



ORGANISMUL NAȚIONAL DE STANDARDIZARE

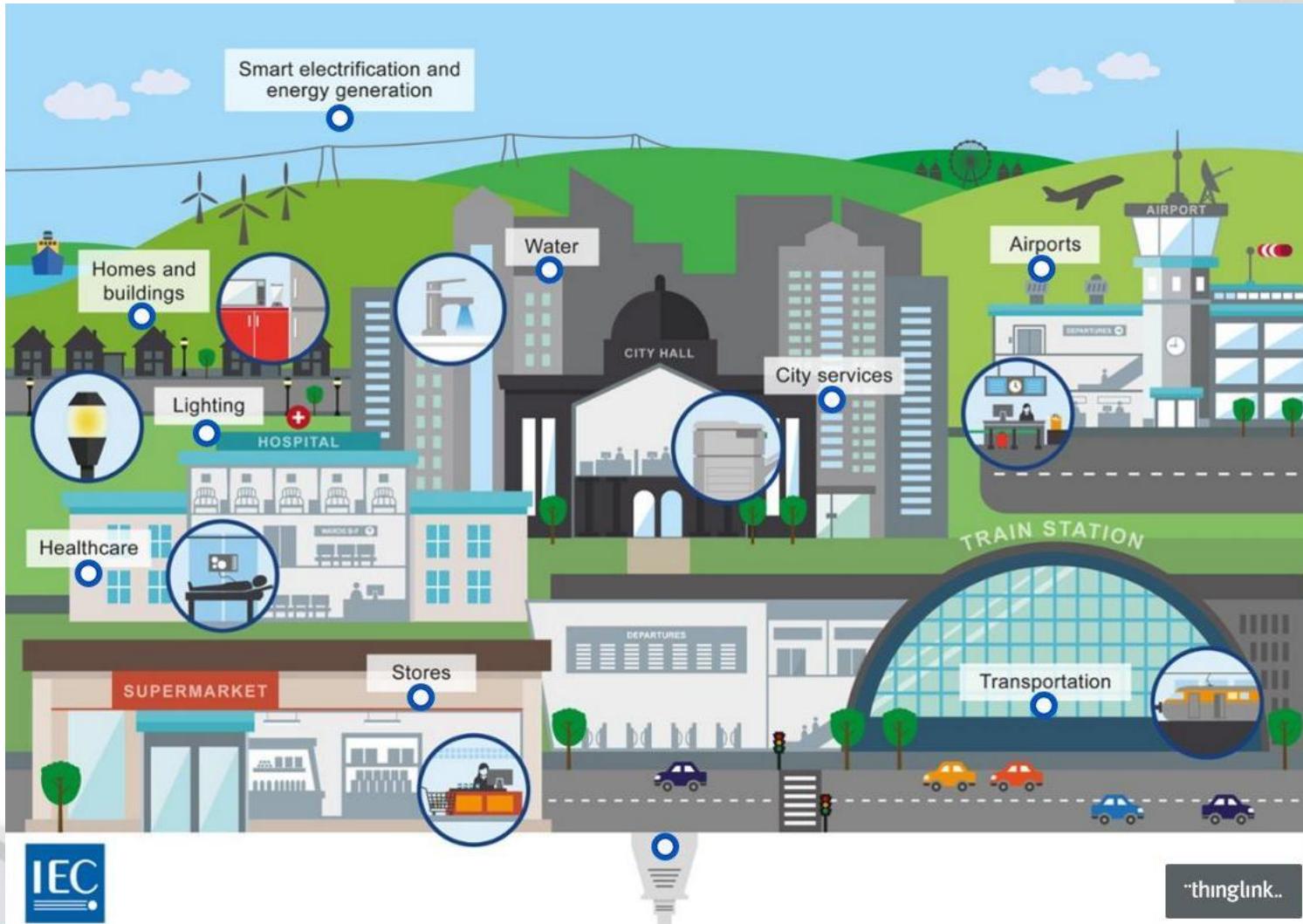




Definiție formulată în cadrul ITU

“A smart sustainable city is an innovative city that uses information and communication technologies (ICTs) and other means to improve quality of life, efficiency of urban operation and services, and competitiveness, while ensuring that it meets the needs of present and future generations with respect to economic, social, environmental as well as cultural aspects”.

<http://www.itu.int/en/ITU-T/focusgroups/ssc/Pages/default.aspx>



Clădiri inteligente. Sisteme care comunică între ele

Proliferarea fără precedent de senzori inteligenți și sisteme de control din ultimul deceniu poate detecta și sesiza diferite condiții și poate emite alerte sau răspunsuri de la mai multe sisteme disparate. Aceste date pot oferi perspective viitoare în managementul și procesul fiecărui sistem

Current situation

Portfolio

Estate management

Asset management

Lifecycle

Energy use

Passive and active

Building services

Maintenance

Occupancy

Space management

Tenant services

Help desk

Waste management

Trash and recycling

Compliance

Environmental reports

Industry specific

Hospital, hotel, etc.



Future scenario

Weather

Advance prediction and pre-emptive action

Emergency services

Information about occupants

Utilities

Smart grid, water efficiency, real-estate pricing, demand management

Transportation

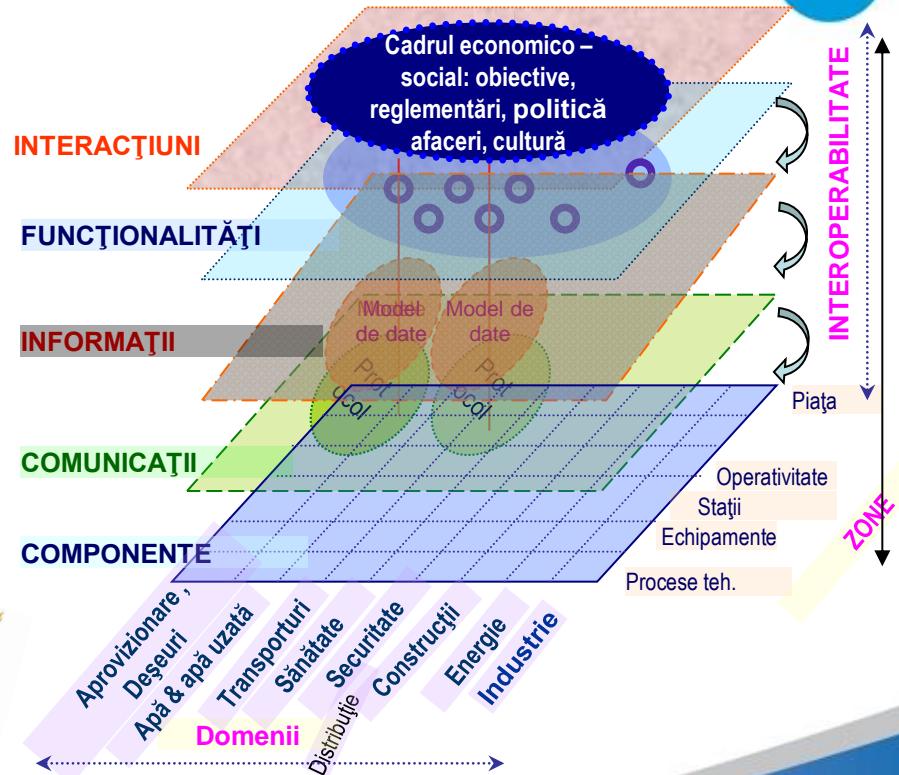
Congestion avoidance, networked buses and trains

Vehicles

Onsite energy generation and/or storage

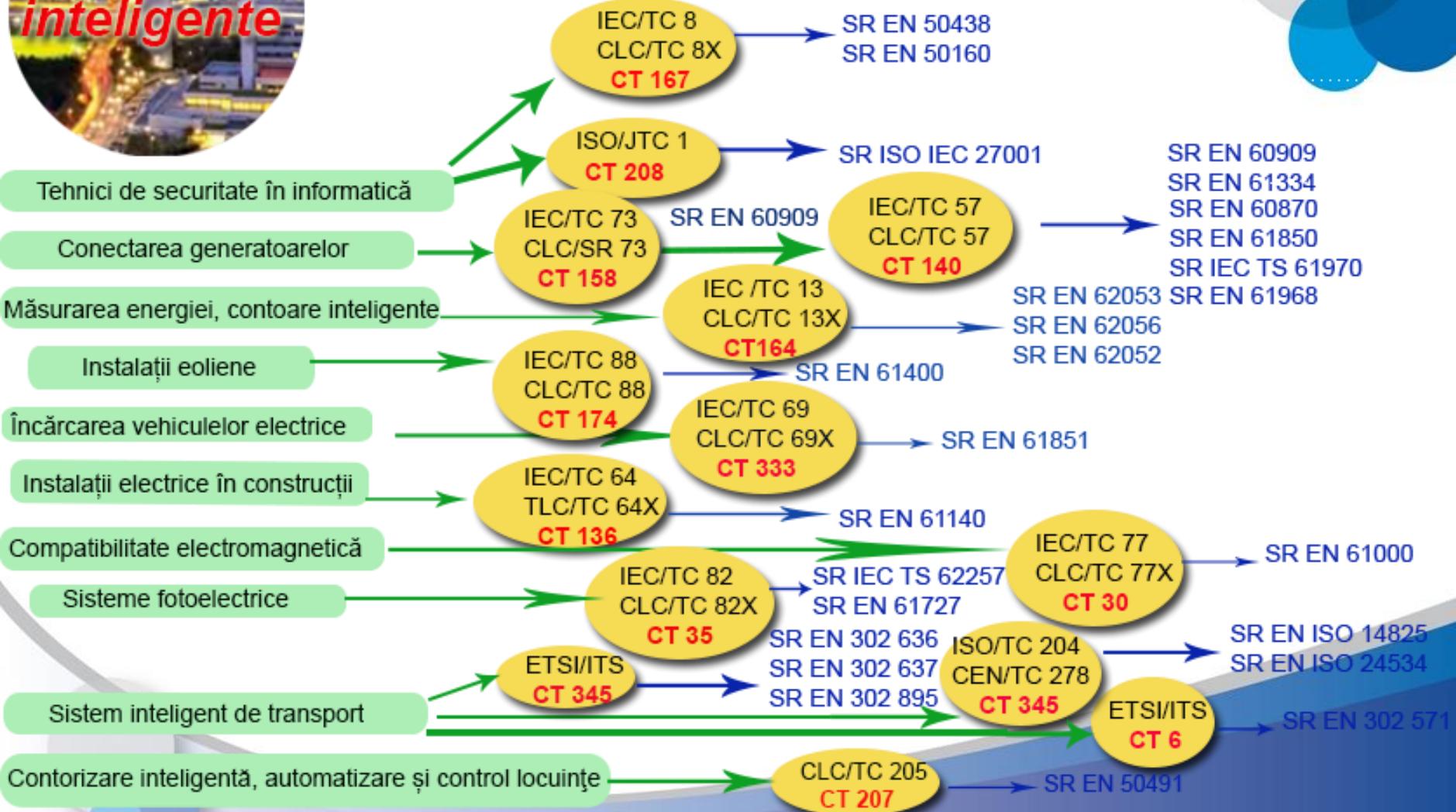


**Energie
Transport
Apă intelligentă
Managementul clădirilor
Cultură și turism
Guvernanță și admininstrare
Mediu - Poluare
Sănătate
Securitate**





Standardizare ➔ "Un sistem de sisteme"



Standardizare ➡ Orașe inteligente



➤ European

CEN-CENELEC-ETSI Coordination Group ‘Smart and Sustainable Cities and Communities’

➤ Internațional

- IEC SEG 1 Systems Evaluation Group on Smart Cities
- ISO/IEC JTC1 Smart Cities
- IEC SyC Smart Energy
- ISO/TMB Smart Cities Advisory Group



ISO/TC 268 Sustainable cities & communities



STANDARDE

- ISO 37120 - Sustainable development and resilience of communities - Global city indicators for city services and quality of life
- ISO/TR 37150 - Smart urban infrastructures around the world
- ISO 37151 - Harmonised metrics for benchmarking smartness of infrastructures
- ISO 37101 - Sustainable development of communities - Management systems - Requirements with guidance for resilience and smartness

PROIECTE

- ISO/WD 37120 - Sustainable development of communities - Indicators for city services and quality of life (ed. 2)
- ISO/DTR 37121 - Inventory and review of existing indicators on sustainable development and resilience in cities
- ISO/NP 37122 - Sustainable development of communities - Indicators for Smart Cities

Standardizare ➔ ISO TC 268



INDICATORI PRINCIPALI

- *Total energie utilizată în sectorul casnic / cap de locuitor (kWh/an)*
- *Procent din populația orașului care are contract pentru energie electrică*
- *Consum anual de energie în clădirile publice (kWh/m²)*
- *Consum energetic total al orașului, exprimat ca procent din energia totală produsă din surse regenerabile*

INDICATORI SUPORT

- *Total energie electrică utilizată pe cap de locuitor – sector casnic & public (kWh/an)*
- *Număr mediu de îintreruperi (incidente/utilizator/an)*
- *Durata medie a îintreruperilor alimentării cu energie (ore)*

IoT & M2M



**ITU-T Y.2060 Global information infrastructure, internet protocol aspects
and next-generation networks**

ISO/IEC 30141, Internet of Things Reference Architecture (IoT RA)

ISO/IEC 30141 Internet of Things Reference Architecture (IoT RA)

IEC 62264 Hierarchy Levels

IEC 62890 Life Cycle & Value Stream



ETSI TS 118 103 V2.4.1 (2016-09)

oneM2M; Security solutions (oneM2M TS-0003 version 2.4.1 Release 2)

ETSI TR 103 055 V1.1.1 (2011-09)

**Electromagnetic compatibility and Radio spectrum Matters (ERM);
System Reference document (SRdoc): Spectrum Requirements for
Short Range Device, Metropolitan Mesh Machine Networks (M3N) and
Smart Metering (SM) applications**

ETSI GS NGP 001 V1.1.1 (2016-10)

Next Generation Protocol (NGP); Scenario Definitions

ETSI TS 118 111 V2.4.1 (2016-09)

**oneM2M; Common Terminology (oneM2M TS-0011 version 2.4.1
Release 2)**



ETSI TS 118 109 V1.1.0 (2016-03)
oneM2M; HTTP Protocol Binding (oneM2M TS-0009 version 1.5.1
Release 1)

ETSI TS 118 102 V1.0.0 (2015-02)
oneM2M Requirements

ETSI TS 118 110 V2.4.1 (2016-09)
oneM2M; MQTT Protocol Binding (oneM2M TS-0010 version 2.4.1
Release 2)

ETSI TS 118 109 V2.6.1 (2016-09)
oneM2M; HTTP Protocol Binding (oneM2M TS-0009 version 2.6.1
Release 2)

ETSI TS 118 124 V2.0.0 (2016-09)
oneM2M; OIC Interworking (oneM2M TS-0024 version 2.0.0 Release 2)

**ETSI TS 118 102 V2.7.1 (2016-09)
oneM2M Requirements (oneM2M TS-0002 version 2.7.1 Release 2)**



**ETSI TS 118 120 V2.0.0 (2016-09)
oneM2M; WebSocket Protocol Binding (oneM2M TS-0020 version 2.0.0
Release 2)**

**ETSI TS 118 114 V2.0.0 (2016-09)
oneM2M; LWM2M Interworking (oneM2M TS-0014 version 2.0.0 Release 2)**

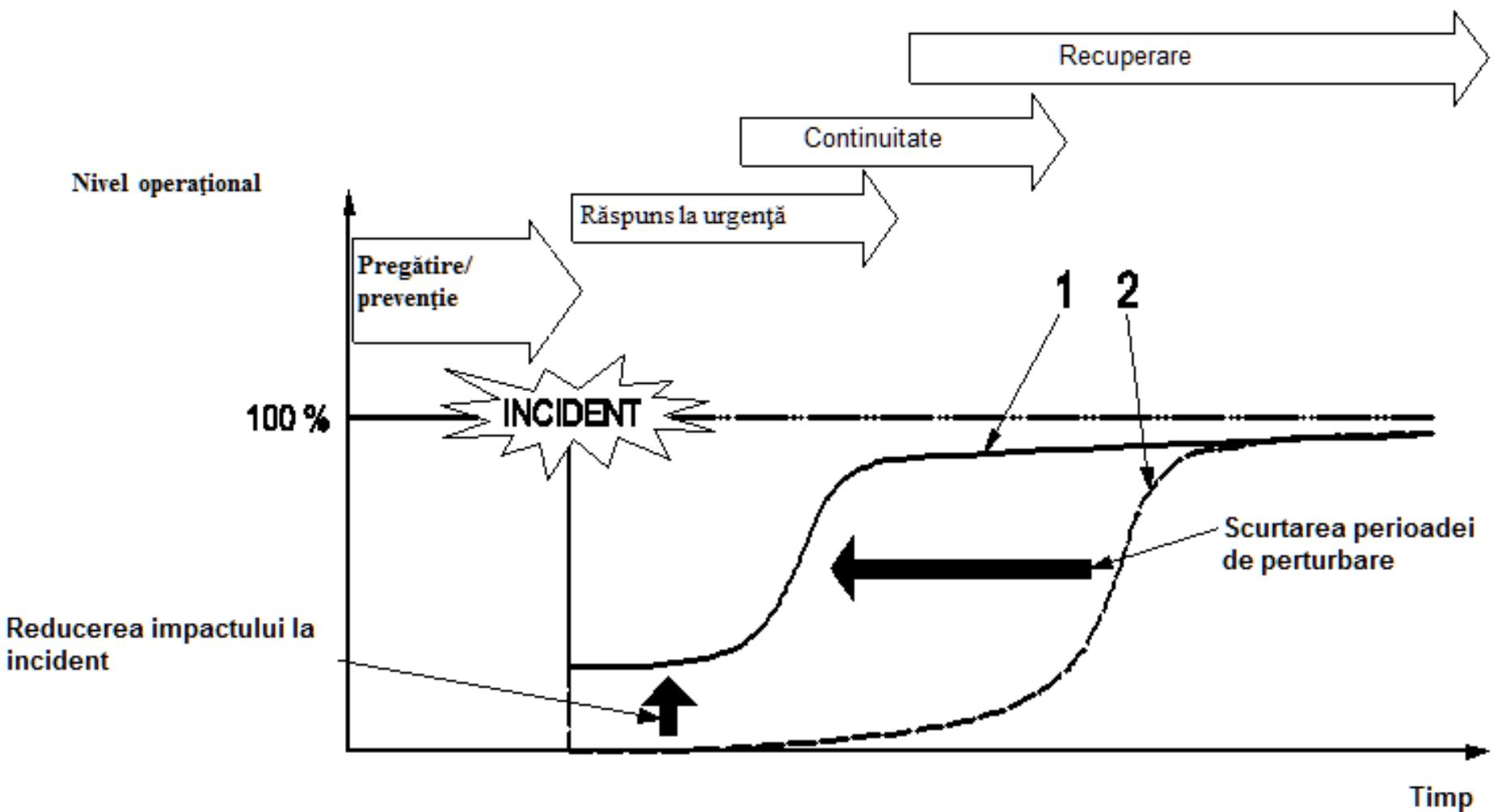
**ETSI TS 118 121 V2.0.0 (2016-09)
oneM2M; oneM2M and AllJoyn® Interworking (oneM2M TS-0021 version
2.0.0 Release 2)**

**ETSI TR 121 905 V13.1.0 (2016-07)
Digital cellular telecommunications system (Phase 2+) (GSM); Universal
Mobile
Telecommunications System (UMTS); LTE; Vocabulary for 3GPP
Specifications (3GPP TR 21.905 version 13.1.0 Release 13)**

**ETSI TR 118 516 V2.0.0 (2016-09)
oneM2M; Study of Authorization Architecture for Supporting
Heterogeneous Access Control Policies (oneM2M TR-0016 version 2.0.0)**

Orașe inteligente

Managementul situațiilor de urgență



ISO/TC 292 Security and resilience



General

SR EN ISO 22300 Securitate societală. Terminologie

ISO/TR 22312 Societal security – Technological capabilities

ISO 22397 Societal security – Guidelines for establishing partnering arrangements

ISO 22398 Societal security – Guidelines for exercises

Business continuity management

SR EN ISO 22301 Securitate societală. Sisteme de management al continuității activității. Cerințe

SR EN ISO 22313 Securitate societală. Sisteme de management a continuității activității. Linii directoare

ISO/TS 22317 Societal security – Business continuity management systems – Guidelines for business impact analysis

ISO/TS 22318 Societal security – Business continuity management systems – Guidelines for supply chain continuity

ISO/IEC/TS 17021-6 Conformity assessment – Requirements for bodies providing audit and certification of management systems – Part 6: Competence requirements for auditing and certification of business continuity management systems



Emergency management

SR ISO 22320 Securitatea societății. Managementul urgențelor. Cerințe privind răspunsul la eveniment

ISO 22322 Societal security – Emergency management – Guidelines for public warning

ISO 22324 Societal security – Emergency management – Guidelines for colour coded alert

ISO 22325 Security and resilience - Emergency management - Guidelines for capability assessment

ISO/TR 22351 Societal security – Emergency management – Message structure for exchange of information

Community resilience

ISO 22315 Societal security – Mass evacuation – Guidelines for planning

Authenticity, integrity and trust for products and documents

ISO 12931 Performance criteria for authentication solutions used to combat counterfeiting of material goods

ISO 16678 Guidelines for interoperable object identification and related authentication systems to deter counterfeiting and illicit trade

Protective security

SR EN ISO 22311 Securitate societală. Supraveghere video. Interoperabilitatea exportului

ISO 18788 Management system for private security operations - Requirements with guidance for use

Supply chain security management

SR ISO 28000 Specificații pentru sisteme de management al securității pentru lanțul de furnizare

ISO 28001 Security management systems for the supply chain - Best practices for implementing supply chain security, assessments and plans - Requirements and guidance

ISO 28002 Security management systems for the supply chain - Development of resilience in the supply chain - Requirements with guidance for use

ISO 28003 Security management systems for the supply chain - Requirements for bodies providing audit and certification of supply chain security management systems

ISO 28004 Security management systems for the supply chain - Guidelines for the implementation of ISO 28000 (Part 1-4)



Projects

General

ISO 22300 Security and resilience - Terminology [Revision]

Business continuity management

ISO/TS 22330 Security and resilience - Business continuity management systems - Guidelines for people aspects on business continuity

ISO/TS 22331 Security and resilience - Business continuity management systems - Guidelines for business continuity strategy

Emergency management

ISO 22320 Security and resilience - Emergency management - Guidelines for incident response [Revision]

ISO 22326 Security and resilience - Emergency management - Guidelines for monitoring of facilities with identified hazards

ISO 22327 Security and resilience - Emergency management - Community-based landslide early warning systemwarning system



Comitete Tehnice Naționale

CT 391 *Servicii de securitate private*
(CEN/TC439
Private security Services)

CT 376 *Securitate*

(ISO/TC 292 *Security and resilience /*
CEN /TC 391
Societal and Citizen Security)



Mulțumim pentru atenție!!

