



# International Amateur Radio Union Region 1

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Subject	Application and IARU Region 1 support with respect to License Shared Access (LSA)		
Society	SSA	Country:	Sweden
Committee	C5	Paper Number	LA17_C5_13
Author	Mats Espling, SM6EAN		

## 1. Introduction

When removing amateur radio allocations, the Swedish Administration (PTS) is referring to LSA<sup>1)</sup> as a method for amateur radio to get future access to those frequency bands. It is not clear:

- If its view is known to the new/incumbent users.
- If the role of the administration/NRA, as laid out in ECC Report 205 and CEPT Report 56, is accepted by the administrations.
- What procedure shall be used to conclude if a license under LSA can be obtained.

The PTS report shows that LSA looks like a framework that will be used in several countries and frequency bands. As such, it will be an important framework for the amateur community to understand and act within.

## 2. Recommendation

As the LSA framework is new, and may play an important role in future access to spectrum, it may be relevant for IARU Region 1 to clarify how support can be given to the different national discussions and negotiations. The recommendation contains two parts:

- The national administration has a responsibility in setting up the sharing framework. It is proposed that IARU Region 1 create recommendations to support member societies for how to act on a general national level to prepare for future discussions and negotiations. I.e. in the situation with re-farming and LSA is proposed to be the future way for amateur radio.
- It is also proposed that IARU Region 1 create case support for national discussions and negotiations between the administration, primary user and amateur radio society. This can for example be in the form of checklist/guideline but also by e.g. e-mail or Skype.

## 3. Background

As re-farming of spectrum is on-going for the expansion of mobile data access, the 2,3 and 3,4 GHz amateur band are effected currently. In Sweden, and some other countries, while allocating spectrum to new “primary allocations,” the Administration/NRA is referring to LSA as a possible solution to solve the amateur radio access to the frequency band.

The conclusion for amateur radio in Sweden for the 2,3 GHz band <sup>2)</sup>:

“The amateur radio activity that is currently present in the 2,3 GHz band is limited to

a few users. PTS considers that this use can be addressed through a LSA arrangement in cases where a consent by the mobile operators can be obtained.”

PTS summarises an international overview as a part of their work with the report. In very short summary:

- UK: No amateur radio in the band 2 350 – 2 390 MHz. LSA not mentioned in the PTS report.
- France: 2,3 GHz has extensive military use and LSA may be of interest. Mobile data tests have been stopped. (*See also reference 4, Part IV*)
- Italy: Mobile data tests ongoing in 2,3 GHz and experiences will be collected for possible future LSA.
- The Netherlands: Pilot project with web based booking in 2,3 GHz. Experiences may be used for future LSA.
- Denmark: 2,3 GHz foreseen for use of mobile data in the band but no LSA.
- Norway: 2,3 GHz allocated until end 2019, no decision how to proceed after 2019.
- Finland: 2,3 GHz foreseen to be used for mobile data. LSA may be the method to manage different applications in the band.

The “sharing framework” within the LSA concept can be understood as a set of sharing rules or sharing conditions that will materialise the change, if any, in the spectrum rights of the incumbent(s) users and define the spectrum, with corresponding technical and operational conditions, that can be made available for alternative usage under LSA.

It may well already have been laid out, discussed and documented how to really act under the LSA framework, but from discussions that the author of this document has studied, this has not been the clear.

#### Examples from reports:

ECC Report 205 states <sup>1) 4)</sup>:

##### **“Sharing framework**

The implementation of LSA relies on the concept of a “sharing framework” that is under the responsibility of the Administration / NRA. Its development requires the involvement of all relevant stakeholders.”

The sharing framework is further described under section 4.2 of the report 205. It is again made clear “...which is established under the responsibility of the Administration / NRA ...” and that the implementation is at national level.

CEPT Report 056 <sup>3)</sup> states

“The introduction of WBB under LSA will require a dialogue involving Administration / NRA, Incumbent(s) and prospective LSA Licensees, in order to define the sharing framework. The detailed procedure will have to be defined at national level, taking into account the different national authorisation schemes.”

One risk with the LSA approach is that with the ambition to auction spectrum, the notion of LSA may influence interest and/or price of spectrum. A consequence may then be that the transparency of LSA for the new primary user will be limited before the auction is closed.

Another risk is that LSA is used by the administration to postpone spectrum discussions for amateur radio and refer to a future discussion under an unclear “sharing framework”. However, for practical reasons this may actually be the situation we’re facing in many cases. It’s then important to be as prepared as possible.

As a practical example, the early communication with the Swedish administration (PTS), LSA is used as the allocation and licensing principle for e.g. 2,3 GHz. The indication from PTS is that it’s up to the radio amateur community to get in contact with the (new) primary user to negotiate if there are possibilities for sharing under certain conditions. If these conditions are agreed, PTS may issue licenses for amateurs under the agreed conditions.

### References

- 1) ECC Report 205: Licensed Shared Access (LSA), February 2014  
<http://www.erodocdb.dk/doks/filedownload.aspx?fileid=4061&fileurl=http://www.erodocdb.dk/Docs/doc98/official/pdf/EC-CREP205.PDF>
- 2) Swedish administration, PTS, report PTS-ER-2016:33 (in Swedish but with abstract in English)
- 3) CEPT Report 056 “Report B1 from CEPT to the European Commission in response to the Mandate on ‘Harmonised technical conditions for the 2300-2400 MHz (‘2.3 GHz’) frequency band in the EU for the provision of wireless broadband electronic communications services’”, 6 March 2015
- 4) “The potential of Licensed Shared Access for the wireless broadband growth – Regulatory Aspects of LSA” Emmanuel Faussurier, ANFR