

CONNECTIVITY INNOVATION SPECTRUM



Connectivity

Satellites have been delivering communications services to Europe for over 60 years. From simple beginnings they are now key enablers of content delivery across the continent, and remain the only guaranteed communications channel in disaster situations. Satellite also plays a key role in enabling telephony where there is none by backhauling the networks of terrestrial communications providers, as well as directly connecting European citizens unserved by terrestrial infrastructure to broadband Internet.

Innovation

Satellite was the first to adopt and commercialise High Definition (HDTV) broadcast content and the first to deliver Ultra-High Definition (UHD TV) content. Our ability to innovate, and unique ability to efficiently deliver broadcast content can harness the best of satellite and terrestrial technologies to provide consumers with the content they demand in the most cost-efficient and energy-efficient manner. Recent satellite innovations also enable direct reception of broadcast content via satellite for viewing on multiple devices in the home - essential for high quality video.

Spectrum

In November, the International Telecommunication Union (ITU) will take decisions on spectrum demands for all services at the World Radiocommunication Conference (WRC-15). Satellite operators require additional spectrum to continue delivering high-quality content increasingly demanded by consumers. Spectrum for existing services such as emergency communications also needs to be safeguarded: these services are under threat from the mobile industry who wish to acquire core satellite spectrum. The growth of the mobile industry is undeniable, but their claims for more spectrum require more analysis before they are accepted.

Debunking Mobile Spectrum Demand

In recent years ESOA has analysed the mobile industry's studies which support their claims for more spectrum. Systematic flaws in all the methodologies bring into question the mobile industry's claims.

The mobile industry relies for example on faulty assumptions leading to a gross over-estimation of spectrum demand. These assumptions include, assuming 'typical' traffic density will be more than 200 times the volume during the 2014 FIFA World Cup Final, and assuming usage of 200 GB per subscriber, which for the foreseeable future will only be required by the top 1% of most active users. The increasing importance of Wi-Fi offloading is also underestimated.

Economic studies developed for the mobile industry offer a partial and inflated perspective of the economic value of the C-band for mobile services. They fail to appreciate the importance of critical services such as emergency communications, which can never be replaced by mobile. The studies also omit that, along with emergency communications, C-band uniquely supports businesses in a number of sectors, by providing connectivity for oil and gas, banking, broadcasting, maritime and many others, as well as backhaul for mobile networks. C-band also delivers social value by supporting humanitarian activities and health, meteorology and e-government services.

The decisions that governments take at WRC-15 will shape the way we communicate for many years to come. To meet the needs of European consumers, all decision-makers must critically assess demands for new spectrum, and ensure that the needs of the mobile industry are not put above the needs of all others.