

The background features a large, semi-transparent watermark of the International Telecommunication Union (ITU) logo. It consists of a globe with latitude and longitude lines, overlaid with a stylized lightning bolt and a satellite dish. The text "ITU" is prominently displayed in the center of the globe.

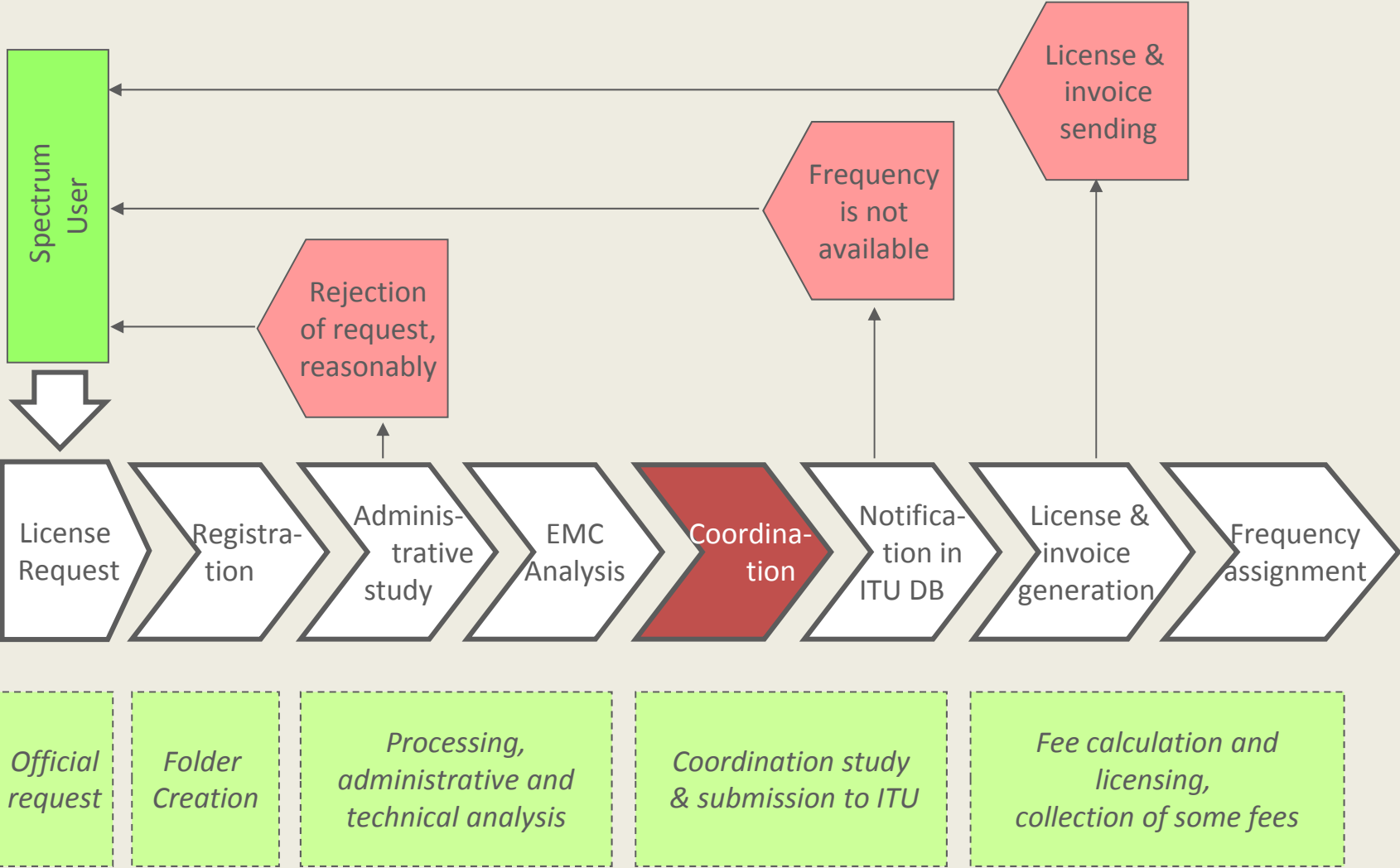
# **A cross Border Frequency Coordination Agreement**

Spectrum Workshop  
12 October 2016  
Mexico City. Mexico

# What to expect in these slides

- ✘ **Where does Coordination stand in National Licensing workflow**
- ✘ **What principle to apply for Coordination**
- ✘ **What to consider in a regional/multi-lateral cross border co-ordination agreement**

# Example - National Spectrum Licensing workflow



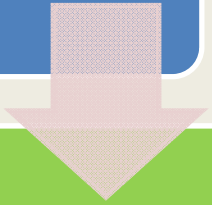
## Example - National Spectrum Licensing workflow

- ✘ Request for Licensing received by office
  - + *Ensure all the technical parameters are there in application (establish a minimum required info. criteria)*
  - + *Detailed backend technical evaluation*

Need for Coordination Established

# General overview of coordination

Co-ordination request and all technical characteristics of radio network/equipment sent to all administrations affected to enable accurate assessment of interference



Administrations affected assess possibility of interference to own stations;

**No possibility of interference: obliged to agree to request**



If assessments produce different results, administrations can agree to operation on a trial basis; **field strength calculations replaced with agreed field strength measurements**

# A cross border Agreement - Components

## ➤ Definitions

- Terms used in the agreement :  
*Preferably same as in the RR*
- Full Details of Administration involved in the Agreement  
*Full Name etc.*
- Details of Frequencies with respect to each radio services covered by the agreement
- Categories of frequencies for coordination
  - *Preferential frequencies*
  - *Shared frequencies*
  - *Frequencies for planned radio communication networks*
  - *Frequencies used on the basis of geographical network plans*
  - *Frequencies used on the basis of arrangements between operators*
  - *Others*

# A cross border Agreement - Components

## ➤ Definitions

- Frequency Register

*The Frequency Register consists of lists set out by every Administration indicating its coordinated frequencies as per the categorization of frequencies*

- Other articles defining:

- *Administration affected*
- *Harmful interference*
- *HCM Programs*
- *Data Exchange*

***Annexures could be used for Details***

# A cross border Agreement - Components

## ➤ General

- Set out responsibility of each Administration involved in following clauses of the Agreements and its procedure
- May also clearly define that this agreement/framework in no way affects the rights and obligations of the Administrations arising from other international, regional, multilateral, bilateral and intergovernmental agreements

A coordination agreement on regional level should be **flexible** enough to allow the countries involved in bilateral coordination to change the mentioned coordination arrangements e.g. time limits with mutual consent



# A cross border Agreement - Components

## ➤ **Technical Provisions**

- Articles related to the technical co-ordination of a radio station and the evaluation with reference to relevant applicable Annexes for details

## ➤ **Procedures**

- Detailed Administrative and technical with clearly defined time limits for each procedure of RF coordination.
- Preferred way is to provide the procedural details in accordance to each category of frequencies

# A cross border Agreement - Components

## ➤ **Others Provisions:**

- Report of harmful interference
- Revision of this Agreement
- Accession to this Agreement
- Withdrawal from this Agreement
- Status of co-ordinations prior to this Agreement
- Languages of the Agreement
- Entry into force of Agreement

# A cross border Agreement - Components

## ➤ Annexes

- Can be categorized with respect to the RF services involved in the agreement
  
- Contain all technical details
  
- Example of Annexures:
  - *Maximum permissible interference field strengths and maximum cross-border ranges of harmful interference for frequencies requiring co-ordination*
  - *Data exchange (methods and details of the contents of the lists)*
  - *Measurement procedures*
  - *Propagation curves to be used for coordination w.r.t each service*
  - *Determination of the interference field strength*
  - *Coding instructions for antenna diagrams*
  - *Method for combining the horizontal and vertical antenna*
  - *Triggers for co-ordination in the Fixed Service*

# A cross border Agreement - Components

1. **Definitions**
2. **General**
3. **Technical provisions**
4. **Procedures**
5. **Report of harmful interference**
6. **Revision of this Agreement**
7. **Accession to this Agreement**
8. **Withdrawal from this Agreement**
9. **Status of co-ordinations prior to this Agreement**
10. **Languages of the Agreement**
11. **Entry into force of Agreement**
12. **Annexes for technical and administrative details**

**Rec. ITU-R SM.1049-1**

*(A METHOD OF SPECTRUM MANAGEMENT TO BE USED FOR  
AIDING FREQUENCY ASSIGNMENT FOR TERRESTRIAL SERVICES  
IN BORDER AREAS )*

# Thank you for your attention



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