Smart Cities Mission
Ministry of Urban Development

Advisory No. 10 **14th July, 2017**

Sub: Laying of Common Duct for OFC network in Smart Cities on Public Private Partnership (PPP) DBOT Hybrid Annuity Model

In order to have proliferation of broadband in the country, one of the most consistent issues observed is the issue of obtaining Right of Way (RoW). Further, the levies are not uniform and vary from state to state and city to city. While the charging mechanism may vary from one place to another, the common point is that the charges are very high. The time taken to obtain the RoW clearance is too long. Further, un-coordinated development activities such as road expansion, laying of electrical cable, etc are undertaken by multiple agencies and private contractors, result in frequent cuts in cable, leading to depreciated life of the cable and increase in operating costing for service providers.

2. The Smart Cities Mission guidelines para no. 6.2 gives the essential features in a smart city. One such feature is visible improvement in the area (e.g. replacing overhead wiring with underground wiring. In addition, paras 2.4 & 2.5 of the guidelines identify implementation of robust IT connectivity and digitalization as a core infrastructure. It is accordingly envisaged that a common duct for OFC be laid in the smart cities to meet these mission objectives.

3. The Telecom Regulatory Authority of India (TRAI) has carried out a feasibility study for laying of common duct for optical fiber. The report may be referred to at https://smartnet.niua.org and http://smartcities.gov.in. The Smart Cities may carry out the project development exercise such as preparation of technical and financial feasibility and procurement of concessionaire through the smart city PMC.

4. One of the potential models for implementation of the project highlighted in the feasibility study carried by TRAI is 'DBOT Hybrid Annuity'. The key features of the model are as under:

a. Project funding: Under this model, the concessionaire shall be responsible to design and develop and finance 60% of the project cost. The remaining 40% of the project cost shall be contributed by the Smart City in five equal installments linked to the project completion milestone.

b. The concessionaire shall have to initially bear the 60% of the project cost through a combination of equity and debt and undertake the construction activity. The balance 40% shall be released by the employer upon utilization of concessionaire's contribution.

c. Bid Parameter: The least NPV of the quoted project cost + NPV of Annuity Payment + NPV of the O&M for entire operation period shall be the bid parameter.

d. Annuity Payment: The Annuity payment to the concessionaire shall be made for the 60% of the contribution on a bi-annual basis.

e. O&M: The concessionaire shall be responsible for the maintenance of the facility during the concession period. The payment towards the O&M shall be paid by the employer bi-annually as per the concessionaire's financial quote. The O&M payment shall be linked with the performance standards w.r.t. O&M subject to inflation index (WPI and CPI in the ratio of 70:30).

f. Concession period: The concession period can be 15-20 years (including construction period) depending upon the financial viability assessment.

g. Revenue: The right to generate revenue shall remain with the city. However, the concessionaire shall be responsible for assisting the city in various means to monetize the infrastructure.

5. The Smart Cities may take proactive measures to undertake this project so as to make visible improvement in the area and provide robust IT connectivity in the City. The Cities have the flexibility to structure the project as per the techno-commercial feasibility assessment.

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