Comments of Shirish (shirishag75@gmail.com)

Hi there,
A broadband user here.

a. Are PSU's ideal choices for implementing the National Optical Fibre Network (NOFN)

ans. In theory yes, but in actuality no. By PSU's if you mean BSNL and MTNL then no, because they haven't done any updates to the infrastructure or shared any blueprint of what services they hope to bring in the future and at what cost. NOFN , for all we know would just be dark fibre (optical fibre not lit up) being another white elephant to the list of projects that government does. If there was some more transparency in the way BSNL functioned but it seems not. About Railtel, the less said the better. For number of years, they said they would expanding all over the country, but have remained mostly a bangalore based ISP.

b. Should awarding of EPC turnkey contracts to private sector parties through International Competitive Bidding (ICB) be considered for the NOFN project?

ans. There is potential therein, BUT with the change in policy that no retrospective taxation laws will be applied. Another policy change should perhaps be instead of just looking at lowest cost, put performance, liability stakes into it and let each of them share a prospective plan as how they would go about doing the project if they get the tender. The one who gives the best plan could be assured some part of the project and should not be a single vendor turnkey project at all. All of this should be put in the tender document.

c. Should we not explore ways in which infrastructure development costs can be reduced ? Is it possible to piggyback on the existing private sector access networks so as to minimize costs in reaching remote rural locations ?

ans. Sure we should. But private sector would not give us anything without wanting something in return. Also this may be a short-term solution but long-term there should be community networks (different from government solutions) which might possibly be self-sustaining in the right environment. In either case, government, community and private sector networks are needed, both for redundancy and making sure that we are not in a monopoly where we are bound by one authority (either government or private sector).

d. What can the private sector do to reduce the delivery costs ?

ans. They could start by how they do their accounting and charges framed for the project. Apart from that, putting as much of the project timelines, status and material costs and quality in public domain. This will not just increase transparency, but also implicitly serve as a check against corruption and some cooking of books.

e. What are the major issues in getting Right of Way (RoW) for laying optical fibre ?

ans. Land is a state subject. So Right of Way (RoW) is a state and Muncipal corporation subject. Most of the Municipal Corporations wants huge amount of money to fill their 'deficit' . There could be imagined solutions as giving free bandwidth to a certain threshold in return of granting ROW . The company laying the fibre could also tell a discount for the residents of that area for laying the fibre. This could have both financial as well as political rewards for both the company laying the fibre and the Municipal Corporation.

f. What are the impediments to the provision of Broadband by Cable Operators?

ans. The main impediment is unlike ADSL which is mostly a free and open standard, Cable is in a bit of mess with proprietary hardware. I cannot use the same cable modem to access broadband from Cable A when I move to Cable B. I will have to buy their modem whereas in ADSL the customer simply has to re-tune the frequency which even if he doesn't know, his ISP can help. Moreover, many companies already put major ISP's frequency and tunings inside the ADSL modem box so it's that much easier.
Another thing is there is no idea how good the cable is. Most cable TV operators do a below-par business so cannot think of having a useful utility like broadband by them.Having least downtime, good support infrastructure is crucial for both businesses and residents alike and cable falls on both accounts.

g. What measures (including policy changes) are required to be taken for promoting broadband through the cable network ?

ans. See above. Changing all of that would have positive impact, but need a sufficiently open cable modem local industry. If we can do that, there is still hope for greater penetration at a cheaper cost.

h. What measures are required to reduce the cost and create a proper ecosystem for deployment of FTTH in the access network ?

ans. I *think* the biggest issue is not just the cost but the technology itself. Unlike the humble ADSL connection where the connection may degrade due to line conditions, noise, distance and other factors, fibre either works or not.

Both the cost, availability and range of modems is very limited in the country. Till that is no effort to have a wider range of devices, it will be a still-born. Add to that the costs for both installation and recurring charges need to come down by the factor of four or five in order to reach the common man. If FTTH is even placed double of ADSL modem it might have reach provided if the modem issue can be sorted out.

i. What are the reasons that installation of Wi-Fi hotspots has not picked up in the country ?

ans. One of the biggest reasons is cost and access. For reasons known, most wi-fi hotspots are not open. And as wi-fi is a bit costlier, the owners choose to offer it as a premium service at most places. By putting it as a premium service and equating it with amount over a certain bill, large majority of patrons are left out and only the rich are able to afford the service. If Wi-Fi was open with access and bandwidth controls, it would have been popular.

j. What is the quantum of spectrum required to meet the target of broadband penetration ?

ans. Depends on what kinds of technology is used, can't estimate but do know if femtocells come in the picture, it should ease both reach and congestion for data networks.

k. What are the measures required to encourage Government agencies to surrender spectrum occupied by them in IMT bands?

ans. Don't think that anything will work, they now know that spectrum means money and sort of radio spectrum does have economic value. Unless there is some destructive technology (more multiplexing or something else) which makes spectrum cheaper they will not let go of it unless there is a stick for them. Government, as elsewhere is a story of incentives and the stick.

l. What should be the time frame for auctioning the spectrum in 700 Mhz band ?

ans. A typical spectrum auction time-frame is between 3-6 months going by past history. If you start now, we should have the auction somewhere in February next year and people would start enjoying or using that spectrum in another 8-12 months or even more from the date the spectrum is handed over with testing and any infrastructure the companies would need to set up.