

Spectrum:

1. "Spectrum" refers to the range of electromagnetic radio frequencies used for transmitting signals for various communication purposes. The electromagnetic spectrum encompasses a wide range of frequencies, from very low frequencies (VLF) used for submarine communication to extremely high frequencies (EHF) used for satellite communication.
2. Different parts of the spectrum are allocated for specific uses, such as television broadcasting, radio broadcasting, mobile communication, satellite communication, and more. The allocation of spectrum is regulated by government agencies to ensure efficient use and to avoid interference between different services.
3. For example, the spectrum used for mobile communication is divided into bands, such as the low-frequency bands (e.g., 700 MHz), mid-frequency bands (e.g., 2.4 GHz), and high-frequency bands (e.g., 28 GHz). Each band has different characteristics and is suitable for different types of communication applications.
4. Presently, National Frequency Allocation Policy (NFAP)- 2022 is a comprehensive document that outlines allocation of different frequency bands for various services which includes mobile communications.
5. The NFAP-2022 serves as a comprehensive roadmap for the allocation and management of the radio frequency spectrum in India, ensuring efficient utilization of this valuable resource and enabling the deployment of various wireless services and technologies across different sectors.