Your Ref: TRAI Consultation Paper No. 06/2020, dated 20th August 2020

To TRAI, New Delhi

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Sub: Comments on Consultation paper on "Road Map to Promote Broadband Connectivity and Enhance Broadband Speed"

### **Responses are as follows:**

# <mark>Q1:</mark>

Broadband or high speed internet may be re-defined in the following manner:

**National Broadband:** Users need not cross National boarders even on "*data high-way*". Usage will be among portals/mails/apps/etc hosted within Nation, where no need to connect systems beyond National borders. Users have on-line access only with in a Nation. Under this category of broadband users can do all on-line activities that are available within Nation viz., on-line transactions/bookings/mails/apps/etc. that are established with in Nation and no need to touch (virtually) in any systems/servers connected out-side nation directly/in-directly while using National broadband services.

**Global Broadband**: Users can connect any content/portals/apps/etc. online access across globe., which is existing at present.

OS/Browsers/etc need to incorporate such options based broadband category whether National/Global.

# <mark>Q3:</mark>

**Broadband for Entertainment:** For smart TVs, Viewing entertainment content like movies, short films, videos on various segments, etc. which consumes high data.

**Broadband for Life**: Various transactional applications viz., money transfers, bookings, ordering/delivery of goods, live maps, Emergencies, Health, Education, ecommerce, Governance, Business, Service, on-line working, live-conferences/meetings, etc. related. Some times require moderate data or some times need high data for live activities

Broadband - Mini: For IoTs, M2M, related transactions which requires low data

#### Q5 to Q8, Q10:

Start approval of ROW through centralized on-line portal wherein each pieces of route that ROW grants to be shown on on-line maps. State/Central authorities can be accountable for the lapses if any. Public dash-board to be made available to see the RoW application status. Example: For any delay, the reasons to be displayed in this dash-board.

#### Q9, Q11 to 19, Q23 to 24:

#### Last Mile:

Problem of hanging wires or OF cables across streets/roads are to be addressed. This is possible through last mile convergence among various (telecom or non-telecom) distribution systems and using of shared OF cable at last mile by various players. Multi-Fibre cables (ex: 256 fibres) are to be laid by any of the local distribution network (example: OF cable can be laid along with Gas Distribution, Power Distribution, Water Pipe Distribution, Drainage Pipes, Open Drainages, etc.) which connects every house/building/campus. Encourage such innovative models. Convergence of cable TV & Broadband services on fibre at last mile is a win-win solution (in recent past cable TV operators using OF cable as their last mile).

#### <mark>Q20:</mark>

Nice point. Interesting

### <mark>Q21:</mark>

People use feature phones to protect their financial transactions example: OTPs. (people have multiple mobile connections and one SIM may be used on feature phone and rest may be using through smart phones)

Un-educated persons (ex: construction workers) use mobile phones only for voice calls on feature mobile instruments.

Elder people are comfortable to use key pad mobile phones to make voice calls due to ageing problem they cannot manage touch/smart phones.

People at remote villages, tribal areas does not have enough mobile data services.

How this figure 40% arrived?

# <mark>Q33:</mark>

For FTTH connections all broadband modems are to be standardized and they should be interoperable (i.e. Optical Fibre Broadband modem should be same for every TSP/ISP). Whenever a customer changes the service provider the OF broadband modem need not to be changed. BIS standards to be prescribed for FTTH Modems. Repair of these modems to be possible so that customer need not feel burden to have a FTTH connection.

Regards

SSVAS