-based communication systems have broken down. To add insult to injury, you have no maps of the disaster area.

Exceptional situations like this one require exceptional measures, for example the use of satellites.

Space-based telecommunications like satellite phones allow you to communicate in the absence of functioning telecommunication infrastructure, or to by-pass the network overload likely to occur if the telecommunication infrastructure is still functional.

Still in the context of the hypothetical emergency situation, satellites can be positioned to remotely sense the terrestrial surface and produce a map of the terrain, of rivers and water bodies, and of houses and other types of human infrastructures.

I am only offering this as an example of relatively straightforward applications. Yet, the real value of satellite remote communication and sensing lies in the

integration of land and space-based information, including both information safely archived in advance and information retrieved on the spot.

In fact, my services are exploring with the European Space Agency how space can support **public health**.

Two high level topics have been identified so far: “Public health surveillance and early warning” and “health and climate”.

“**Public health surveillance and early warning**” deals with prevention, detection, alerts, situation awareness and response to health threats including Chemical, Biological, Radiological or Nuclear (CBRN) risks. More specifically, the aim will be to assist and support:

- EU and national health crisis centres by using complementary integrated space solutions in existing public health information systems and by sharing such information;
- field teams under the European Centre for Disease Prevention and Control and World Health Organisation (ECDC/WHO) mandate through integrated applications, using space and non-space assets.

The relation between “**Health and Climate**” is of increasing importance in the public health field. It is vital to understand the impact of environmental factors, including climate change, on health and well being.

Space assets can play a crucial role in the forecast of health hazards, for example by establishing predictive links between climate and environmental changes and health risks such as:

- Seasonal changes and health risks (heat waves, atmospheric pollution...)
- Long-term environmental changes and emergence or re-emergence of communicable diseases

Satellite programmes are also helpful in **tracking epidemics**. They have the potential to help forecast disease outbreak.

Indeed, they can provide excellent means for visualising and analysing epidemiological data, revealing trends, dependencies and inter-relationships and acting as a common platform for the convergence of multiple disease surveillance activities.

As an example, satellite remote sensing is being used to track the progress of meningitis in the Sahel region of West Africa.

But satellite navigation systems will also play an important role in the future in protecting the **health and welfare of animals** transported in the EU.

The new EU legislation on the protection of animals during transport, which entered into force in January 2007, already requires new lorries transporting livestock for over eight hours to be equipped with a satellite navigation system.

The purpose of the system is to improve enforcement of the EU standards on travelling time limits for the protection of animals.

This tool could be further developed with a view to better controlling the movement of animals throughout the EU. This could help prevent the spread of diseases while at the same time reducing paperwork.

Such a system could also facilitate cooperation between Member States in enforcing EU rules regarding the transport of animals. It could be used to collect data in real time on animal transport conditions, which would allow more accurate and timely monitoring of the transport of animals.

There are therefore a number of potential areas where satellite technology can play a significant role: management of emergencies, disasters and trauma, health early warning systems, protecting the health and welfare of animals.

The prospect of using satellite communication technologies in support of telemedicine could also be of direct benefit to the healthcare community itself.

In this context, we need to explore new technical solutions and applications e.g. in relation to mobility of patients, healthcare at home and e-Health.

Populations living in remote communities and those living in sparsely populated areas have sometimes been poorly served by healthcare providers. With the use of new technologies, the gap in services is being filled and parity is being restored in these isolated communities.

For some **remote communities**, the nearest specialised hospital may be hundreds of kilometres away. In many cases, this gap can be bridged using e-Health technology that allows patients, nurses and doctors to talk as if they were in the same room.

In emergency situations or in remote areas, satellites are used to transmit images and information on the sick or injured to medical specialists thus allowing them to advise local medics on treatment or even guide them through an operation.

Satellite solutions can make all the difference in meeting the challenges that face us. And it is important that we work together and learn from each other as we go forward in this field.

This conference gives us a good opportunity to share knowledge, views and expertise on space-based communications, and I am sure that today's session will be a rich source of interesting and fruitful discussions.