

# JOINT COMMUNICATION ELECTRONICS STAFF



## WRC 11 - ISSUES FOR INDIA DEFENCE PERSPECTIVE



# DEFENCE PERSPECTIVE

- **Rapid growth of wireless based services**
- **New technologies/developments demand additional spectrum.**
- **Most of WRC-11 Agenda's pertain to requirement of spectrum for new services/sharing of existing bands for additional usages.**



# DEFENCE PERSPECTIVE

- Defence Services system are traditionally wireless based as operations are mobile and exact area cannot be predetermined.
- A variety of defence comn and non comn systems like int gathering, radars, weapon guidance systems exist.
- Systems have a long gestation period and take approx 10 – 15 years to develop.
- Due to our unique geopolitical scenario a large No of systems are deployed at any given time.



# DEFENCE PERSPECTIVE

- **As per an Memorandum of Understanding, an exclusive Defence Band has been identified, however formal promulgation awaited.**
- **Existing as well as future spectrum requirements for commercial applications have been duly considered while earmarking Defence Band.**
- **This will benefit both Defence as well as civilian users and provide more clarity on availability of spectrum. It will facilitate in doing away with the lengthy and time consuming coordination process presently being followed.**



# PERSPECTIVE ON AGENDA ITEMS FOR WRC - 11

- **Agenda Items 1.1 , 1.2 – No comments.**
- **Agenda Item 1.3 – Pertains to regulatory actions including allocations for UAVs. Existing UAV spectrum usages should be covered in the proposals both for remote pilot to control the UAVs and data transmitted by UAVs to the remote stations.**
- **Agenda Items 1.4 – Pertains to introduction of new aeronautical mobile service in 112 – 117.975, 960 – 1164 and 5000 – 5030 MHz bands. Band 960 – 1164 should be avoided due to existing usages.**



# DEFENCE PERSPECTIVE

- Agenda Items 1.5 – 1.6 – No comments, harmonisation of spectrum for Electronic News Gathering is critical.
- Agenda Item 1.7 – Not in favour of identifying spectrum in 1525 – 1559 MHz and 1626 – 1660 MHz for aeronautical mobile satellite service due to existing usages.



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- **Agenda Items 1.8, 1.9, 1.10, 1.11, 1.12, 1.13, – No specific with comments. Agenda Items 1.9 & 1.10 dealing with new digital technologicis for maritime mobile services & freq allocation for safety systems for ships and ports are critical.**
- **Agenda Item 1.14 – Requirements for new applications for the radiolocation service in 30-300 MHz. 30-200 MHz already cluttered up with existing comn systems. Spectrum above 200 MHz only should be considered.**



# DEFENCE PERSPECTIVE

- **Agenda Items 1.15** – Allocation in 3-50 MHz to radiolocation service for oceanographic radar applications not feasible, as large No of HF and VHF applications exist.
- **Agenda Item 1.16** – Need for passive systems for lightning detection below 20 KHz is critical.
- **Agenda Item 1.17** – Pertains to sharing studies between mobile and other services in 790-862 MHz. WRC Resolution focuses on two specific usages for PPDR and digital TV transmissions. Earmarking any additional usages not feasible.



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- **Agenda Items 1.18 – No comments.**
- **Agenda Item 1.19 – Consider regulatory measures for SDR and CRS. Views are as follows :-**
  - **Use of CRS would entail permitting other services to monitor specified bands to look for white spaces.**
  - **In view of FDI permitted in Telecom sector could have serious security implications, if strict regulatory mechanisms not enforced.**
  - **Tech challenges for CRS indicate that a world wide pilot channel for all applications may be best option.**



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- **Agenda Items 1.20** – Spectrum allocation for HAPS in 5850-7075 MHz. No specific views, however practical usages of HAPS in our country needs to be analyzed.
- **Agenda Item 1.21, 1.22, 1.23, 1.24 and 1.25** – No specific comments.



# DEFENCE PERSPECTIVE

**THANK YOU**