To
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INPUTS FOR NTP-2018

Villages: Connecting all un-connected villages **on par with Urban** connectivity. Every telecom service provider (TSP) must have to connect all the areas. Service providers should not have option of USO payment for not connecting rural/remote areas under their jurisdiction. Strengthening the enforce system to ensure the quality delivery specific to villages/remote areas. **Availability of village data portal**: The village list (state/district wise) in interactive mode along with it"s status and level of connectivity with time/date stamping is made available in a portal, to ensure cross feedback from public about the quality, public as enforcement support system.

Open **Telecom University** for targeted research, R&D, Innovation, creating more IPRs, developing indigenous systems, professional HR at all levels in telecom echo system, etc..

Revamping multiple service areas in to **single service area** (entire nation will be one service area). This will reduce the complexity in telecom echo system. I.e. **National TSPs.** (Virtual Network Operators may be limited to regional/local/specific/limited operations)

Spectrum Lock: Come out of the concept of allotment of spectrum in a specified Spectrum band. I.e. service providers **should not be locked** in a specific spectrum band to enhance their deliverables or optimize their operations on par with technological developments which happens time to time. In detail:

- ➢ Basing on the characteristics of telecom frequencies, the operator may require particular category of spectrum basing on the density of the customer base (Urban / rural / remote / etc. areas) to provide quality services across the spread of their operations.
- ➢ Due to the technological evaluation, the utilization of spectrum at various bands may change time to time, so to capture the advantage of newly evaluated technology **without lag**, instant allotment of required band/quantum of spectrum is the requirement to provide better telecom facilities to the citizens of the country.
- ➢ Some times, it may require to drop certain frequencies due to the advantage found in other frequencies. The licensees should not be locked to a particular spectrum / frequencies and unable to shift to new technology/spectrum (due to this auction based acquiring spectrum, service provider needs to stick to particular frequency band over a long period).
- ➢ This is the time to overcome such constraints in future spectrum allotments.

Huge capital is required to roll-out when ever there is a **shift of** spectrum or technologies. So acquiring spectrum through auction by paying huge amount is not appropriate on each occasion of shift of spectrum or multiple spectrum bands utilization. As cost of acquiring/rolling-out technology can not be reduced, reducing the cost of acquiring spectrum may be considered. Spectrum costs (in any shape) are to be minimized to the lowest for better deliverability and health of TSP.

Limiting the maximum number of National TSPs leads better utilization of spectrum.

Address the problem "**hanging of over head cables / wires** across streets / foot-paths / trees" (these wires / cables may be live or disconnected ones).

Electronic waste: Evaluation of telecom technologies leading to huge electronic waste. This is to be addressed. (manufacturer / wholesaler/ retailer / supplier are benefiting by selling/supplying their technologies/devices). Mechanism to collect and safe process of life-expired, out-dated and irreparable electronic/digital gadgets & equipments

Re-using of numbering resources should not cause inconvenience to the new user (example: consequences happens to present user due to previous user/s). This problem is to be addressed.

When ever any decision taken in this Nation, which leads huge **opportunity of manufacturing** (example: digitalization in cable TV leads requirement of set-up boxes in large number), the system should work in such a way that the opportunity is to be utilized by the nation but not pass the benefit to other countries. So all such future decisions yield improved manufacturing opportunities to the nation.

Local Telecom Manufacturing echo system (local availability of components, etc.) is to be strengthened. All the available telecom manufacturing facilities in India may be brought together for better yielding to the Nation.

International N/Ws: Development of Cross boarder network resources or Regional & International telecom networks (example: Napal may utilize data centres, cloud resources, decision support systems, of India)

Introducing "**National Internet" & Global Internet**" to address various ICT related threats. (All users may not require to access global level, so they may limit to National Internet).

Light Way i.e. "Optical Fibre Cable"" is the main ingredient to meet the objectives/mission of the NTP – 2018, so it is required to ensure minimum damages to this back bone, while developing new/upgrading existing infrastructure. Necessary provision may be incorporated in this policy to ensure the same.

"tele-density" is not reflecting actual meaning as such multiple connections are being taken by single person. As per new KYC procedures i.e. Aadhar number updating for every mobile number, we may hope of arriving actual tele-density of our Nation. So, provision may be incorporated in this policy, to have an arrangement with concenred authorities (Aadhar).

Accordingly needful items may be incorporated in the structure of formulation of **5th Telecom Policy of India** i.e. NTP-2018.

With Regards

Srinivas