FAQ On Wireless Operating License for spectrum to the Internet Service Providers:

Q1. What is Internet Service Provider (ISP)?

A1. Internet Service Providers (ISP) are those service providers providing internet service to the subscribers and have requisite service license from Department of Telecommunication (DoT) i.e. ‘ISP Category-A or B or C’ or Unified License with ISP Authorisation (UL-ISP) for Category A/B/C. For details of such service license please refer [https://dot.gov.in/dataservices/data-services](https://dot.gov.in/dataservices/data-services).

Q2. Do all the Internet Service Providers (ISP) require spectrum to provide service?

A2. NO; All the ISPs do not require spectrum for providing service. Most of the ISPs provide internet service through wireline (cable/leased line etc.) and thus do not require spectrum.

Q3. What is Wireless Operating License (WoL) for the spectrum of the ISPs?

A3. Wireless Operating License is the license issued under Section 4 of the Indian Telegraph Act of 1885, by Wireless Planning & Coordination Wing (WPC Wing) of DoT for the telegraph established, maintained and worked by the Licensee (ISP) using the spectrum obtained (through frequency earmarking/ Decision-to-grant License) for this purpose.

Q4. What is frequency earmarking or Decision-to-grant License (D/L) as mentioned above?

A4. Any Internet Service Provider having ISP service license (ISP Category A/B/C or UL-ISP) may apply for spectrum (which require license for its use vis-à-vis license exempt spectrum) for providing internet service as per extant procedure. Once approved, a certain quantum of spectrum is assigned to the applicant through frequency earmarking or D/L.

Q5. What is required to obtain the WoL for spectrum assigned to the ISPs?

A5. The applicant requires i) the service license from DoT as mentioned in Q1; ii) frequency earmarking or D/L as issued by WPC Wing; iii) SACFA clearance for the fixed stations in the network and iv) invoice of the Transceiver equipment & technical brochure; to apply for WoL.

Q6. What is FDD & TDD?

A6. FDD stands for Frequency Division Duplexing and TDD stands for Time Division Duplexing. These are duplexing technologies wherein separate frequency channels (FDD) or time channels (TDD) are used for Tx-Rx communication.

*************
FAQ On Wireless Operating License for Microwave Access (MWA) and Microwave Backbone (MWB) links of the Access Service Providers:

Q1. What is Microwave Access (MWA) and Microwave Backbone (MWB)?

A1. Both MWA & MWB are part of the mobile backhaul network. Mobile backhaul is that portion of network infrastructure that provides interconnectivity between the access and core network. Access network is that part of the network which gives the end user the access to the network. MWA carriers are used for short-haul connectivity, interconnecting the BTSs or BTSs to the BSCs etc. MWB carriers are long-haul carriers connecting the BSCs to MSCs or MSCs to MSCs etc.

Q2. What is meant by Access Service Provider?

A2. Access service providers are those who provide Access service and having access service license from DoT [CMTS/UASL/UL (AS authorisation)]. ACCESS SERVICES (AS) means telecommunication service provided to subscribers by means of a telecommunication system for the conveyance of voice or non-voice messages through wired or wireless telegraphy on the network of the Access Service Provider.

Q3. Why do Access Service Providers require MWA & MWB spectrum?

A3. MWA & MWB spectrum is required by the Access service providers (ASP) to connect the ‘Access’ part to their core network. ASPs use Optical Fibre (OFC) as well for the above purpose.

Q4. What are the MWA & MWB spectrum bands?

A4. MWA being the short-haul link, relatively higher frequency bands are used. 13 GHz, 15 GHz, 18 GHz & 21 GHz bands are currently earmarked for MWA spectrum. On the other hand, MWB being the long-haul link, relatively lower frequency bands are used. Presently, 6 GHz & 7 GHz bands are earmarked for MWB spectrum.

Q5. What is Wireless Operating License (WoL) for the MWA & MWB spectrum of the ASPs?

A5. Wireless Operating License is the license issued under Section 4 of the Indian Telegraph Act of 1885, by Wireless Planning & Coordination Wing (WPC Wing) of DoT for the telegraph established, maintained and worked by the Licensee (ASP) using the MWA/ MWB spectrum obtained (through frequency earmarking/ Decision-to-grant License) for this purpose.

Q6. What is frequency earmarking or Decision-to-grant License (D/L) as mentioned above?

A6. Any Access Service Provider having Access service license (CMTS/ UASL/ UL(AS)) may apply for MWA/ MWB spectrum in a licensed service area (LSA) provided they have valid
access spectrum in that LSA. Once approved, such spectrum is assigned to the applicant through frequency earmarking or D/L.

Q7. What is required to obtain the WoL for MWA/ MWB spectrum assigned to the ASPs?

A7. The applicant requires i) the valid service license from DoT as mentioned in Q2; ii) frequency earmarking or D/L as issued by WPC Wing; iii) SACFA clearance for the fixed stations in the network and iv) invoice of the Transceiver equipment & technical brochure; to apply for WoL.

**************

**************