

Consultation Paper on Implementation Model for BharatNet

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Issues for Consultation

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?
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.

Please see the accompanying note for response to the above two questions.

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

The proposed BOOT model (for execution at the second layer, please see accompanying note) would be more suitable in terms of cost, timely execution and quality of construction. This is because the revenue risk would be transferred to the BOOT operator, which would provide better incentives for timely execution and quality of construction. It is possible that the estimated revenues by the BOOT bidder may not make the project viable if the entire cost were to be borne by the operator. Towards this, a viability gap funding would have to be provided for. In case, it is viable, then a revenue

sharing arrangement should be provided. The BOOT operator selection criteria would be the least VGF/highest revenue share.

While the selection criteria amounts to a price discovery bid, an important challenge would be to ensure a competitive bidding scenario. In order to ensure competition, we recommend that the unit of bidding be at the district level. This would also ensure market homogeneity. Some districts may attract a revenue share while others may require a VGF.

Even if a VGF were to be provided, it should be seen as “value for money” for the government, since the question then is whether the government could get the same outcomes by spending the VGF amount on its own.

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

Ideally, the BOOT operator should not be a content/service provider. However, if this is viewed as adding to viability, then the BOOT operator should not be utilizing more than 25% of the capacity. This will prevent any monopolistic behavior at the content/service providing layer.

In addition, the BOOT operator should satisfy certain minimum financial and domain experience criteria.

6. Should there be a cap on number of States/ licensed service area to be bid by the executing agency?

Ideally, there should be at least three BOOT operators in a state. This could be ensuring that no one operator being offered more than 40% of the districts. In case there are no bidders or just one bidder, then the district could be considered for a later phase.

7. What measures are required to be taken to avoid monopolistic behavior of executing agency?

Same as response to Question 6

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

Apart from ensuring that the BOOT operator does not utilize more than 25% of capacity for itself, a price cap should be imposed through TRAI. (The price cap implementation could be similar to what Airport Economic Regulatory Authority does for airports). Subject to this, the BOOT operator could enter into commercial contracts at any price lower than the price cap.

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

The BOOT operator should have full flexibility in all the above. Choice of technology beyond optical fibre should also be provided as long as minimum service levels of bandwidth at GP level are ensured.

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?

VGF option should be provided by DOT. The VGF would be discovered by the bidding. The acceptable level could be 40% of the capex cost (as is prevalent in other infrastructure sectors) or such that at least 50% of the districts get an operator. There could be an apriori judgment on certain districts either on considerations of remoteness or security, where a higher VGF may be considered.

Those districts which do not get taken in the first round, need to be bid out again after the first round of districts start putting out content and generating revenues. The perceived risk by bidders would be lower here. If even in the second round the bidders do not come, then the EPC route could be chosen.

The VGF payments should be tied with project milestones.

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

One percent of the project cost per month of early completion/delay could be the incentive/penalty. This is based on a 12% per annum value of the project cost.

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

Based on the life of the asset, the period of ownership could be 25 years.

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?

A DPR assessment should be made by BBNL before the bids. If the actual revenue goes 50% beyond the DPR projections, then, higher of the 50% of the additional revenue or the revenue share bid percentage (if revenue share was the bid rather than VGF) is payable to the government.

14. Whether there is a need to mandate the number of fibres to be offered as a dark fibre to other operators to ensure more than one operator is available for providing bandwidth at GP level?

Apart from providing at least one dark fibre to the government, the BOOT operator needs to ensure that no single operator gets more than 40% of the available dark fibres.

15. What measures are required so that broadband services remain affordable to the public at large?

For the citizen, some government determined content should be free, for which the government would pay either the BOOT operator or the content service provider. In addition, every user should get a minimum capacity of free usage.

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?

BBNL should provide a reference architecture for which the government should be responsible for getting ROW. The BOOT operator would have to seek ROW itself for any other design. For those parts of the design that deviate from the DPR, government does not have to provide ROW.

For delays on the government side, compensation based on 1% project cost per month delay should be applicable. The principle is similar to that in point 11.

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?

Wide consultations, global tendering and demonstration of sincerity of purpose would help.

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

Note

The three models CPSU, State and Private sector led are not three clearly defined mutually exclusive approaches. It is important to recognize that these are three layers of

actors: i) the entity interested in creating and owning the asset, ii) the entity that creates and maintains the asset and iii) the entity that creates/distributes content and services.

At the first layer, the choices are: i) BBNL, the SPV representing the Centre and ii) an SPV of BBNL with the state government. This choice is to be exercised by the state government in consultation with BBNL and keeping in view the current state of optical fiber deployment. We believe that there is no role for any other type of player, including the private sector in this layer.

At the second layer, the choices are i) BOOT, where ownership is limited to the cable and ducts and ii) EPC. The BOOT or the EPC player could either be from the public or the private sector.

At the third layer, we expect multiple players, including government and the private sector. The second layer entity would seek these out, subject to “must have” providers.

The implementation model largely focuses on the second layer. The following points towards the structure are also proposed:

1. Each bid could be for a district.
2. There should be a government DPR as a part of the bid documents to specify a basic architecture and expected revenues.
3. The BOOT model would also include design as an integral part of build.
4. The bid criterion would be VGF/revenue share
5. Depending on the price discovery, there could be phased implementation.
6. There should be at least three BOOT operators per state.
7. Affordability should be clearly defined and ensured.
8. TRAI should be the rate and service regulator.