

Welcome to the World of Standards



Licensed Shared Access Standardization

Expo Milan - Innovation in the Digital Single Market in Europe

Dr. Markus Mueck, Chairman ETSI TC RRS

25-October-2015

LSA - Standardization and
Regulation Status

LSA – Main aspects and solution

Next Steps & Conclusions





I. LSA - Standardization and Regulation Status

- **CEPT has finalized LSA related activities for 2.3-2.4 GHz**

- ❑ RSPG (Radio Spectrum Policy Group) published its 'Opinion on LSA' as document RSPG13-538
- ❑ ECC Report 205 on LSA, defining and analyzing the LSA concept, was published in Feb. 2014
- ❑ ECC Recommendation ECC/REC/(14)04 on "Cross-border coordination for MFCN and between MFCN and other systems in the frequency band 2300-2400 MHz" approved in May 2014
- ❑ ECC Decision ECC/DEC/(14)02 on 'Harmonised conditions for MFCN in the 2300-2400 MHz band' approved in June 2014

- ❑ CEPT Report 055 - Technical conditions for wireless broadband usage of the 2300-2400 MHz frequency band
- ❑ CEPT Report 056 - Technological and regulatory options for sharing between WBB and the relevant incumbent services/applications in the 2.3 GHz band
- ❑ CEPT Report 058 - Technical sharing solutions for the shared use of the 2300-2400 MHz band for WBB and PMSE

- **LSA related activities in ETSI & 3GPP**

ETSI has finalized the following Documents:

- ❑ TR 103 113 System Reference Document on “Mobile broadband services in the 2300 MHz -2400 MHz frequency band under LSA regime”
- ❑ ETSI TS 103 154 “System requirements for operation of Mobile Broadband Systems in the 2300 MHz -2400 MHz band under LSA”
- ❑ TS 103 235 “System Architecture and High Level Procedures for operation of LSA in the 2300 MHz-2400 MHz band”

ETSI currently develops

- ❑ DTS/RRS-0146 Information elements and protocols for the interface between LSA Controller (LC) and LSA Repository (LR) for operation of Licensed Shared Access (LSA) in the 2300 MHz-2400 MHz band

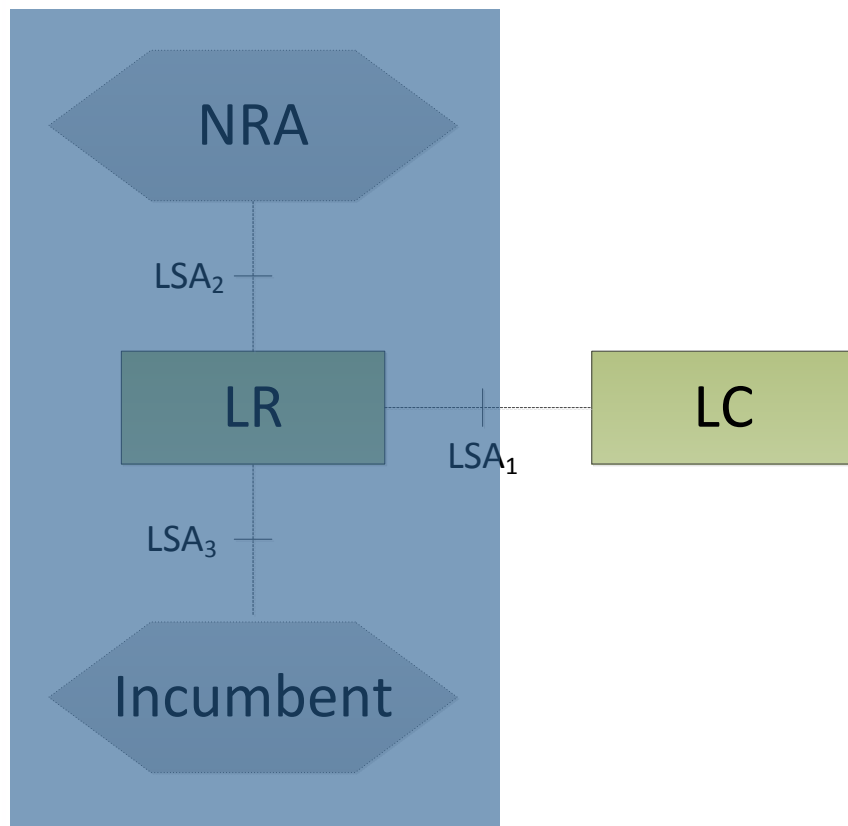
3GPP SA5 currently studies

- ❑ 3GPP TR 32.855 - 3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Telecommunication management; Study on OAM support for Licensed Shared Access (LSA); (Release 13)

■ II. LSA – Main aspects and solution

- LSA is “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” [ECC Report 205]

- LSA is a **complementary spectrum management tool** on **voluntary basis** that fits under an **individual licensing regime**
- LSA complements the **traditional exclusive access** based on **individual authorization** when re-allocation / refarming of spectrum is impracticable due to incumbent use
- A **predictable QoS** is offered to the LSA licensee
- LSA licensee use the **spectrum where** and **when** it is **not used by the incumbent**
- LSA licensee has **exclusive spectrum rights** of use (when entitled to use spectrum)



- LSA System clearly separates non-LSA licensee domain and LSA licensee domain to maintain the assets privacy
- Technical and operational conditions and related practical details (e.g. protection requirements) are defined in the Sharing Framework/Arrangement between the involved parties

III. Next Steps and Conclusions

- LSA Regulation framework is clear



- LSA Implementation has now to be considered by National Administrations



- Standards & Specification activities need to be finalized in order to implement LSA

