

**GOVERNMENT OF INDIA  
MINISTRY OF COMMUNICATIONS  
DEPARTMENT OF TELECOMMUNICATIONS**

**RAJYA SABHA  
UNSTARRED QUESTION NO. 1206  
TO BE ANSWERED ON 16<sup>th</sup> DECEMBER, 2022**

**BENEFITS OF 5G**

**1206 # SHRI DEEPAK PRAKASH:**

Will the Minister of Communications be pleased to state:

- (a) the policies framed for the auction and usage of 5G spectrum; and
- (b) the manner in which the country is going to benefit from this?

**ANSWER  
MINISTER OF STATE FOR COMMUNICATIONS  
(SHRI DEVUSINH CHAUHAN)**

- (a) The Government has set the following objectives for the Spectrum Auction:
  - (i) Obtain a market determined price of Spectrum through a transparent process;
  - (ii) Ensure efficient use of spectrum and avoid hoarding;
  - (iii) Stimulate competition in the sector;
  - (iv) Promote rollout of the respective services;
  - (v) To arrive at optimal price of spectrum to ensure sustainable and affordable access to Digital Communications.

M/s MSTC Limited is selected as Auctioneer through a bidding process. As in past auctions, the Spectrum Auction 2022 was conducted in Simultaneous Multiple Rounds Ascending (SMRA) methodology. The Auction was conducted on Electronic Auction System (EAS) which was made available to eligible bidders. Telecom Regulatory Authority of India (TRAI) has given its recommendations dated 11.04.2022 on Auction of Spectrum in frequency bands identified for IMT/5G. After considering these recommendations, the Government issued Notice Inviting Applications (NIA) in which the spectrum to be auctioned, reserve price, eligibility criteria to participate in the Auction, payment terms, roll-out obligations and other terms and conditions of spectrum auction are mentioned. A total of 72097.85 MHz of access spectrum in all 22 Licensed Service Area (LSA) was put to auction.

To ensure optimum use of 5G spectrum, successful bidders have to adhere to roll out obligations over a period of five years in a phased manner from the date of allocation of spectrum. The salient features of rollout obligations is enclosed as **Annexure**.

(b) The spectrum being made available will boost the quality of voice and data services and also ensure the continuity of telecom operations. The voice and data services are used by all the sections of the society, all part of the country and various sectors of the economy, thus contributing to overall socio-economic growth of the country. The 5G services will also serve various verticals of industry and social sectors such as Agriculture, Healthcare, Manufacturing & Industrial Automation, Mining, Education, Energy and Grid Power, Automotive Industry, Media and Entertainment etc.

Improved capabilities of 5G network create multiple usage scenarios broadly categorized as under:

- Enhanced mobile broadband (eMBB) allowing high throughput and seamless usage of AR/ VR apps, faster media downloads, live interactive classes etc.
- Ultra-reliable and low latency communications (URLLC) supporting near real time response situations viz. Industrial automation, autonomous driving, work-and-play in the cloud, remote medical surgery etc.
- Massive machine type communications (mMTC) helping realise IoT related applications such as smart city and smart home applications.

Salient features of rollout obligations in the Notice Inviting Application (NIA) for auction of access spectrum.

**A. Rollout obligations in respect of 3300 MHz spectrum**

- (i) In Licensed Service Areas (LSAs) i.e. Telecom Circles other than Metro LSAs:

<b>Time Period</b>	<b>Roll Out Obligations (per LSA)</b>	<b>Minimum number of towns to be covered using targeted sites (per LSA)</b>
Phase-1: By the end of 1 <sup>st</sup> year	Commercial launch of services in at least 1 city in the LSA	1
Phase-2: By the end of 3 <sup>rd</sup> Year	Cumulative number of sites to be deployed: Category A LSAs: 700 Category B LSAs: 460 Category C LSAs: 260	In Category A LSAs: 14 In Category B LSAs: 9 In Category C LSAs: 5
Phase-3: By the end of 5 <sup>th</sup> Year	Cumulative number of sites to be deployed (at least 5% of the sites to be in rural SDCA, including economic zones): Category A LSAs: 2000 Category B LSAs: 1400 Category C LSAs: 940	In Category A LSAs: 40 In Category B LSAs: 28 In Category C LSAs: 19

- (ii) Metro LSAs:

<b>Time Period</b>	<b>Roll Out Obligations (per LSA)</b>
Phase-1: By the end of 1 <sup>st</sup> year	Commercial launch of services anywhere in the LSA
Phase-2: By the end of 3 <sup>rd</sup> Year	Cumulative number of sites to be deployed in each LSA: 280
Phase-3: By the end of 5 <sup>th</sup> Year	Cumulative number of sites to be deployed in each LSA: 920

**B. Rollout obligations in respect of 26 GHz spectrum**

- (i) In Licensed Service Areas (LSAs) i.e. Telecom Circles other than Metro LSAs:

<b>Time Period</b>	<b>Roll Out Obligations (per LSA)</b>	<b>Minimum number of towns to be covered using targeted sites (per LSA)</b>
Phase-1: By the end of 1 <sup>st</sup> year	Commercial launch of services anywhere in the LSA	1
Phase-2: By the end of 3 <sup>rd</sup> Year	Cumulative number of sites to be deployed: Category A LSAs: 240 Category B LSAs: 150 Category C LSAs: 80	In Category A LSAs: 2 In Category B LSAs: 1 In Category C LSAs: 1
Phase-3: By the end of 5 <sup>th</sup> Year	Cumulative number of sites to be deployed: Category A LSAs: 660 Category B LSAs: 460 Category C LSAs: 300	In Category A LSAs: 7 In Category B LSAs: 5 In Category C LSAs: 3

- (ii) Metro LSAs:

<b>Time Period</b>	<b>Roll Out Obligations (per LSA)</b>
Phase-1: By the end of 1 <sup>st</sup> year	Commercial launch of services anywhere in the LSA
Phase-2: By the end of 3 <sup>rd</sup> Year	Cumulative number of sites to be deployed in each LSA: 90
Phase-3: By the end of 5 <sup>th</sup> Year	Cumulative number of sites to be deployed in each LSA: 300

\*\*\*\*\*