

LICENSED SHARED ACCESS
Draft RSPG Opinion
ESOA draft response
August 2013

INTRODUCTION

ESOA is pleased to participate to the abovementioned consultation. The question of spectrum sharing is of critical importance to the satellite sector given, on the one hand, the many instances where satellite is sharing spectrum, notably on a license exempt basis, and, on the other hand, the high sensitivity of satellite signals to interference.

ESOA is a non-profit European organisation established with the objective of serving and promoting the common interests of European satellite operators. The Association is the reference point for the European satellite operators industry and today represents the interests of 11 satellite operators who deliver information communication services across the globe.

The RSPG draft Opinion on Licensed Shared Access (document RSPG13-529) aims at developing a concept for LSA with a view to facilitating its implementation and fully leveraging its potential.

The RSPG has proposed to define the LSA concept as follows:

“A regulatory approach aiming to facilitate the introduction of radiocommunication systems operated by a limited number of licensees under an individual licensing regime in a frequency band already assigned or expected to be assigned to one or more incumbent users. Under the LSA framework, the additional users are allowed to use the spectrum (or part of the spectrum) in accordance with sharing rules included in their rights of use of spectrum, thereby allowing all the authorized users, including incumbents, to provide a certain QoS”.

ESOA understands that, in order to determine the scope of LSA in the context of this definition, it is considered that a sharing arrangement falls within the framework of LSA if:

- 1) A band is primarily *used or intended to be used* for a given radiocommunication service by one or more incumbent users.
- 2) There are sharing *possibilities* for a limited number of licensed alternative users of the band.
- 3) Alternative users should *not* interfere with the primary use of the band.

These sharing rules are considered necessary to provide a certain level of quality of service (QoS) for all users in the band.

DISCUSSION

As a preliminary remark, it should be noted that national telecommunications laws already allow sharing of frequency bands, under national regulations, typically following the conditions laid down at ITU, CEPT and EU level (Telecoms Regulatory Framework). All EU Member States, have already made spectrum sharing possible.

The RSPG notes:

“LSA is not to be considered a new licensing regime but rather a regulatory approach that focuses on facilitating a more efficient use of spectrum in frequency bands assigned (or expected to be assigned) to one or more incumbent users by introducing additional licensed users.”

It is therefore expected that this framework:

- Fully complies with the licensing regime as defined in the EU Telecoms Package, after the Framework & Authorisation Directives 2002/20/EC & 2002/21/EC as amended;
- Is only relevant in spectrum where incumbent users are individually licensed (i.e. not license exempted);
- Is aimed at providing some kind of *legal* security for spectrum sharing but does not prejudice on technical or technological constraints that, in some cases, makes sharing just *not* feasible.

PRESERVING EXISTING QOS

The RSPG has proposed a revised definition for LSA that highlights the need to allow all authorised users, *“including the incumbents”*, to provide a certain QoS. ESOA is highly concerned that the promotion of flexibility in spectrum use does not lead to deteriorate the conditions under which critical services are provided, and we fundamentally subscribe to the point that LSA should in no way compromise the incumbent QoS.

If a deterioration of the incumbent’s QoS still happened that was not predicted or predictable, ESOA would urge European regulators to put in place adequate regulatory mechanisms to ensure financial compensation.

MAINTAINING RIGHTS FOR FUTURE DEVELOPMENT

The RSPG notes about the LSA approach:

“these arrangements will need sufficient flexibility in order to allow for the incumbent to develop its network and to be able to take into account changes in technology (both the incumbent and new LSA users), in accordance with its spectrum rights of use.”

The RSPG further adds:

“It is also recommended that LSA licences do not, in the long term, limit potential innovation by the incumbent service in accordance with its spectrum rights of use.”

ESOA can only agree that it is essential to enable such a development. There are situations where the safeguard of incumbent’s interests ought to be clarified, for instance as regards FSS in the 3400-3800 MHz band subject to EC Decision 2008/411/EC.¹

LSA is defined as an instrument to permit *viable coexistence* between different users in a same band. ESOA therefore considers that LSA should in no way be foreseen as a tool to re-allocate spectrum.

SHARING OPPORTUNITIES

ESOA believes that, in evaluating the opportunity of introducing LSA in a specific frequency band, a thorough evaluation is made of both benefits *and* risks associated with the presence of newcomers. This evaluation should look at all different aspects (of economic, but also of technical and social nature), as well analysed in the RSPG Opinion on the review of Spectrum Use [RSPG11-391], in order to best capture the consequences of changing the incumbent’s operational environment.

In particular, alongside QoS, other considerations (e.g. resilience, coverage, security, safety, contribution to culture, access to international communications) are critical to measure the value of some services to society. There will undoubtedly be several cases where the cost of sharing will demonstrably be too high based on these parameters.

LICENSE EXEMPTED SERVICES

The RSPG notes:

“The regulator takes no responsibility for protecting individual users of licence-exempt devices against interference and does not provide a legal guarantee for ensuring a certain quality of service (QoS).”

The general principle established in the EU Regulatory Framework on Electronic Communications is to favour a light licensing regime (*“Member States shall facilitate the use of radio frequencies under general authorizations”* – Article 5.1 of the Authorisation Directive) where license exemption prevails.

¹ As a reminder, Recital 7) precisely stipulates: *“The fact that there are other existing applications within these bands ... does not preclude the future use of these bands by other systems and services to which these bands are allocated in accordance with the ITU Radio Regulations (designation on a non-exclusive basis). Appropriate sharing criteria for coexistence with other systems and services in the same and adjacent bands have been developed in ECC Report 100.”* Article 1 of the EC Decision states that the harmonisation for BWA systems will occur, ‘without prejudice to the protection and continued operation of other existing use in this band’; and Article 2 states that Member States shall designate and make available the 3400-3600 MHz and 3600-3800 MHz bands for terrestrial electronic communications networks but ‘on a non-exclusive basis.’

Several ETSI & CEPT texts do reflect this approach, e.g. standards and decisions applying licence exemption to MSS L-band or FSS C-band, Ku-band and Ka-band terminals that are used to provide essential services. There are also many terrestrial services (e.g. WiFi) which operate under a licence-exempt regime. ESOA believes that a responsibility lies with NRAs to favour this approach where possible in Europe, in a harmonised way.

In particular, there are several cases with some NRAs where a network operator is licensed whereas the associated equipment (terminals) are licence exempt. If the terminals are part of the network (as network terminating points), the responsibility of the regulator can be engaged to ensure interference immunity and QoS of network operations even in the absence of individual end-user licenses.

It is also to be reminded that, in general, licence exemption is applied where the risk of interference to other spectrum users is low or non-existent. Licence exemption does not equate to operation without protection from interference. More generally, the regulator has a responsibility to ensure that it does not authorise applications which would cause harmful interference to other services, whether licensed or licence-exempt - a function NRAs have generally accomplished successfully in the past.

ESOA therefore cannot agree with or subscribe to the RSPG's abovementioned statement. Licence exemption should remain the preferred method of authorisation for many satellite applications, and licence exempt services should continue to enjoy protection from interference through careful spectrum management decisions.

NEXT STEPS

One challenge with LSA is developing harmonised measures to enable economies of scale in the internal market while accounting for national specificities in implementation and use, which depends e.g. on the types and market presence of incumbents.

In particular, it should be considered that too specific technical conditions agreed as a result of LSA negotiations may lead to a fragmented situation, with particular sharing conditions developing in the different countries. It is unclear how the declared goal of promoting a harmonised approach will be satisfied.

In any case, given that NRAs are rightly entitled to determine their own sharing conditions in order to adjust LSA to their national specifics, ESOA insists that LSA has to be implemented within, and respect, the existing regulatory framework made up of the EU Telecoms Package, the CEPT deliverables and the ITU Radio Regulations.