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SERIES L: CONSTRUCTION, INSTALLATION AND
PROTECTION OF CABLES AND OTHER ELEMENTS OF
OUTSIDE PLANT

Practical aspects of unbundling services by multiple operators in copper access networks

ITU-T Recommendation L.62

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Practical aspects of unbundling services by multiple operators in copper access networks

Summary

In many countries, Other Licensed Operators (OLOs) are allowed to compete with the incumbent operator. This creates an environment where a company has to install, operate and maintain its network bearing in mind that other networks exist right beside it, or even at the same location. In a number of countries, it is also determined that the operators should share some parts of the network with OLOs, in a transparent process to the users. This is called Unbundling of Network Elements or, in short, unbundling, and is a very complex task. Some new issues have to be taken into account to allow the accommodation of those operators sharing the same location to do so without problems. To guarantee an environment where operators interact but do not affect the Quality of Service provided by other operators, legal, regulatory and administrative statements must be followed by the correct technical solutions, which assure the network integrity, easy use of equipment and access to security. This Recommendation is intended to provide the guidelines to achieve these targets for the local loop in copper networks.

Source

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Keywords

Copper cable, ISDN, local loop, network element, shared network, unbundling, xDSL.

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Introduction

Network elements can be unbundled in a number of ways which are described in this Recommendation. Co-location is also described, as it is intrinsically related to unbundling.

Crucial aspects must be foreseen, e.g., the evolution of the optical access network, which reduces the copper network, getting closer to the customer premises. It may be difficult to change the network topology maintaining services already provided by OLOs in the same network element.

It must be noted that when multiple services are provided over the same network element, each service must not affect the Quality of Service provided by other operators and shall comply with the Recommendations applicable for each service when provided alone. Also, a service must not interfere with other services in use, or which are planned to be used, in a network element.

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