Standards for Smart Tourist Communities

CYPRUS ORGANISATION FOR STANDARDISATION

Evolvement

- More flexible
- Better response
- Less expensive to operate

2005 – Today
- Independent Body
- Under Private Law
- Cyprus National Standards Body

1975 – 2005
- Public Body (MCIT)
- Under government control

Smart and Sustainable Standards

European Committee for Standardization

European Committee for Electrotechnical Standardization

International Organization for Standardization

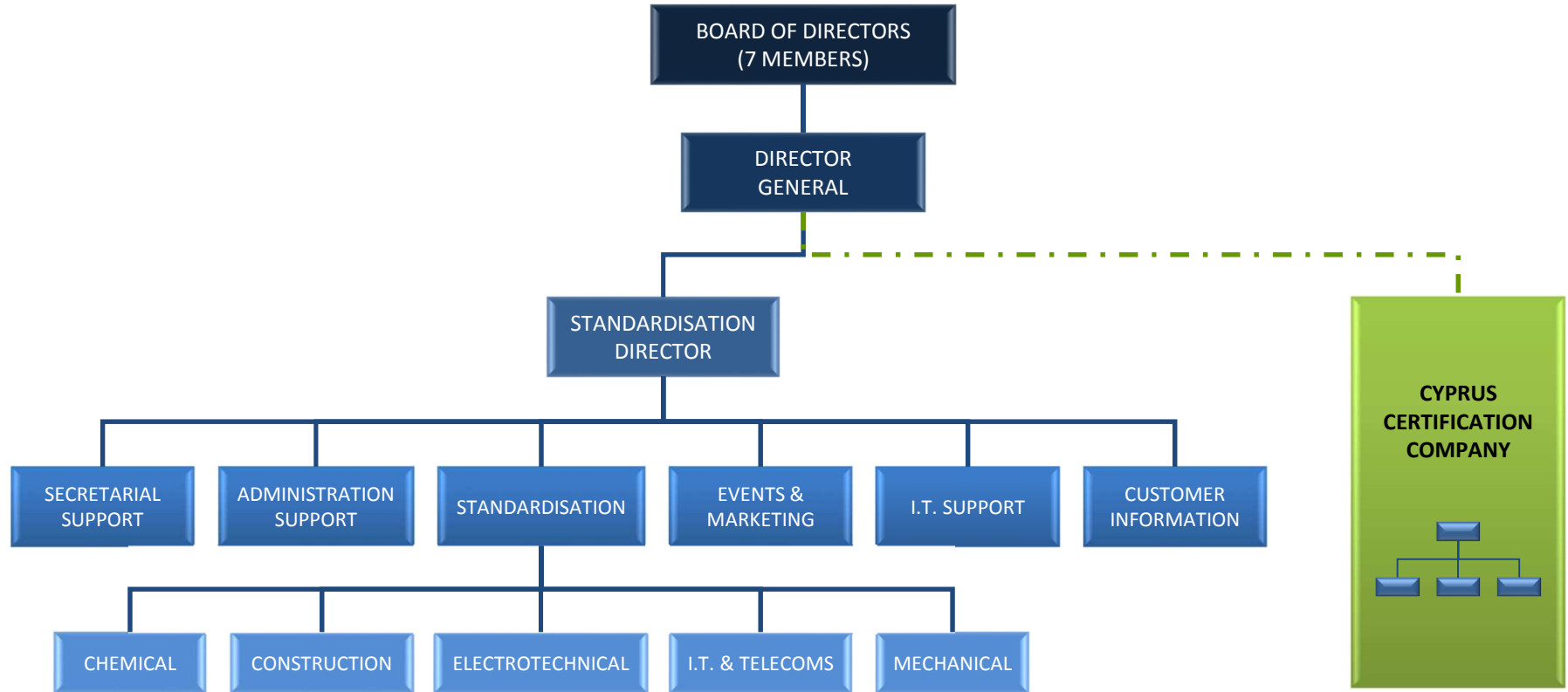**International Electrotechnical Committee**

European Telecommunication Standards Institute

Organizational chart

MINISTRY OF FINANCE
100% SHAREHOLDER

BOARD OF DIRECTORS
(7 MEMBERS)

DIRECTOR GENERAL

STANDARDISATION DIRECTOR

CYPRUS CERTIFICATION COMPANY

- SECRETARIAL SUPPORT
- ADMINISTRATION SUPPORT
- STANDARDISATION
- EVENTS & MARKETING
- I.T. SUPPORT
- CUSTOMER INFORMATION

STANDARDISATION:
- CHEMICAL
- CONSTRUCTION
- ELECTROTECHNICAL
- I.T. & TELECOMS
- MECHANICAL

Main Activities

➔ Managing the Standardisation System in Cyprus

➔ Informative lectures & seminars

➔ Training seminars/courses

➔ Visits/meetings with the industry

➔ Publications

➔ Articles (Mass Media)

Standards Everywhere

CYS Mirror Committees

MC 1	Construction Products & Civil Engineering
MC 2	Mechanical Engineering
MC 3	Healthcare
MC 4	Health & Safety
MC 5	Heating, Cooling & Ventilation
MC 6	Transport & Packaging
MC 7	Telecommunication & Information Technology
MC 9	Chemicals & Environment
MC 10	Gas
MC 11	Food & Biotechnology
MC 12	Services
MC 13	Electrical & Electronic Equipment Electrical & Electronic Medical Devices

ISO/TC 228
Tourism and related Services
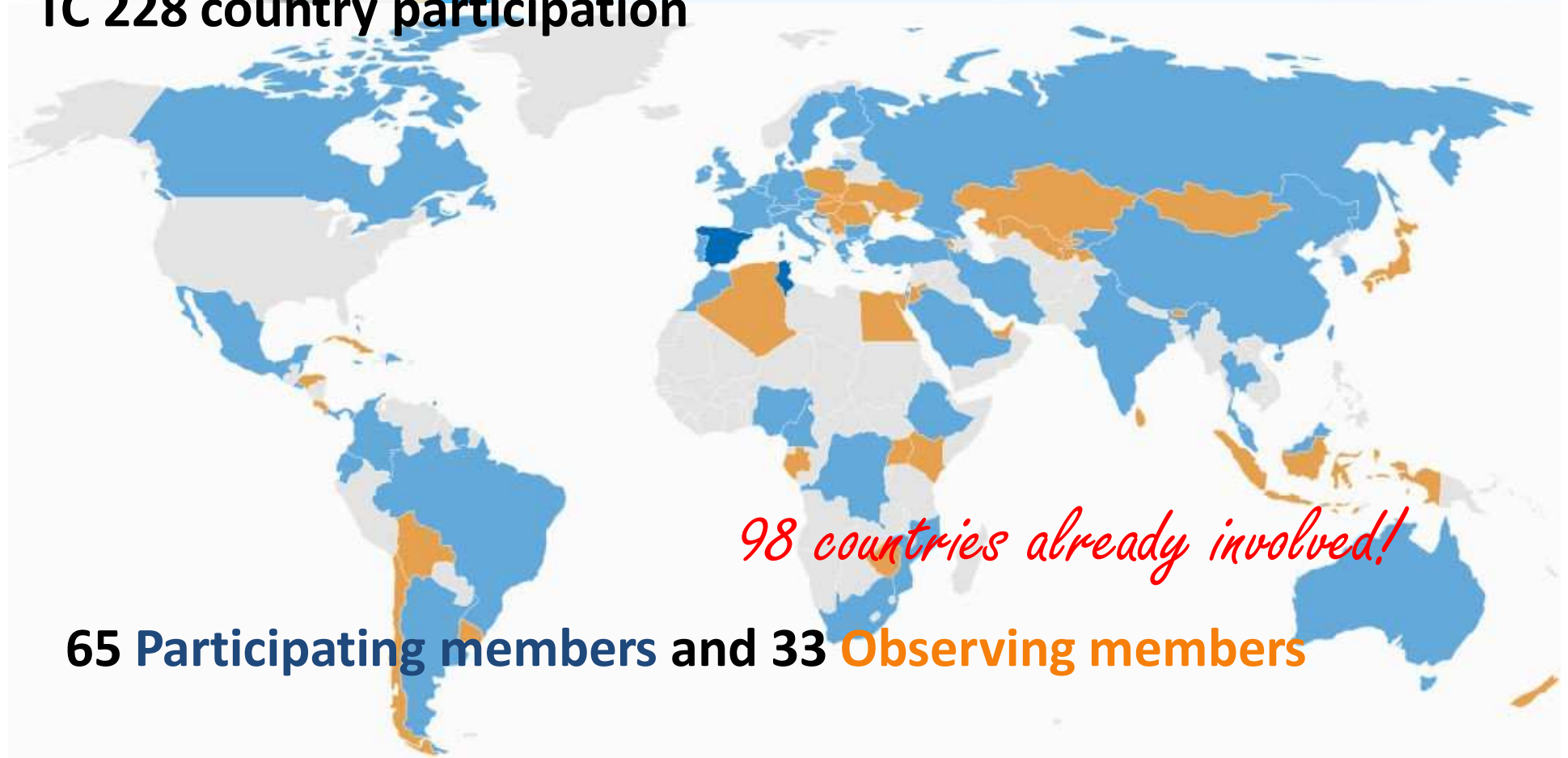
TC information

Scope of ISO TC 268

- ✓ To standardize specifications of the services offered by tourism service providers
- ✓ To specify requirements of facilities and equipment used in the Tourism Industry
- ✓ To provide criteria for making inform decisions by consumers

Composition of the TC

TC 228 country participation

98 countries already involved!

65 Participating members and **33 Observing members**

Structure

ACTIVE WORKING GROUPS

WG 1 – Diving services (Austria)

WG 2 – Health Tourism Services (Spain)

WG 7 – Adventure Tourism (Brazil)

WG 8 – Yacht harbours (Belgium)

WG 11 – Bare Boat Charters (UK)

WG 12 – International Volunteer Tourism (UK)

WG 13 – Sustainable Accommodation (Brazil)

WG 14 – Accessible Tourism (UNWTO – Spain)

WG 15 – Accommodation(Spain)

AHG 01 – Heritage hotels and Traditional restaurants (Iran)

WG 1
Diving services

Objective of WG1:

To develop Internationalal standards to increase safety in diving services.

Important Standards :

ISO 24803:2017
- [ ] Recreational diving services -- Requirements for recreational diving providers.

- [ ] **ISO 13289:2011**
  Recreational diving services -- Requirements for the conduct of snorkeling excursions

WG 2 Health Tourism services

Objective of WG 2

To develop International standards to enhance service provision in welness spas & medical tourism.

Important Standards:

- ☐ **ISO 17680:2015** Tourism and related services - Thalassotherapy -- Service requirements
- ☐ **ISO 17679:2016** Tourism and related services - Wellness Spa – Service requirements

Under Development

- ☐ **ISO/AWI 22525** - Tourism and related services -- Medical Tourism -- Services requirements
- ☐ ISO/DIS 21426 - Tourism and related services -- Medical spas -- Service requirements

WG 5
Beaches

Objective of WG5:

To develop International standards for the good operation of the beaches.

Important Standards :

- ISO 13009:2015 - Tourism and related services -- Requirements and recommendations for beach operation

WG 7 Adventure Tourism

WG Objective of 7

To Develop a set of standards to enhance safety performance for participants and staff safety.

Important Standards:

- ❑ **ISO 21101:2014** - Adventure tourism -- Safety management systems -- Requirements

- ❑ **ISO 21103:2014** - Adventure tourism -- Information for participants

WG 8 Yacht Harbours

Objective of WG 8

To develop International standards to enhance yacht harbours services.

Important Standards:

- ❑ **ISO 13687:2014** - Tourism and related services -- Yacht harbours

- ❑ **ISO/CD 21416** - Tourism and related services -- Yacht harbours -- Essential requirements for luxury harbours

WG 11 Bare boat charters

Objective of WG 11

To develop Specifications concerning the service provision for bare boat charter companies and equipment to be supplied for bareboat charter.

Important Standards:

- ❑ **ISO 20410:2017** Tourism and related services -- Bareboat Charter -- Minimum service and equipment requirements

- ❑ **ISO/AWI 228** Tourism and related services -- Supplementary charter holiday services and experiences

WG 13 Sustainable Management System for Accommodation

Objective of WG 13

To develop standards for establishing a sustainability management system for accommodation, including environmental, social and economic aspects.

Important Standards

- **ISO/DIS 21401** - Tourism and related services -- Sustainability management system for accommodation establishments -- Requirements

- **ISO/TS 13811:2015** - Tourism and related services -- Guidelines on developing environmental specifications for accommodation establishments

WG 14
Accessible Tourism

Objective of WG 14

To develop requirements and recommendations on the key aspects of tourism on specific infrastructure, products and services concerning accessibility.

Important Standards:

❑ ISO/AWI 21902 - Tourism and related services -- Accessible tourism for all -- Requirements and recommendations

WG 15 Accommodation

Objective of WG 15

To develop requirements and recommendations on the key aspects of accommodation.

Important Standards:

❑ **ISO/AWI 22483** - Tourism and related services - Accommodation: Hotels -- Service requirements

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AHG 01 Heritage Hotels and Traditional Restaurants

Objective of WG 15

To develop standards on two preliminary new work items on Heritage hotels and Traditional restaurants.

Important Standards:

- ISO/NP 21620 - Tourism and related services- Heritage Hotels

- ISO/NP 21621 - Tourism and related services- Heritage Hotels

Smart Tourist Standards

PNE 178501(National Spanish Standard) AENOR

"Management system of Smart Tourist destinations Requirements"

This standard specifies the requirements **to establish, implement**, maintain **a management system** for a **Smart Tourist Destination** that adequately considers governance, innovation and the use of technologies.

Smart Tourist Standards

- **ISO 14785:2014** - Tourist information offices -- Tourist information and reception services – Requirements.

- **ISO 13810:2015** - Tourism services -- Industrial tourism -- Service provision

- **ISO 26000** -Social responsibility

26 Published Standards

ISO 21103:2014	Adventure tourism -- Information for participants		
ISO/TR 21102:2013	Adventure tourism -- Leaders -- Personnel competence	ISO 17680:2015	Thalassotherapy -- Service requirements
ISO 14785:2014	Tourist information offices -- Tourist information and reception services – Requirements	ISO 18065:2015	Tourist services for public use provided by Natural Protected Areas Authorities – Requirements
ISO 18513:2003	Tourism services -- Hotels and other types of tourism accommodation - Terminology	ISO 13009:2015	Requirements and recommendations for beach operation
ISO 21101:2014	Adventure tourism -- Safety management systems – Requirements	ISO /TS 13811:2015 (Ed.1)	Guidelines on developing environmental specifications for accommodation establishments
ISO 13687-1:2014	Yacht Harbours -- Part 1: Minimum Requirements for basic service level harbours	ISO 13810:2015 (Ed. 1)	Industrial tourism -- Service provision
ISO 13687-2:2017	Yacht harbours -- Part 2: Minimum requirements for intermediate service level harbours	ISO 17679:2016	Wellness spa -- Service requirements
ISO 13687-3:2017	Yacht harbours -- Part 3: Minimum requirements for high service level harbours	ISO 20410:2017	Bareboat charter -- Minimum service and equipment requirements

How to participate?

- Contact your ISO member [National Standardization Body](#)

- If you are a P member, you are invited to **nominate experts in the Working Groups and register them in ISO Global Directory** to participate actively in the projects and receive the notifications each time a new document is posted.

- If you are unable to travel and attend meetings physically, send your contributions by mail to the secretary and/or participate online in meetings through webex. Ask the secretary to make available this option.

How to get informed?

- **Visit the Committee's new Website**: https://committee.iso.org/tc228

- The web has replaced the **TC Newsletter**: the old issues (2014-2016) are available in the public information folder (without password) of Livelink

- Through **ISO Livelink Notifications**: New documents, open ballots, member lists and upcoming meetings are available in ISO TC 228 Livelink

- Or simply ask the **secretaries** about any doubt, question or suggestion you may have: nortiz@une.org and/or chokri.makhlouf@innorpi.tn

I. **Global overview of Smart Cities Standardization**

CITIES TODAY

2 %	**70 %**	**60 %**	**70 %**
Surface occupied by today's cities on the earth's surface	**Percent of global GDP generated**	**Amount of energy consumed by actual cities**	**Amount of waste and greenhouse gas emissions produced by cities**

- **BY 2050:**
  - World population is forecast to reach nearly **10 billion people**
  - **80 %** of people are expected be urbanized

Sources: ISO and smart cities, 2017 ; CEN-CENELEC-ETSI Sector Forum on Smart and Sustainable Cities and Communities

Cities challenges vs citizens interests

Waste & Water Management
i.e. Sao Paulo, New Delhi, Panama

Tourism & cultural engagement
i.e. Paris, Buenos Aires, Florence

Traffic & mobility Management)
i.e. Beijing, Barcelona, Cairo

Cities interests

Business & commerce
i.e. Berlin, New York, Tokyo.

Electricity Supply
i.e. Caracas, Germany

Safety
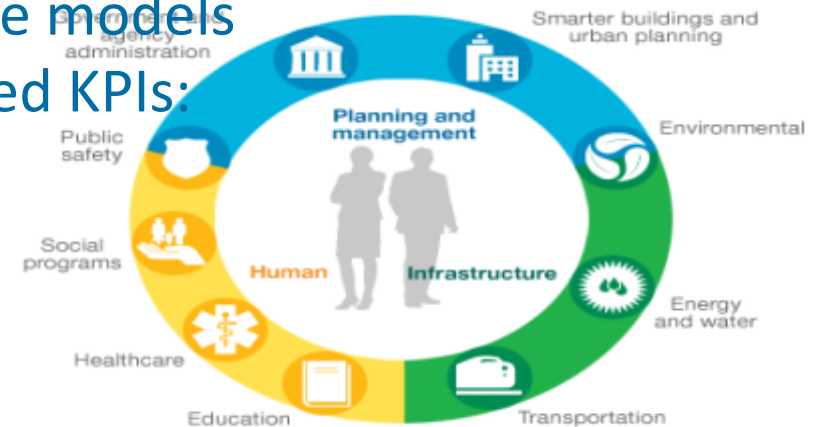i.e México City, Rio de Janeiro

ISO Smart and Sustainable Cities developments

Holistic Approach - Smart Cities require a holistic approach for sustainable development...

- Challenges faced by Cities are very complex and multi dimensional, multisectorial.
- Big challenge is to develop comprehensive policies, consistently applied over different municipal areas.
- A focus on citizens with new governance models
- 5 major areas of priorities with dedicated KPIs:
  1. **People**
  2. **Planet**
  3. **Prosperity**
  4. **Governance**
  5. **Replication-Dissemination**

ISO Smart and Sustainable Cities developments

ISO Technical Committee 268

Standardization in the field of Sustainable Cities and Communities including development of requirements, and tools related to the achievement of **sustainable development** considering **smartness** and **resilience**, to help all Cities and Communities.

The proposed series of International Standards will encourage the **development and implementation of holistic and integrated approaches** to sustainable development and sustainability.

ISO/Technical Committee 268 Sustainable cities and communities

➢ISO/TC 268/WG 1 - Management System Standards

➢ISO/TC 268/WG 2 - City indicators

➢ISO/TC 268/WG 3 - City anatomy and sustainability terms

➢ISO/TC 268/WG 4 - Strategies for smart cities and communities.
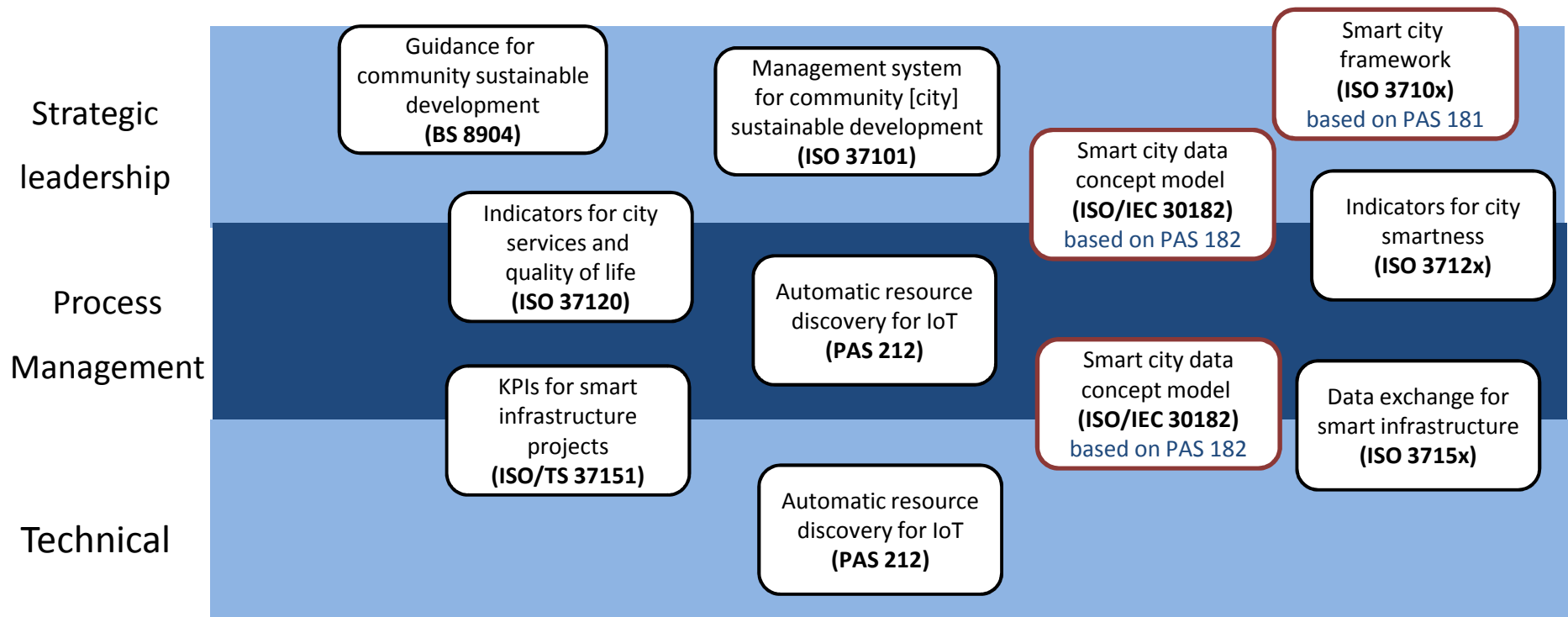
ISO/TC 268/SC 1
Smart community infrastructures

➢ ISO/TC 268/SC 1/TG 2 - Smart Community Infrastructure - Pilot Testing.

➢ ISO/TC 268/SC 1/WG 1 - Infrastructure metrics

➢ ISO/TC 268/SC 1/WG 2 - Integration and interaction framework for smart community infrastructures

➢ ISO/TC 268/SC 1/WG 3 - Smart transportation

➢ ISO/TC 268/SC 1/WG 4 - Data exchange and sharing for smart community infrastructures

ISO – International Standards Organisation – Sustainable cities and communities standards activity

STRATEGIC/LEADERSHIP / Process Management / Technical Standards

Strategic leadership

Guidance for community sustainable development **(BS 8904)**

Management system for community [city] sustainable development **(ISO 37101)**

Smart city framework **(ISO 3710x)** based on PAS 181

Smart city data concept model **(ISO/IEC 30182)** based on PAS 182

Process Management

Indicators for city services and quality of life **(ISO 37120)**

Automatic resource discovery for IoT **(PAS 212)**

Indicators for city smartness **(ISO 3712x)**

KPIs for smart infrastructure projects **(ISO/TS 37151)**

Smart city data concept model **(ISO/IEC 30182)** based on PAS 182

Data exchange for smart infrastructure **(ISO 3715x)**

Technical

Automatic resource discovery for IoT **(PAS 212)**

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ISO 37101:2016 -Sustainable development in communities - <u>Management system for sustainable development</u> - Requirements with guidance for use

❑ **Designed to help communities define their sustainable development objectives and put in place a strategy to achieve them**

❑ **Support of cities to become resilient, smart and sustainable**

❑ **To establish local sustainability initiatives**

❑ Dedicated to **communities** and identify **cities** as kind of communities

❑ Based on **continuous improvement approach**

Benefits issued from using ISO 37101 in cities and communities

Sustainability within the Community

- Help to **build consensus and establish strategy**
- **Improve the sustainability** of strategies, programmes, projects, plans and services without prescribing any solution

Organizational

- **Flexible framework** consistent with sustainable policies already launched by cities and communities
- **Robust methodology** based on continuous improvement
- Usable by **various** kinds of communities

International recognition

- International Standard
- **Consistent with UN SDG** and could support the **New Urban Agenda**
- Implementation of ISO 37101 could be **certified and assessed**

New global ISO Certifiable Standard for Smart City Indicators:

ISO 37120:2014 - Sustainable development of communities indicators for city services and quality of life

- http://www.iso.org/iso/catalogue_detail?csnumber=62436
- 1st ISO certifiable global standard for Smart City Indicators
- Published: June 2014

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ISO 37120:2016 - Sustainable development of communities -- Indicators for city services and quality of life

ISO 37120 includes 100 indicators (46 core and 54 supporting), which are structured around the following 17 themes

- Economy
- Education
- Energy
- Environment
- Finance
- Fire & Emergency Response

- Governance
- Health
- Recreation
- Safety
- Shelter
- Solid Waste

- Telecommunications
- Transportation
- Urban Planning
- Wastewater
- Water & Sanitation

ISO 37120:2016 - Sustainable development of communities – Indicators for city services and quality of life

How do Cities gain?

ISO 37120:2014 to be used for:

- assess the performance of services, infrastructure, institutions (esp. outsourced),
- improve city operations,
- benchmark themselves,
- prioritize city budgets (assess quality of life)
- support open data, app development,
- build better case for public/private funding for infrastructure investments.

Making a smart city.....

"*A smart sustainable city is an innovative city that uses information and communication technologies (ICTs) to improve quality of life, efficiency of urban operation and services.*

UNECE   **ITU**

First internationally agreed definition…

Making a smart city……key Technologies

Smart Energy Management
- Smart Grids
- Smart Meters
- Energy Efficiency/Green Building
- Green Energy

Smart Transportation
- Smart Transport Management
- Intelligent Trafic Management
- Smart trafic lights
- Trafic monitoring
- Smart Parking

Smart data & e-Government
- Massive amounts of data collected & analyzed
- Public Information
- e-Service Delivery
- Intelligent Video Surveillance

Waste Management
- Recycling
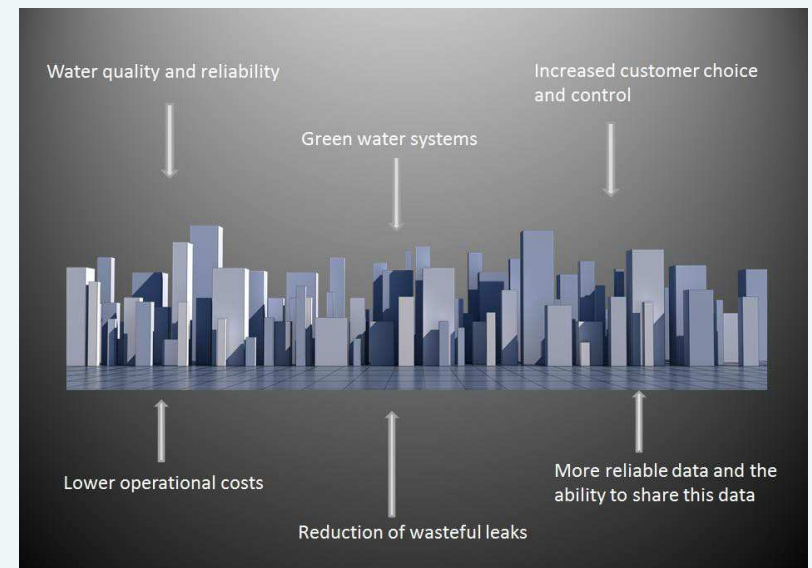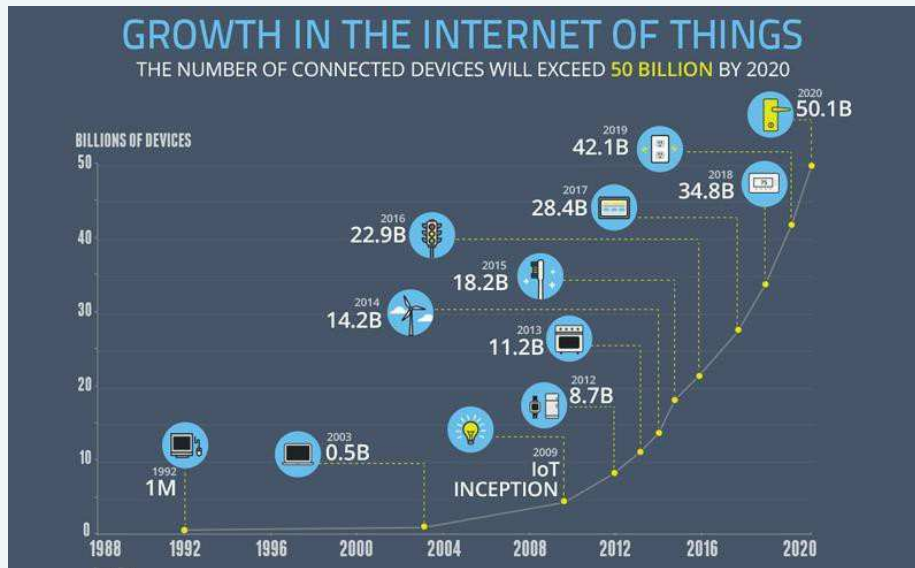- Waste Collection
- Waste Water Treatment

Water Management
- Smart Meters & Management
- Water Quality Monitoring
- Leakage detection

HOW cities are getting smarter

IoT will shape smart sustainable cities

GROWTH IN THE INTERNET OF THINGS
THE NUMBER OF CONNECTED DEVICES WILL EXCEED **50 BILLION** BY 2020

IoT is "*A global infrastructure for the information society, enabling advanced services by interconnecting (physical and virtual) things based on existing and evolving interoperable information and communication technologies*". (Recommendation ITU-T 2060).

Standardization for Smart Cities

ISO/TMB/ Smart Cities SAG + TF

CEN-CENELEC-ETSI Sector Forum on SSCC

Advisory & Strategic Group of the ESOs

✓ Recommendations and coordination
✓ No standardization development

ISO/TC 268 ISO/TC 268/SC 1

ISO-IEC/JTC 1 WG 11

Technical Committees

✓ Standardization Development
✓ (Standards, TS, TR, PAS…)

IEC SyC Smart cities

ITU-T/FG SSC

Standards for Smart Cities

Thank you….

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