

INTERNATIONAL TELECOMMUNICATION UNION



TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU (10/96)

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

# Creation of a fire security code for telecommunication facilities

ITU-T Recommendation L.20

(Previously CCITT Recommendation)

#### ITU-T L-SERIES RECOMMENDATIONS

# CONSTRUCTION, INSTALLATION AND PROTECTION OF CABLES AND OTHER ELEMENTS OF OUTSIDE PLANT

For further details, please refer to ITU-T List of Recommendations.

#### FOREWORD

The ITU-T (Telecommunication Standardization Sector) is a permanent organ of the International Telecommunication Union (ITU). The ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 1 (Helsinki, March 1-12, 1993).

ITU-T Recommendation L.20, was prepared by ITU-T Study Group 6 (1993-1996) and was approved by the WTSC (Geneva, October 9-18, 1996).

#### NOTES

1. In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

2. The status of annexes and appendices attached to the Series L Recommendations should be interpreted as follows:

- an *annex* to a Recommendation forms an integral part of the Recommendation;
- an *appendix* to a Recommendation does not form part of the Recommendation and only provides some complementary explanation or information specific to that Recommendation.

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#### CREATION OF A FIRE SECURITY CODE FOR TELECOMMUNICATION FACILITIES

(Geneva, 1996)

#### Introduction

In most countries, there are both national and provincial as well as other fire regulation codes related to buildings for the prevention of the spread of fire.

Some companies operating in countries where the fire regulation codes may or may not apply do not have a specific code for their internal use in order to unify, optimize and adjust their needs to provide adequate fire protection measures. This situation will increase the work of the management project group since it will be necessary to compile and evaluate national and international fire regulation codes for the design and conditioning of buildings destined to house telecommunication equipment and facilities and for the training of personnel.

The adoption of adequate fire prevention measures can lessen the risk to life and reduce the chances of a serious disruption to the telecommunication network.

The fire department of a civil administration needs information on any telecommunication building concerning access, local fire fighting facilities, emergency power supplies, water supplies in tall buildings, where to disconnect the public power supplies, the presence of hazardous materials and the importance of minimizing water damage to telecommunication equipment.

#### It is recommended

For existing buildings and the design and construction of new buildings, housing telecommunications installations administrations should create an internal fire security code, according to the anticipated specific use of each building, containing the minimum guidelines for fire safety and protection against fire.

The code should be made starting with an analysis of each country's national, provincial or other fire regulation codes.

The basic structure will be the following:

- documentation;
- basic design guidelines to be put into practice for building construction;
- basic design guidelines to be put into practice for the construction and installation of equipment;
- measures to be put into practice for reducing the time between ignition and effective fire fighting in buildings;
- fire detection and alarm systems;
- fixed fire-extinguishing systems;
- portable fire extinguishers;
- emergency lighting;
- fire safety signs;
- organization and training of personnel in fire instruction and drills for evacuation and fire fighting in the case of a fire;
- disaster recovery plan covering the hazard assessment of deposits produced by a fire together with the
  precautions necessary for their safe removal;
- temporary service for emergency and other essential services;

- agreement with the civil administration fire department for a training plan for fire fighting, to be implemented in each building, containing the steps to be followed for fire extinction and of the resources to be used;
- fire statistic reports (for example, performance of different materials in the case of a fire).

The design of new buildings and the adaptation of existing buildings should comply with the following conditions:

- to rapidly detect any fire should it break out;
- to minimize fire spread in each building and to avoid the spread of fire from one building to another;
- to provide safe exits for the easy evacuation of all personnel in case of fire;
- to provide easy access for fire fighting and fire extinction;
- to provide fire instruction and carry out evacuation exercises so that all personnel know what to do in case of fire.

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