

# Standards for Smart Cities – European activities



DIN Deutsches Institut für Normung e. V.



Challenges facing tomorrow's urban infrastructure and sustainable urban development – standardization initiatives of DIN and DKE

## STANDARDS FOR SMART CITIES

Cities occupy less than two percent of the earth's surface, yet they consume between 60 and 80 percent of the available energy worldwide and are responsible for 75 percent of greenhouse gas emissions. In the light of diminishing resources and global population growth, the need for sustainable urban development and a common set of metrics to monitor it is becoming ever more urgent. Standards are already contributing to sustainable development in the following areas:

- AMBIENT ASSISTED LIVING
- BARRIER-FREE BUILDING
- DRINKING WATER/WASTE WATER
- ELECTROMOBILITY
- MUNICIPAL SERVICES
- SAFETY AND PUBLIC SECURITY
- SMART GRIDS
- SUSTAINABLE CONSTRUCTION
- SUSTAINABLE URBAN DEVELOPMENT



ELECTROMOBILITY



SMART GRIDS



DRINKING WATER/WASTE WATER



SAFETY AND PUBLIC SECURITY



AMBIENT ASSISTED LIVING



SUSTAINABLE URBAN DEVELOPMENT



MUNICIPAL SERVICES



SUSTAINABLE CONSTRUCTION



BARRIER-FREE BUILDING



# Smart Cities

## European Standardization Activities

DIN

DIN Deutsches Institut für Normung e. V.



Smart Cities  
and Communities

afnor  
NORMALISATION

BSI  
British Standards



Join the Platform...

... to share your smart city solution proposals, best practices, project ideas and more!



Smart  
City Exhibition 2013  
BOLOGNAFIERE  
16-17-18 ottobre 2013



AENOR

NOTA DE PRENSA

Unos 200 expertos forman el comité español de Smart Cities

**Aprobadas las líneas de trabajo del comité español de normas sobre Ciudades Inteligentes**

# Activities in United Kingdom

- „...to ensure the technology fulfills its potential, the British Standards Institution (BSI) has **been commissioned by the UK Department of Business**, to formulate a **Smart Cities Standards Strategy**; ...identify the needs and concerns of stakeholders and explore where standards might facilitate the uptake of the Smart Cities concept.”  
(Source: BSI website, 2013-05-01)
- New initiative to support **\$40 billion smart cities** in the UK  
(Source: gov.uk website, 2013-10-09)
  - Bristol
  - Manchester
  - Birmingham
  - Glasgow
- BSI published Draft Publicly Available Specification (PAS) Smart Cities Vocabulary, Draft for comment only (2013-09-30)



# Activities in France and Italy

**France:** AFNOR and his Chinese counterpart, SAC signed an official statement of cooperation on standardization; the currently identified areas include: **smart cities**, the management of energy, environmental protection, food, railway equipment, IT, social sector, health.

(Source: AFNOR website, 2013-04-26)

**Italy:**  
several activities in Italian cities and communities



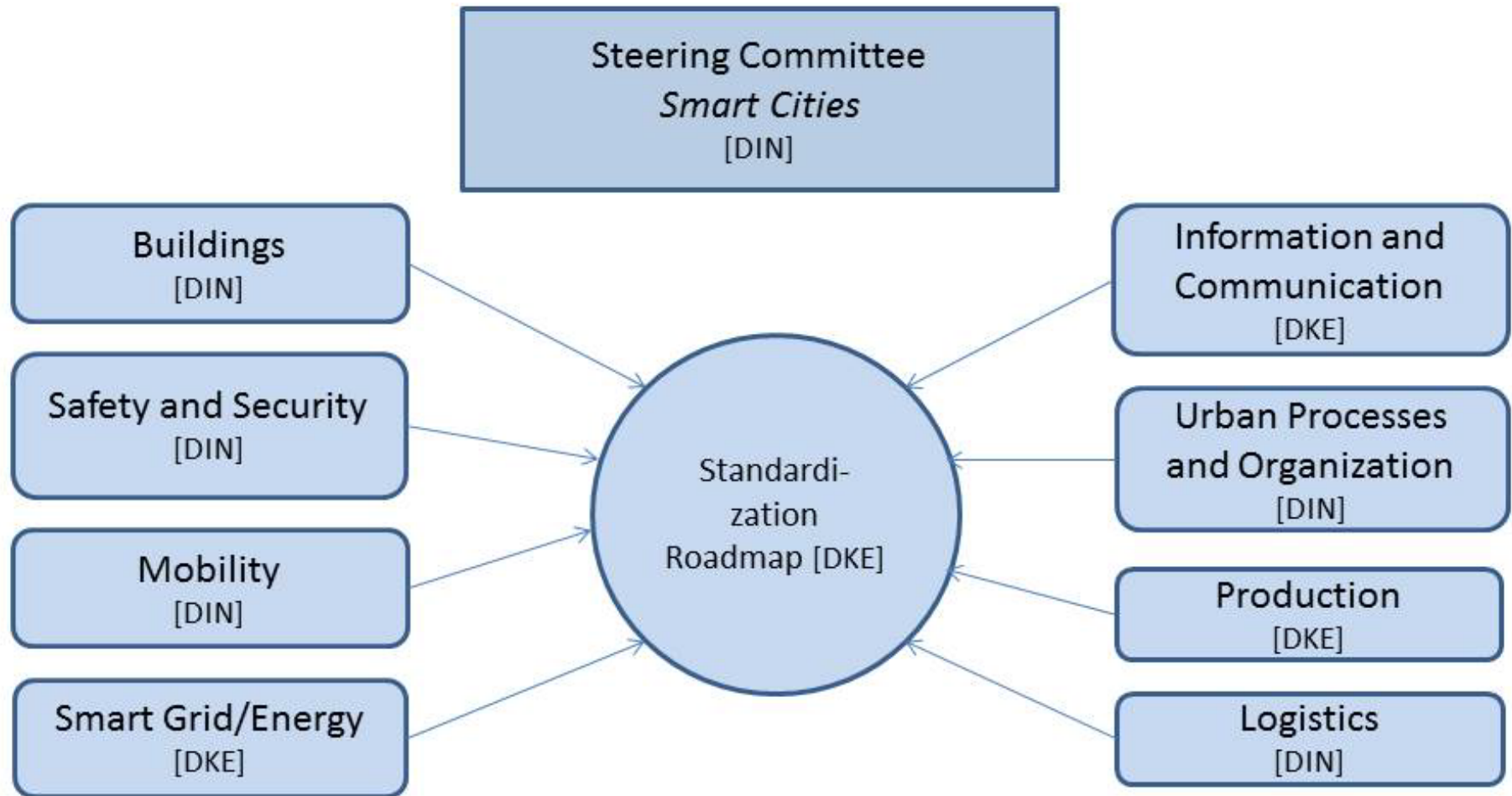


## Smart Cities – Infrastructure

- PNE 178101 **Public Service Networks**
- PNE 178102 **ICT network infrastructures**: Fibre optic networks, wireless networks and data processing centres.
- PNE 178103 Convergence of the **Management-Control Systems in a Smart City**
- PNE 178104 **Integrated systems** for a Smart City
- PNE 178105 **Universal accessibility**, urban planning and territorial ordinance
- PNE 178106 Guides with **Specifications for Public Buildings**



# Activities in Germany



## CEN/CENELEC **S**mart + **S**ustainable **C**ities and **C**ommunities **C**oordination **G**roup (SSCC-CG)

- **Founded** in 2012
- **Currently:** Evaluation of European Activities
- **Goal:** Coordination of European Activities after creating and submitting an evaluation report to the European Commission
- **Members:** Various CEN/TC members (industry), EU-Commission, NSB representatives, ETSI representatives

## CEN/CENELEC Smart + Sustainable Cities and Communities Coordination Group (SSCC-CG)

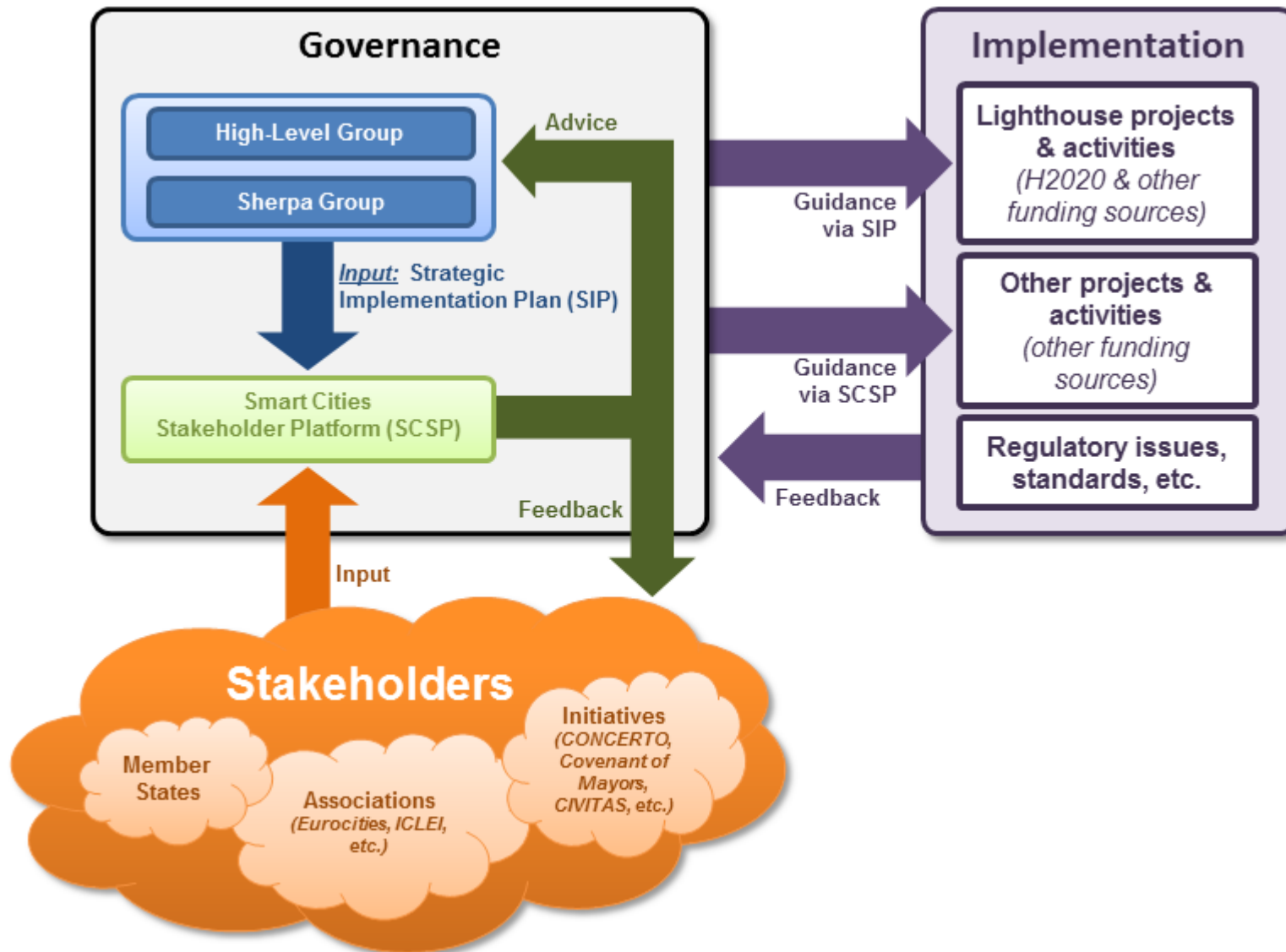
### Implemented Task Groups:

- TG 1:** Mapping of relevant International, European and national standardization initiatives
- TG 2:** Mapping of stakeholders and interested parties in Europe
- TG 3:** Mapping of topics and issues to be dealt with under the SSCC-CG scope



# Activities of EU Commission

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High Level Group of the European Innovation Partnership  
for Smart Cities and Communities

## **Strategic Implementation Plan**

The plan outlines ideas on how to best harness innovative technologies and innovative public private partnerships.

Actions needed to make our cities better places to live and to reduce:

- energy use
- carbon emissions and congestion

**26 November 2013** – Launch event for Strategic Implementation Plan of the European Innovation Partnership for Smart cities and communities

**January 2014** – Start of implementation phase of European Innovation Partnership under Horizon 2020.

## Keys to Innovation – Integrated Solutions

- Advanced Materials for Energy Efficient Buildings
- Heat Pump and Micro-CHP as Complementary Boiler Alternatives
- ICT Stack for Energy Management
- Smart renovation and retrofit of buildings and services
- Zero-Energy Buildings with Low-Energy Storage
- Virtual Power Plant
- Smart Thermal Grids
- Smart Integrated Energy Governance
- Smart Grid Systems
- E-Mobility and Power Matching
- Cooperative Intelligent Transport Systems and Services
- Enabling Seamless Multimodality for End Users
- Smart Organization of Traffic Flows and Logistics

## **ISO Task Force Smart Cities**

DIN is heading a strategic liaison committee at ISO

This ISO/TF Smart Cities should ensure involvement of ISO/TCs as they see fit and furthermore should monitor other national, regional and international activities.

## IEC/Systems Evaluation Group (SEG)

**Founding members:** Japan, China, Germany

**Inaugural Meeting:** Dec. 9<sup>th</sup> and 10<sup>th</sup> 2013 (DIN, Berlin)

**Goal:** evaluation of global *Smart Cities* activities and creation of a standardization roadmap



## Thank you!

### More information:

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