

Formation of the regulatory framework for the usage of the 1980 – 2010 MHz / 2170 – 2200 MHz band by the selected entities, pursuant to Decision No. 449/2009/EC of the Commission of the European Communities, dated 13 May 2009, for the provision of Mobile Satellite services to aircrafts.

Introduction

EchoStar Mobile Limited (EML) welcomes the opportunity to respond to this consultation. EML acknowledges the actions of the Greek National Telecommunication and Post Commission (EETT) to establish the regulatory framework for the provision of Mobile Satellite Services to aircrafts. However, it is important to recognise that the provision of Mobile Satellite Services to aircrafts is only one of many potential applications / services that can be accommodated within this frequency band and we therefore urge the regulator to ensure that the regulatory framework offers sufficient flexibility to address the breadth of applications possible. To this end, we advise that EML is not intending to introduce an aircraft based communications service in this band but rather an IP enabled solution that will support a diversity of ground based communications services as outlined in the background section below, including potentially in the future air to ground communications. We encourage the Commission to adopt a single licence framework for the terrestrial component that is technology and service neutral and consistent with EU-wide regulatory principles. Furthermore, we encourage the Commission to adopt an administrative-based approach to setting fees. Such an approach will best reflect the costs of licensing and more readily enable the deployment of advanced mobile services throughout Greece.

Background

As one of the two pan-European licensees for MSS/CGC with plans to begin offering its services in the short-term, EML considers that a clear and certain regulatory environment for its services is critical.

EchoStar XXI, our advanced MSS 2 GHz band satellite has completed construction and is currently being prepared for shipment to Kazakhstan on 14 November 2016 well ahead of the planned launch date of 22 December 2016. In addition to the intensive activity in preparation for the launch we have been working in parallel to ensure that our service is ready to be provided commercially. To this end, we have constructed and commissioned our primary gateway earth station and our data centre in Germany. In addition, we will have finalised construction and the commissioning of all 16 of our calibration earth stations (CES) during November, including our earth stations in Greece. Further, as we have previously shared with you, we will receive our first MSS device, the portable data terminal, to be utilised with EchoStar XXI also in November. Finally, following a successful launch at the end of 2016 we plan to introduce services to the market in the first half of 2017.

We also continue to make progress on the business side. We have identified our first EU-wide reseller and are finalizing our relevant commercial agreement so that communication services can

be provided to customers. In addition, EML is also exploring service opportunities in automotive connectivity, Machine-to-Machine (M2M) communications and the Internet of Things (IoT), and public safety. Specifically on public safety, EML is actively working with a potential European partner to develop a mission-critical wide area network for public protection and disaster relief, using satellite services to provide network resilience and coverage in underserved areas.

As we approach commercialisation we are keen to work with regulators to ensure that the ambitions of the European Parliament and Council Decision¹ are realised. In particular, that the regulatory framework for the MSS enables the effective introduction of this innovative platform for the achievement of universal service objectives and in so doing enhance competition in the provision of voice and data services on a pan-European basis.

To this end, EML is planning to offer as soon as EchoStar XXI is launched and in commercial operation MSS services throughout the EU, even to the most rural and remote areas. In addition, we are continuing with development of our CGC services. In order to realise these, however, it is critical that a clear and certain regulatory regime for CGC be created throughout the EU. Such a regulatory regime should be based on certain clear principles that enable the full use of CGC by both licensees to ensure the benefits of a harmonized pan-European regulatory framework are implemented including a cost related approach to fees, and recognising the significant financial overheads associated with the implementation and operation of such a pan-European service.

Consultation Questions and EML's Responses

1. Do you agree with the things proposed Regulation of the Terms of Use? Justify your answer

Response

EML acknowledges the actions of the Greek National Telecommunication and Post Commission (EETT) to establish the regulatory framework for the provision of Mobile Satellite Services to aircrafts. However, it is important to recognise that the provision of Mobile Satellite Services to aircrafts is only one of many potential applications / services that can be accommodated within this frequency band and we therefore urge the regulator to ensure that the regulatory framework offers sufficient flexibility to address the breadth of applications possible. To this end, we advise that EML is not intending to introduce an aircraft based communications service in this band immediately but rather an IP enabled solution that will support a diversity of ground based communications services as outlined in the background section above. We would encourage the Commission to adopt a single licence regime that is technology and service neutral and consistent with EU-wide regulatory principles. Implementation of such a framework is necessary to allow EML to develop, operate and provide EU consumers, including in Greece, the most advanced, spectrally-efficient and reliable services, no matter where they are located.

The European Union's regulatory framework for electronic communications is intended to enable European consumers to benefit from increased choice, and high-quality and innovative services. Technology and service neutrality are key principles in the application of the European framework and to this end EML encourages the Commission to adopt a technology and service neutral approach

¹ Decision 626/2008/EC, of 30 June 2008, on the selection and authorisation of systems providing mobile satellite services

to the licensing of the Complementary Ground Component (CGC). This principle is reinforced in European Commission Decision 2007/98/EC which designated the 1980-2010 MHz and 2170-2200 MHz bands for systems providing MSS including those with a CGC, and subsequent Decisions² facilitate the introduction of MSS and CGC on a technology and service neutral basis. We therefore urge the Commission to adopt a regulatory approach which is not limited to one technology / service solution but rather that offers the flexibility to accommodate a range of applications whether aircraft based communications systems or terrestrial based systems.

2. Do you agree with the things proposed in the Regulation for the Fees of Spectrum? Justify your answer.

Response

EML is committed to the introduction of advanced services utilising the S Band spectrum in Greece and across Europe but without certainty of the fees that would be applicable to the CGC element of its intended service it is difficult to plan for a commercial service launch in Greece. Furthermore, if the significant costs proposed for Aeronautical CGCs were to be applied to the CGC aspect of the EML service then this would act as a deterrent to EML's provision of CGC services in Greece resulting in inefficient use of the S band spectrum. Accordingly, it would be a disincentive to investment to impose significant regulatory fees on the CGC portion of MSS/CGC and this would negatively impact Greek consumers and businesses.

Rather EML encourages the Commission to adopt an administrative pricing model (one that is based on the costs of regulation) for radio spectrum used for CGC. This approach has been adopted by several EU member states, and by the United States and Canada, where CGC is regulated on a service- and technology-neutral basis. This approach recognizes the significant costs incurred by satellite operators in relation to the construction and launch of their satellite(s), and in developing their mobile satellite service ecosystem.

3. Do you agree that the provision of the mobile aircraft satellite services has no impact on the competition concerning the provision of terrestrial mobile services in the Greek territory? Justify your answer.

Response

No Comment.

Other Matters

Technical Matters

EML welcomes the acknowledgement that the Aeronautical CGCs, aeronautical terminals and the aircraft terrestrial stations, must operate as specified in the ECC Report 233. However, EML urges the Commission to only apply the interference mitigation measures captured in ECC Report 233, when the CGC component is used to provide the aeronautical service. Whereas the use of CGCs on a service neutral basis to provide hybrid satellite-terrestrial mobile services was not subject to study in ECC Report 233 and accordingly, there is no basis for the imposition of the Report findings to the hybrid satellite-terrestrial mobile service.

² Decision 626/2008/EC on the European Parliament and Council on the selection and authorisation of systems providing mobile satellite services.

EML also wishes to emphasise that when utilising the CGC as part of a hybrid satellite-terrestrial aeronautical service, if the operating characteristics of the Aeronautical CGC System were to deviate from those specified in ECC Report 233 then additional interference studies would be required to determine the new impact to adjacent systems. As ECC Report 233 determined, with regards to the aeronautical terminals operating in the aeronautical CGC system, in some cases (for example when the aeronautical terminal is transmitting with high power at low altitudes) interference issues could potentially occur to DA2GC ground stations, ECN base stations in adjacent bands, or in conventional CGCs of MSS systems in the 2 GHz MSS band. (Based on Aeronautical CGC System parameters stated in ECC Report 233). Therefore, if the Aeronautical CGC system characteristics do not adhere to those defined in ECC Report 233 resulting effectively in an increase to the EIRP power levels then additional interference studies would be required.

We therefore request that the Commission require MSS operators operating the hybrid satellite-terrestrial aeronautical services, to implement only the system characteristics and applicable mitigation measures identified in ECC Report 233 to ensure coexistence between electronic communications services.

Conclusion

While EML generally supports the actions of the Greek Commission to establish the regulatory framework for the provision of Mobile Satellite Services to aircrafts, we urge the Commission to ensure that the regulatory framework offers sufficient flexibility to address the breadth of applications possible.

When setting fees for the CGC element of the MSS service we urge the Commission to adopt a service and technology neutral approach to fee setting and critically fees should be determined on the basis of an administrative pricing approach (one that is based on the costs of regulation) if not there would be a disincentive to investment.

We endorse the application of the findings of Report 233 when the CGC component is used to provide the aeronautical service, but note that there is no basis to apply the findings of this report to the hybrid satellite-terrestrial mobile service envisaged by EchoStar.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Jennifer'.

Jennifer A. Manner

Head, Regulatory Affairs

A handwritten signature in black ink, appearing to read 'Peter'.

Dr Peter D. Couch

Director, Policy and Regulatory Affairs