

## Finding the right balance for European airwaves



Much expectation has been generated before the European Parliament vote on the review of the EU Electronic Communications legislation, part of the Telecoms Package, during the second September plenary (September 22-25). More transparency and improved consumer protection are issues high on the agenda. In addition, policy-makers must take note of the impact that some of the proposed changes may have on the viability of the services provided by European satellite operators.

It is true that radio frequencies are being freed up thanks to the digital switchover, and the telecoms proposal aims to promote more efficient use of spectrum to boost competitiveness and innovation. Some even imagine that this new scenario may help Europe overcome its "digital divide" and connect citizens regardless of how remotely they live. Satellites offer a fast and reliable solution for delivering high quality communication services to make this happen, whether on mountaintops, in villages or on islands. But they do require guaranteed access to spectrum. Especially because providing the same high quality service and reaching out to rural citizens by terrestrial means depends on rolling out enormous lengths of cable, which is not only costly but also risks defacing much of Europe's landscape.

Satellites are unique in what they are able to do and how they do it. For one thing, they are the only infrastructure that is active on earth from outer space. Regulation should take this, and other satellite attributes into account, such as their ability to reach beyond borders, and protect them for the benefit of European citizens. The frequency in which a satellite operates cannot be changed after launch; therefore the operational viability of a satellite depends exclusively on harmonization of spectrum rights across all areas served by its footprint. This is coordinated by the International Telecommunications Union (ITU). This UN agency manages airwaves at the global level, and there is an urgent need to have a clear recognition of its role and purpose in the review of the current legislation.

A clear example of the imperative for international coordination is the use of C-band, a frequency slot strong enough for communications in Africa, Asia and Latin America where heavy rainfall can further weaken satellite signals reaching the earth. Cband is the UN standard for emergency communications, and its functionality is also critical for communications for ships out at sea. However, the EU still wants to open C-band up for new wireless services such as WiMax which does not provide critical services and which could interfere with those vitally important satellite signals.

The original Commission proposal did not make any direct mention of ITU regulation, but this has been brought back after the committee vote in Parliament. It should remain in the list of priorities before and after plenary. Only a clear reference that respects and maintains the ITU coordination process in place will provide the security that harmful interference and resulting service fragmentation within the EU27 will be prevented.

An additional dangerous provision is the notion of technology neutrality. This principle implies that specific technologies will not be favoured or discriminated against and that a competitive playing field will be maintained between them. It may sound like a wonderful concept, but the truth is that not all technologies are equally able to deliver the same services with the same quality standards, and the application of identical rules to different technologies may have different effects on each one. Satellites already share bands with other technologies, and their signals are weaker when they reach earth having travelled some 36,000km. If legislators let all kinds of technologies fight the same battle for spectrum, the deployment of security and emergency communications may also be put at risk. Access to some frequencies must be safeguarded for some technologies before the consequences become irreversible.

Regarding the possible effects on the industry, the EC originally proposed a review of existing spectrum rights every five years, the first time being already by the end of 2010. Now, a new provision from Parliament proposes to delete any revolving review but the reference to a mandatory review by 2011 remains. The viability of the satellite industry heavily relies on 15 to 20 year business cycles, and the looming possibility of unforeseen changes in frequency allocation may detract from future investment in this very strategic sector.

Satellites are not only important for services such as television or telephony, but they can also play a major role in the success of many European policies. First of all, they have the ability to promote a rich cultural exchange among all 27 members that will strengthen the idea of a single Europe beyond our borders. They can contribute directly to the knowledge-based society as planned in the Lisbon Strategy by bringing connectivity to multiple EU regions simultaneously. Satellites also efficiently use solar energy for their entire lifetime, which can be 15 years or more.

They are our "eyes in the sky" monitoring the health of our planet, including changing sea levels, deforestation, and remotely enabling management of renewable energy plants, all to fight climate change. What's more, they play a vital role in Europe's security and defence capabilities and will be an integral part of future space policy goals and initiatives.

How can satellites be so strategic for Europe, and important for European and global citizens, and still not be sufficiently recognised in the new proposed regulation? How are operators going to maintain or develop new services if there is no clear guarantee on the availability of spectrum? Collaboration between space and earth-based technologies will be essential in enabling communication services to evolve to their fullest potential. But it is in the hands of the EU legislators to protect their combined strengths in order to bring the benefits of the information age to all European citizens. Satellites are already up in the sky and are willing to do the job.