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Smart cities – City service continuity against disasters – The role of the electrical supply

Villes intelligentes – Continuité des services urbains en cas de catastrophes – Rôle de l'alimentation électrique



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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 03.100.70; 29.240.01

ISBN 978-2-8322-9994-4

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SMART CITIES –
CITY SERVICE CONTINUITY AGAINST DISASTERS –
THE ROLE OF THE ELECTRICAL SUPPLY**

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The text of this International Standard is based on the following documents:

FDIS	Report on voting
SyCSmartCities/139/FDIS	SyCSmartCities/144/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

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INTRODUCTION

Cities are facing many kinds of potential threats which affect the continuity of city services. There exists, therefore, a great need to establish safe and secure societies in which negative impacts on city services to the citizens are minimized and city services are continuously available to them during a period of emergency. There is no doubt that, in modern cities, electricity plays a critical role in maintaining city services.

This document provides requirements and guidelines to ensure that city services can be sustained when the power supply from the grids is discontinued because of disasters.

The users of this document are assumed to be city developers, city operators, equipment manufacturers, essential service providers and disaster management personnel.

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SMART CITIES – CITY SERVICE CONTINUITY AGAINST DISASTERS – THE ROLE OF THE ELECTRICAL SUPPLY

1 Scope

This document establishes concepts and gives guidelines to help sustain a variety of city services on the occasion of a disaster from the perspective of providing electricity. It outlines the basic concepts on how multiple city services can cooperate and continue by electricity continuity plan(s) and electricity continuity system(s). It also specifies methods and means to establish these.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 22301, *Societal security – Business continuity management systems – Requirements*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
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3.1

business continuity plan

BCP

documented procedures that guide organizations to respond, recover, resume, and restore to a pre-defined level of operation following disruption

[SOURCE: ISO 22301:2012, 3.6]

3.2

electricity continuity plan

ECP

documented procedures that guide organizations to ensure continuity of electricity supply to maintain city services in a business continuity plan that addresses disruption caused by a critical event

3.3

electricity continuity system

ECS

system required to ensure reliable and effective implementation of functions which are necessary for ECP