Related with NTA's decision No. 2444.2069.03.13

Directives for laying and maintaining Optical Fibre Network

1. Introduction

With the liberalisation of the Telecom sector, different telecom service Licensees were awarded to provide telecom service across the country. At present, there are six major telecom Licensees who are allowed to provide voice telephony services. In order to expand their services, the Licensees are laying optical fibres across the country on their own in different forms viz. direct-buried, underground-ducted, overhead etc. specially to build backbone network of their own. Optical ground wire (OPGW) and all-dielectric self-supporting (ADSS) are also being leased from Nepal Electricity Authority for network expansion. The instances of damaging existing optical fibre network by another Licensee in course of installing its own optical network are on the rise. Similar cases could have also happened to other types of network cable as well. Such disruption is detrimental in terms of financial loss as well as degradation in the quality of telecommunication service. In the lack of redundancy, the telecommunication service could also be interrupted. In the event of recurrence of such disruptions, it has become essential to establish a framework that outlines the procedures and policies while laying and maintaining the optical fibre network/other type of network cable, thereby minimizing the damage to be made in future by licensees into optical fibre network/other type of network cable of different Licensee across the country.

2. Objective

To clearly outline the procedures, policies and precautionary measures regarding laying and maintaining optical fibre network across the country and also formulate methodology for amicable dispute settlement. This is expected to minimise the occurrence of damage of optical fibre networks which will help increase quality of telecommunication service.

3. Maintaining Record of Optical Fibre Network

3.1. All the Licensees must submit the detail information of their existing optical fibre network in the format as stated in Form A and Form B of this directive to Nepal Telecommunications Authority (NTA) to create an optical fibre network database.

3.2. NTA maintains the up to date record of the existing optical fibre network across the country. The information listed in Form B will be disseminated only upon request whereas the information listed in Form A will be disseminated through appropriate means such as website, print media etc.

3.3. The Licensee shall have to disseminate information of their own network on their respective websites as listed in Form A.

4. Optical Cable Laying Procedure

4.1. Appropriate permission/authorization from NTA or the assigned government body shall be required to be taken before laying new optical cable as per the existing laws, rules, regulations, directives and instructions. If existing optical cable is available in sharing basis or rent or in any other models of operation and such optical cable is sufficient to operate service or use, new optical cable laying permission may not be granted.

4.2. Any Licensee laying optical cable in new routes, must ask other prospective Licensee by publishing a public notice if they are interested to share the same trench by sharing the cost to minimise the cost of trenching and to avoid the overlapping of optical cable.

4.3. In the case of roads and highways, trenching shall be carried on the side opposite to another Licensee wherever possible.

4.4. In case of trenching on the same side of roads or highways, overlapping shall be avoided. Sufficient spacing between two optical cables shall be maintained in order to ensure comfortable and safe trenching, laying and maintenance in coordination with other existing licensees or optical cable operator(s).

4.5. In case there is no possibility of laying two optical cables with minimum separation requirement, then the first Licensee laying the cable may ensure that additional spare ducts are laid for future use by other prospective fibre laying Licensee.

4.6. In case of existing optical cable with no possibility of laying two or more optical cables, the prospective Licensee shall coordinate with the existing Licensee to lease the spare duct/core, if available, to avoid overlapping. The lease charge shall be at par with the existing charge applicable between the Licensees. It shall be the duty of the existing Licensee to facilitate the provision of optical fibre for the prospective new Licensee in consultation with the committee as stated in clause 6.1 of this Guideline.

4.7. Route indicator shall be kept at a distance of at most 200 meters and compulsorily at road crossings and turnings ensuring different colours for each Licensee.

4.8. Warning tapes shall be maintained throughout the length of the cable in the case of open trenching.

4.9. The cable laying Licensee shall ensure that the colour of the laid ducts do not match with each other.

4.10. Whenever any Licensee starts laying/upgrading optical cable, it must inform the committee formulated pursuant to clause 6.1 of this Guideline at least two weeks in advance.

5. Network Restoration and compensatory damages by the Licensee

When the second Licensee in the process of laying optical fibre on the same route of the existing Licensee causes any damage, the following clauses shall apply.

5.1. In the circumstances that damage is incurred to the optical cable, the affected Licensee or the Licensee causing the damage shall inform the committee (as stated in clause 6.1 of this Guideline) about such damage by phone, email/SMS or a written letter.

5.2. As soon as the damage in the optical cable is noticed through its system alarm or through the committee, the existing Licensee, upon informing NTA, shall rectify the damage on its own.

5.3. In such case the existing Licensee may claim restoration cost of NRs 75,000.00 for each pair of restoration points from the new Licensee.

5.4. The Licensee causing the damage is liable to pay the restoration cost upon claim filed by the existing Licensee.

5.5. If the aggrieved Licensee is not satisfied only with the restoration cost, he may file an official compliant as per the existing laws for compensation or fine or punishment as appropriate.

5.6. While an existing Licensee repairing the underlying cable, it has to inform the Licensee whose cable is above its cable before starting the repair work. It shall be the responsibility of the Licensee whose cable lies above to restore its network on its own if its cable is damaged during the aforementioned repair work. However, under mutually agreed terms and conditions, the Licensee repairing the network, may also repair the above lying network cable in case it is damaged during its own maintenance process.

5.7. The compensation shall also be applied as per the Sections 37 and 39 of the Telecommunications Act, 2053.

6. Coordination and dispute resolution

6.1. A committee shall be constituted headed by the representative from NTA with the representation from the Licensees owning the optical fibre network in order to facilitate efficient communication between the Licensees as and when necessary.

6.2. This committee is solely responsible for facilitating the provisions of this Guideline.

6.3. The procedure to be followed by the committee will be decided by the first meeting of the committee itself.

6.4. If any one of the Licensee is not satisfied with the provisions of this Guideline, the Licensee may choose to ask NTA to arbitrate in the matter as per the Rule 23 of the Telecommunication Regulation 2054 B.S.

6.5. Licensee not following this directive(s) will be subjected to punishment under Section 47 of Telecommunications Act, 2053.

7. Coordination with relevant bodies/entities

7.1. A requisite permission for right of way from concerned authority shall be obtained before laying optical cable.

7.2. The terms and conditions dictated by the authorising agency shall be strictly followed.

7.3. NTA may issue the recommendation to the relevant agency to facilitate cable laying upon receiving such request from the Licensee.

Form A: Brief OFC Cable route information

SN	Route	OFC cable code	Start point	End point	Distance (km)	Cable Route Type Cable route Type: Aerial, Underground Duct, Underground Direct.	Districts Covered (Major route of the cable with place information)
1							
2							
3							

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Form B: Detailed OFC Cable route information

Eg: Cable Code: NDCL-KTM-POK-001 (Taken from form A)

SN	Cable segment	Cable code	Start point	End point	Distance(m)	Cable type / No. of core	Cable Duct type / number	Cable route (Side/ distance from center (m)/ depth (cm)	Bridge provision	Culvert provision	Landslide provision	River provision	Aerial provision (if, any)	Remarks (Primary)
1														
2														
3														