

Point-by point response to questions

Issues for Consultation

Q.1 The “Report of the Committee on NOFN” has recommended three models and risks/advantages associated with these models. In your opinion what are the other challenges with these models?

ASSOCHAM Response:

It is evident that Govt. led project management models are not very efficient as bureaucratic delays are considered routine and suffer from lack of accountability and single point responsibility. Also the fear of post facto questioning by CAG,CVC, etc dissuade the Govt. authorities from taking any decisions, besides the inherent delays that happen due to the tenuous tendering system and the process of selecting the L1 vendor.

Since the private sector led model suffers from lack of complete autonomy and flexibility to innovate , hence even the private sector led model suffers from lack of single point authority due to multiplicity of control and points of decision making which are implicit due to the presence of multiple packages.

Q.2 Do you think that these three models along with implementation strategy as indicated in the report would be able to deliver the project within the costs and time-line as envisaged in the report? If not, please elucidate.

ASSOCHAM Response:

It is highly unlikely that the project objectives shall be met in a timely and cost effective manner. This is because certain core issues have not been addressed viz. Multi layered structure steeped with bureaucracy and lack of responsibility & accountability. There is no co-ordination of interests between those who are going to build the project and those that are likely to provide the citizen centric services .There is no alignment of interest between the project management organisation and that which is responsible in marketing it . Quality of work monitoring by multiple agencies and at multiple locations is also likely to pose a huge challenge

Q.3 Do you think that alternate implementation strategy of BOOT model as discussed in the paper will be more suitable (in terms of cost, execution and quality of construction) for completing the project in time? If yes, please justify.

ASSOCHAM Response

Yes. It has definite advantages . As this model benefits the implementing agency by giving it an opportunity to earn revenues from the project, and since it permits more autonomy, it has a better chance to succeed . However, the concession/lease period must be extended to at least 30 years as in the case of other successful BOOT model implementation in India, with the scope for further extension in blocks of ten years.

Q.4 What are the advantages and challenges associated with the BOOT model?

ASSOCHAM Response:

Some of the Salient advantages with this model are that it is Milestone based and result oriented, it has potential for fast rollouts and scalability and that since Govt. is not directly involved in day-to-day implementation issues, it has the potential to function like a typical private sector owned and led project and hence has a better chance to succeed. However, it has certain challenges as well viz. certain non-lucrative service areas/states may not attract the consortium and hence gaps in implementation may be there.

Q.5 What should be the eligibility criteria for the executing agency so that conflict of interest can be avoided?

ASSOCHAM Response:

Eligibility criteria may need to be defined based on best practices adopted in case of similar projects in other sectors e.g. a) Selection of implementation agency may be done for a single LSA or state or a combination of both. The agency may be selected by adopting the criteria of Minimum Viability Gap Funding(VGF) sought by the agency for the given state/LSA. However some safeguards should be there to prevent bidders from making desperate bids viz. Floor price should be fixed below which the bidders may not be permitted. In such cases, weightage should be given to different criteria viz. experience of bidders, bidders past track record etc. The agency shall build, operate & own the network during the lease period and should be entitled to a share of the revenues due to sale of dark fibre or bandwidth or both.

Conflict of Interest /Monopolistic tendencies can be managed through

-Mandatory sharing /swap of fiber by BOOT operators of different circles/states , thereby creating at least 3-4 companies in each state selling the same product. The wholesale prices for swap should be capped in terms of a maximum price which should be fixed by the Regulator. This can sort out the conflict of interest and would lead to most efficient creation of infrastructure as the BOOT operator would operate on marginal costing.

Q.6 Should there be a cap on number of States/ licensed service area to be bid by the executing agency? Q.7 What measures are required to be taken to avoid monopolistic behavior of executing agency?

ASSOCHAM Response:

Yes-Cap should be there . It is advisable to have at least four packages . Each package shall consist of a mix of one or more states/LSAs . This shall ensure adequate capital participation, focus in execution and simultaneous development of all states/circles/LSAs. To avoid monopolistic behaviour , regulatory framework is required towards ensuring competitive bidding and overall transparency & non-discriminatory access and pricing. Mandatory sharing of fiber between BOOT operators of different states/circles would also take care of monopolistic behaviour. Some of the suggested measures include cap on number of packages for successful bidder, minimum floor price, weightage for different criteria etc are all measures which are required to be taken to curb such behaviour.

Q.8 What terms and conditions should be imposed on the executing agency so that it provides bandwidth/fiber in fair, transparent and non-discriminatory manner

ASSOCHAM response:

Suitable rules and terms & conditions should be framed to ensure that there is no conflict of interest between project executing agency and that responsible for sale of bandwidth/dark fiber so that availability of bandwidth or dark fiber should be available in a free, fair, non-discriminatory and transparent manner.

Fibre Networks construction should be well planned . The entity must have mobile operators, the local fixed line operator and the government (both Central & State) as a part of the consortium. It should be able to leverage the existing fixed line operator's fibre assets. It should have considerable expertise in designing & pricing wholesale bandwidth and dark fiber to commercial operators. It should have the flexibility to be able to consider alternate



architecture, selection of alternate routes, choice of alternate network topology and to do the rollout in a phased manner .

It should be able to devise alternative deployment strategies with technology choices which can leverage existing infrastructure with scope for upgrade & scalability over time.

Q.9 What flexibility should be given to the agency in terms of selection of route of laying optical fiber, construction, topology and deployment of technology?

ASSOCHAM Response:

The project should be based on objectives rather than on hard coding.

The implementing agency should be given the flexibility to survey the route plan for laying the Optical Fibre to minimise the cost. It should also be allowed the flexibility to use technology of its own choice. It should also have the flexibility to consider options viz. alternate architecture, selection of alternate routes, choice of alternate network topology, if it finds the existing one inappropriate & inefficient.

Incentive linked targets should be provided for achieving rural penetration. Factors viz. availability of affordable handsets , readiness of rural market, Digital readiness , mix of deployment strategies, mix of technologies viz. use of Microwave & Millimeter wave along with electricity infrastructure (eg. Ireland) and strategies which require leveraging & strengthening of existing fiber resources should also be considered.

Q.10 What should be the methodology of funding the project? In case of VGF, what should be the method to determine the maximum value of VGF for each State/ service area and what should be the terms and conditions for making payments?

ASSOCHAM Response

Many service areas may not be lucrative for private service providers . In such areas, the government must consider provision of subsidy in the form of Viability Gap Funding(VGF). In remote and difficult terrains or areas, Maximum Viability Gap Funding may be provided.

The method to determine the maximum value of VGF would require detailed economic analysis to prepare a viable business case for the bidder/executing agency. It would also depend on the terrain/area mix for the particular package, demographic data of the area, etc Also in such cases, Viability Gap Funding should be considered for the entire project right upto its completion.

Q.11 What kind of fiscal incentive and disincentive be imposed on the agency for completing the project in time/early and delaying the project?

ASSOCHAM Response:

The implementing agency in general, would have more incentive to bid for the project in case it is able to retain ownership for a period of at least 30 years extendable in blocks of 10 years upto 60 years & thus require less funding support from the government. Fiscal incentives should be provided for completing milestones in time or even earlier . These could be in the form of reduction of levies, tax holidays , reduction of license fees etc.

Performance linked incentives should be built into the model. Incentive should be there for motivating the Implementing agency to deliver in a timely manner & be cost conscious in choice of execution methodology. Incentives should be outcome linked which should link performance with reduction in USO fund support in a phased manner, thereby reducing the drain on the public ex-chequer. The implementing agency should have more incentive to bid for the project in case it is able to retain ownership for a longer period viz. 30 years and thus will require less funding support from the Govt.

However, any delay in project implementation should attract stiff penalties, subject to those delays not being attributable to things like ROW etc where the agency would have no control.

Q.12 What should be the tenure/period after which the ownership of the project should be transferred to the Government?

ASSOCHAM Response

Govt should extend the lease tenure to at least 30 years , extendable further in blocks of 10 years. This model has worked successfully in the case of development of the new Bangalore Airport (BIAL) where the Concession period is 30 years, extendable to 60. This would allow operators to scale up & become profitable with time and also concurrently discharge important social objectives

Q 13 Do you think that some measures are to be put in place in case the executing agency earns windfall profits? How should windfall profits be defined?

ASSOCHAM Response

Any windfall profits that accrue based on account of innovative practice should get shared by the mandatory swap practice as described earlier. What the BOOT operator should be able to retain would be extra profits due to lower cost of execution due to more efficient technology choice, innovations & better & faster execution.



Given the humungous size of the project and the insurmountable challenges & difficulties that the executing agency has to overcome for getting this project going, it would be highly disturbing if the atmosphere is vitiated by curbing the entrepreneurial spirit from earning profits in the later years. On the contrary, such shining examples of success shall serve as role models to foster the spirit of entrepreneurship in the country for future infrastructure projects of this size and scale. Already enough checks and balances exist in the system through the regulatory mechanisms of TRAI, the existing tax laws, the laws of anti-competition etc to ensure that no windfall gains are achieved in an unlawful manner.

Q.14 Whether there is a need to mandate the number of fibers to be offered as a dark fiber to other operators to ensure more than one operator is available for providing bandwidth at GP level? Q.15 What measures are required so that broadband services remain affordable to the public at large?

ASSOCHAM Response

The Govt./Regulator should mandate that at least 80% of the dark fibre at the GP level should be set aside for allocation to the Telecom Service Providers/Internet Service Providers/Cable Service Providers or the MSOs, etc who are the principal agents of service provisioning to the rural areas besides the government.

Affordability of Broadband services can be ensured through a number of ways viz. by the use of innovative technology, by ensuring competition in providing bandwidth to retail TSP/ISP/CSPs, by allowing Central & State Governments and their agencies to buy bandwidth through the transparent process of competitive procurement for providing affordable G2C services. Also, TRAI shall ensure the same through the process of constant monitoring.

Other measures may include:

existing assets of stakeholders are leveraged rather than duplicated, by selective use of fiber at key aggregation points basis population criteria and using an appropriate combination of technologies viz. fiber and Microwave /Millimeter wave.

Q.16 What safeguards are to be incorporated in the agreement entered between Government and executing agencies if RoW is not being granted to the executing agency in time?

ASSOCHAM Response

The Indian Telegraph Act 1885 provides sufficient safeguards by way of clear definition of the custodians of the infrastructure and by vesting the authority with the Central Government through the Department of Telecom (DOT) in being the final arbiter in matters pertaining to

levy of charges and license fees. (Relevant Sections of the IT Act are reproduced separately in Annexure I). In case of any disputes between the local municipalities and the State Govts. for implementation of ROW guidelines, the decision making power shall vest with the Central Govt only. These rules need to be officially notified in the Gazette to ensure successful implementation.

The agreements signed between Central Govt, State Govts, BBNL & the implementation agency must facilitate free ROW. Central and/or State Govts must facilitate execution of the project by taking the responsibility of removing all ROW, power and space related hurdles which could come in the way of timely completion of the project.

Q.17 The success of BOOT Model depends on participation of private entities, which will encourage competition. What measures should be adopted to ensure large scale participation by them?

ASSOCHAM Response:

To ensure large scale participation by the private sector in the process, the Govt. needs to provide an ambience of ease of doing business and providing potential long term business opportunities with adequate safeguards and protection to their investments and assured returns in a predictable and harmonious taxation regime.

In this case, the Govt. must

- provide opportunity for a viable long term business case
- guarantee and protect long term investment
- provide safeguards with adequate compensation in case of unmitigated losses
- full regulatory & policy support for ROW.
- flexibility in strategy, planning & execution
- provide incentives for timely/early execution
- making available liberalised spectrum regime which permits innovation and choice of spectrum support for new technologies viz. Millimeter wave (E & V band) , innovations in Satcom technology etc

Other ways to maximise the private sector involvement would be by

- a) Employing public investment only in areas where govt.'s broadband ambitions cannot be achieved by the market on commercial basis

b) Taking measures to reduce costs to private sector of rolling out broadband networks by ensuring spectrum availability at reasonable price

c) Risks of delay and costs in ROW to be taken by Govt.

d) Demand boost enablement by Govt. and demand assurance for government led services viz. e-gov, e-health, e-education , CSC , etc

Q.18 Please give your comments on any other related matter not covered above

ASSOCHAM Response

To achieve the Digital India vision, Bharat Net is a must . To achieve Bharat Net , the two critical factors are :a) Cost & timelines of execution and b) Rural Market demand for these services

While it is apparent that the Rural India market is not ready yet for the broadband enabled services, this is likely to seriously impact the Return on Investment for the BOOT operator , and also likely to affect the pace of implementation of the project. Due to lack of readiness of the ecosystem due to lack of availability of affordable handsets, lack of digital literacy and awareness, this could be a serious bottleneck.

ASSOCHAM believes that the BOOT model provides flexibility to the implementing agency to innovate, provides the agency flexibility of bringing alternate technology which can ensure faster deployment of High bandwidth & capacity at the GPs. This can help kickstart the Digital India vision of Hon'ble PM and give impetus to the knowledge economy and digital empowerment of all Indian citizens.

The BOOT model per se involves the participation of the private sector. However, their participation needs to be encouraged by the following:

-Collaboration & complementing the role amongst mobile operators, fixed operators, existing fixed line operators and the Govt. This can be enabled by operators upgrading their physical infrastructure at each site, having fibre at key aggregation points combined with Millimeter/Microwave technologies .

-Govt. support through performance linked benefits by incentivising industry with phased reduction in USOF funding support basis rural coverage achieved . This shall motivate the industry towards higher participation & investment in building on required bandwidth & upgrading existing assets

-Phased approach for deployment , offering reinvestment utilisation opportunities.



ASSOCHAM is of the opinion that wireless technologies can serve a very important role in timely rollout of Bharat Net till fiber reaches those places . This could be through a mix of technologies viz. high capacity Wireless Backhaul technologies combined with Carrier Grade Wifi or even innovative Satellite technologies with the benefits of a liberalised satcom policy environment.