Focus Group on Smart Sustainable Cities

Daniela Torres

Coordinator of Working Group 4 of the ITU Focus Group on Smart Sustainable Cities (FG SSC)

Focus Group on Smart Sustainable Cities (FG SSC)

- Established at ITU-T Study Group 5 meeting in Geneva in February 2013.

- As an **open platform** for smart-city stakeholders for smart-city stakeholders to exchange knowledge in the interests of identifying the standardized frameworks needed to support the integration of ICT services in smart cities.

- Open to all.

Management Team

Chairman:
- Silvia Guzman, Telefónica

Vice-chairmen:
- Flavio Cucchietti, Telecom Italia
- Pablo Bilbao, Federation Argentina de Municipios, Argentina
- Franz Zichy, USA
- Nasser Saleh Al Marzouqi, UAE
- Ziqin Sang, Fiberhome Technologies Group
- Sekhar Kondepudi, National University of Singapore

Secretariat:
- Cristina Bueti, Adviser, ITU

Terms of Reference:
Main Tasks and Deliverables

Main tasks and deliverables:

▪**Defining the role of ICTs in environmentally sustainable smart cities**, and identifying the ICT systems necessary to their development;

▪**Identifying or developing a set of Key Performance Indicators (KPIs)** to gauge the success of smart-city ICT deployments;

▪**Establishing relationships and liaison mechanisms** with other bodies engaged in smart-city studies and development;

▪**Identifying future smart-city standardization projects** to be undertaken by its parent group, ITU-T Study Group 5;

▪**Developing a roadmap for the ICT sector's contribution to Smart Sustainable Cities**, providing cohesion to the development and application of technologies and standards.

Terms of Reference: Relationships

Collaboration with:

- **Within SG5:** Q7, Q13, Q14, Q15, Q16, Q17, Q18, and Q19, etc.;

- **all ITU-T Study Groups,** especially SG 11, SG13, SG15, SG 16, and SG17;

- **other international, regional and national SDOs,** such as ISO, IEC, IEEE, CEN/CENELEC, ETSI, etc.;

- **relevant entities including:** municipalities, federation of municipalities, non-governmental organizations (NGOs), policy makers, industry forums and consortia, companies, academic institutions, research institutions, etc.

Past Meetings

1st meeting: Turin,
8 May 2013,
(Telecom Italia)

>50 participants

2nd meeting: Madrid,
17 Sept 2013,
(Telefonica)

>50 participants

3rd meeting: Lima,
6 Dec 2013,
(Gov. of Peru)

>60 participants

4th meeting: Geneva,
5-6 March 2014,
(ITU)

>40 participants

Meeting Results

Turin, **8 May 2013**	▪ Establishment of FG SSC structure and deliverables, 4 working groups created; ▪ Liaison statements sent to other bodies engaged in smart-city studies and development, such as ISO, IEC, IEEE, ETSI, EC DG Connect, UNECE, UNU, StEP, CEDARE, UNESCO, UN-Habitat, WMO, UNHCR, UNEP and UNFCCC.
Madrid, **17 Sep 2013**	▪ Three main documents under development: 　1. Draft definition of Smart Sustainable Cities, 　2. Draft of Key Performance Indicators for Smart Sustainable Cities, 　3. Draft Stakeholders' Map and City Engagement Plan; ▪ Liaison statements sent to other bodies engaged in smart-city studies and development.
Lima, **6 Dec 2013**	▪ Creation of 6 technical groups within WG2 and appointment of the respective leaders; ▪ Progress on the three main documents under development; ▪ Extension of the FG SSC mandate; ▪ Liaison statements sent to other bodies engaged in smart-city studies and development.
Geneva, **5-6 Mar 2014**	▪ Agreement on definition of SSC ▪ 14 Technical reports are being developed ▪ A Roadmap for SSC (including technical specifications) will be presented in June 2014

Working Groups

1. ICT role & roadmap for Smart Sustainable Cities (SSC)

2. Smart Sustainable Cities Infrastructure

3. Standardization gaps, KPIs and metrics

4. Policy & positioning (communications, liaisons and members)

Working Group 1

1. ICT role & roadmap for Smart Sustainable Cities (SSC)

WG1 coordinator: Sekhar Kondepudi (National University of Singapore)

Plan and deliverables:
▪Technical Report on Overview of SSC and the role of ICT;
▪Technical Report on Definitions and Attributes of a Smart Sustainable City;

Introduction of Draft Definition of Smart Sustainable Cities

Working Group 1

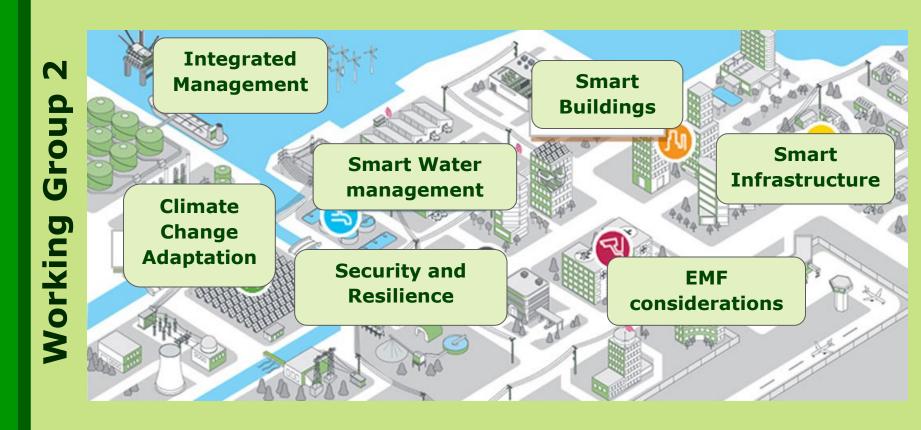|	
Description of key attributes of SSC	▪ Sourced over 200 definitions and descriptions for Smart Sustainable Cities from academia, government, corporations, non-profits, SDOs etc; ▪ Detailed analysis of different key words and attributes.
Overview of success stories of SSC	▪ Examples of smart sustainable cities worldwide (*inter alia*, in Europe, Latin America and Asia).
Definition of a SSC	▪ Definition of what a SSC is and its key attributes.

2. Smart Sustainable Cities Infrastructure

WG2 coordinator:
Paolo Gemma (Huawei)

Plan and deliverables:
- Providing an overview of the use of ICT in cities;
- Looking at future trends;
- Identifying standardization's need;
- 6 technical reports under development.

Areas of the Technical Reports

Working Group 2

- **Integrated Management**
- **Smart Buildings**
- **Smart Infrastructure**
- **Smart Water management**
- **Climate Change Adaptation**
- **Security and Resilience**
- **EMF considerations**

ITU

Working Group 3

3. Standardization gaps, KPIs and metrics

WG3 coordinator: Ziqin Sang (Fiberhome Technologies Group)

Plan and deliverables:
▪Technical Report on Standardization Activities and Gaps for SSC and suggestions to SG5
▪Technical Report on KPIs for smart sustainable cities
▪Technical Report on KPIs metrics evaluation

Introduction of Draft of Key Performance Indicators for SSC

Working Group 3

Proposed **dimensions** under study:	- Infrastructure; - Energy, natural resources and environment; - Economy and innovation; - Governance and public service; - Humanity and society; - Inhabitant happiness index.
Taking into considerations **other works** on KPIs of SSC from, *inter alia*:	- China Institute of Communications, Smart city white paper (2012); - China, Ministry of Housing and Urban-Rural Development (MOHURD), Index system of pilot Smart City; - European smart cities, Ranking of European medium-sized cities (2007); - ISO/TC268/SC1 — Smart Community Infrastructures; - Spain, IDC smart cities Index (2011); - United States of America, Smart city wheel; - Japan, KPIs of SSC (2013).

Working Group 4

4. Policy & positioning (communications, liaisons and members)

WG4 coordinator:
Daniela Torres (Telefónica)

Plan and deliverables:
- Stakeholders Map including standardization bodies & non-standardization bodies
- City Engagement Plan based on technical contributions of the Working Groups
- Focus Group Communications

Introduction of Draft Stakeholders' Map and City Engagement Plan

Working Group 4

Proposed structure

Part 1
- Overview of Smart Sustainable Cities.

Part 2
- Sustainability Challenges of Stakeholders in Cities.

Part 3
- Stakeholder Identification & Roles.

Part 4
- Recommendations to SSC Stakeholders to drive SSC.

Roadmap for Smart Sustainable Cities

Next Steps …

FG SSC agreed on the following definition:

"A smart sustainable city uses information and communication technologies (ICTs) to provide enhanced quality of life to its citizens, improved efficiency of services and sustainable development. Such a city meets the needs of today without sacrificing the needs of future generations with respect to economic, social and environmental aspects".

Share with us your views!

Collaboration and contributions are welcomed!

Conclusions

Need to engage new cities & other key stakeholders (such as academic and research institutes, civil society, NGOs, SDOs, and ICT organizations, industry forums and consortia) to participate and contribute.

Next Steps ...

Next meeting:
Genoa, Italy, 19-20 June 2014

Collaboration and contributions are welcomed!

Moving forward on
Smart Sustainable Cities...

- **Forum on Smart Sustainable Cities**
(Genoa, 18 Jun 2014)
    - ➤ back to back with 5th FG SSC meeting (Genoa, 19-20 Jun 2014)

- **Forum on Smart sustainable Cities**
(London, 17 Sept 2014)
    - ➤ back to back with 6th FG SSC meeting (London, 18 Sept 2014)

- **4th ITU Green Standards Week**
(Beijing, 22-26 Sept 2014)
    - ➤ Including a Forum on Smart Sustainable Cities (24 Sept 2014)

Links & Additional Information

- ITU-T and Climate Change
  itu.int/ITU-T/climatechange
- ITU Focus Group on Smart Sustainable Cities
  itu.int/en/ITU-T/focusgroups/ssc/
- ITU Symposia & Events on ICTs and Climate Change
  itu.int/ITU-T/worksem/climatechange

Thank YOU
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