# ITU-Tにおけるスマートシティ に関する取組みについて

### ITU-T スマートサステナブルシティに関するフォーカスグループ

### 1. 経緯

- 2012年9月に開催されたITU 第2回Green ICT Standards Weekにおいて「持続可能なスマートシティへの対応」が提案
- 同提案を踏まえ、2013年1月のITU-T SG5(環境と気候変動)において、「スマートサステナブルシティに関するフォーカスグループ」の設立が提案され、承認

### 2. 概要

- 議長:シルビア・グズマン(テレフォニカ)
   副議長:アルゼンチン、イタリア、シンガポール、アラブ首長国連邦、米国等より6名
   主な検討項目:
  - ー 環境的に持続可能なスマートシティにおけるICTの役割を明確化するとともに、スマートシティ実現に必要となるICTシステムの特定
  - 既存のスマートシティに関する取り組み、技術に関する動向調査
  - ー スマートシティにおける"ICT展開"に関する評価指標(KPIs)の検討
  - ー 他機関との連携の確立
  - ー ITU-T SG5において実施すべきスマートシティの標準化プロジェクトの特定
  - ー ICT業界からスマートシティへ貢献するための<u>ロードマップの策定</u>
- 上記検討項目の議論を進めるため、3つのサブグループを設置し、議論予定

**XKPIs:** Key Performance Identicators

### 3. 今後の予定

- 2013年5月にイタリア・トリノで第1回会合が開催され、1年間活動を行う予定。
- 全体で4回程度の会合を予定。

## Telecommunication Standardization Bureau



Geneva, 1 March 2013

Ref: TSB Circular 13

COM 5/CB

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- To Administrations of Member States of the Union
- To ITU-T Sector Members:
- To ITU-T Associates;
- To ITU-T Academia

#### Copy:

- To the Chairmen and Vice-Chairmen of all ITU-T Study Groups;
- To the Director of the Telecommunication Development Bureau;
- To the Director of the Radiocommunication Bureau

Subject: Creation of a new Focus Group on Smart Sustainable Cities (FG-SSC);

First meeting of the FG-SSC, Turin, Italy, 8 May 2013

#### Dear Sir/Madam,

- I am pleased to announce the establishment of the ITU-T Focus Group on Smart Sustainable Cities (FG-SSC) further to the agreement by ITU-T Study Group 5 at its meeting in Geneva, 29 January to 7 February 2013.
- This Focus Group will analyse ICT solutions and projects that promote environmental sustainability in cities that can be standardized by ITU-T SG5 and will identify best practices which could facilitate the implementation of such solutions in cities.

It will develop a standardization roadmap taking into consideration the activities currently undertaken by the various standards developing organizations (SDOs) and forums.

This Focus Group will leverage the role of the ICT sector to foster the growth of smart and sustainable cities worldwide and will collaborate with worldwide relevant communities (e.g., research institutes, forums, academia) including other SDOs and consortia.

The FG-SSC webpage can be found at <a href="http://itu.int/en/ITU-T/focusgroups/ssc">http://itu.int/en/ITU-T/focusgroups/ssc</a>.

The Focus Group will operate under procedures set out in Recommendation ITU-T A.7. ITU-T Study Group 5 serves as the parent group. The agreed Terms of Reference of FG-SSC are reproduced in **Annex 1**. Ms Silvia Guzman (Telefónica, Spain) will be the chairman of the Focus Group. Mr Flavio Cucchietti (Telecom Italia), Mr Pablo Bilbao (Federación Argentina de Municipios, Argentina), Mr Franz Zichy (USA), Mr Nasser Saleh Al Marzouqi (UAE), Mr Ziqin Sang (Fiberhome Technologies Group, China) and Mr Sekhar Kondepudi (National University of Singapore, Singapore) will be the vice chairmen. I strongly believe that by establishing the Focus Group, ITU-T will meet the expectations of its membership and demonstrate its ability to address the topics requiring urgent attention.

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- FG-SSC is open to ITU Member States, Sector Member, Associates and Academic Institutions and to any individual from a country which is a member of ITU and who is willing to contribute to the work; this includes individuals who are also members or representatives of interested standards development organizations.
- The first meeting of FG-SSC is scheduled to take place in the Telecom Italia Innovation Laboratories, Turin, Italy, 8 May 2013. Two other events will take place in the same venue: the Eighth Symposium on ICTs, the Environment and Climate Change will be from 6 to 7 May 2013, and the Workshop on Human Exposure to Electromagnetic Fields (EMFs) will be held on 9 May 2013. Information can be found at: <a href="http://itu.int/en/ITU-T/climatechange/Pages/events-201305.aspx">http://itu.int/en/ITU-T/climatechange/Pages/events-201305.aspx</a>
- Remote participation will be available for the meeting. More information about remote participation will be available on the Focus Group web page.
- The items for discussion at the meeting will be made available on the Focus Group web page, together with information related to the meeting, a draft agenda, and the contributions received.

The meeting will open at 0930 hours on 8 May 2013. Participant registration will begin at 0830 hours. No registration fee is required for participating in this meeting.

The discussions will be held in English only.

The documents will be made publicly available for this first meeting.

In preparing documents, please use the basic template for the FG documents available from the Focus Group web page. Participants shall submit input documents to FG-SSC in electronic format to TSB by sending them by e-mail to <a href="mailto:tsbfgssc@itu.int">tsbfgssc@itu.int</a>.

In agreement with the Focus Group management, the deadline for document submission for this first meeting is **30 April 2013**. Please note that this is a paperless meeting.

- To enable TSB to make the necessary arrangements concerning the organization of the Focus Group meeting, I should be grateful if you would register via the on-line form available from the FG-SSC website as soon as possible, but **not later than 24 April 2013. Please note that pre-registration of participants to the meeting is carried out exclusively** *online*. Please consult the FG-SSC webpage regularly for updates concerning the meeting planning.
- We would remind you that citizens of some countries are required to obtain a visa in order to enter and spend any time in Italy. **The visa must be requested not later 8 April 2013** and obtained from the office (embassy or consulate) representing Italy in your country or, if there is no such office in your country, from the one that is closest to the country of departure. Additional information can be found at: <a href="http://itu.int/en/ITU-T/climatechange/Pages/events-201305.aspx">http://itu.int/en/ITU-T/climatechange/Pages/events-201305.aspx</a>.

Yours faithfully,

Malcolm Johnson
Director of the Telecommunication
Standardization Bureau

## ANNEX 1 (to TSB Circular 13)

## Terms of Reference for ITU-T Focus Group on Smart Sustainable Cities (FG-SSC)

#### 1. Rationale and Scope

Achieving sustainable urbanization, along with the preservation of our planet, has been recognized as one of the major challenges of our society in the coming decades. Urban areas reflect the complexity of our societies, where social, economic and environmental issues are tightly interconnected. Cities are responsible for more than 70% of global greenhouse gas emissions<sup>i</sup>, and they are accountable for 60-80% <sup>ii</sup>of global energy consumption <sup>iii</sup>, contributing to environmental degradation locally, regionally and globally.

Information and Communication Technologies (ICTs) can provide solutions to many of the problems facing cities as they become magnets for migrating populations as well as contributing to making cities more eco-friendly and economically viable.

In this sense it is important to emphasize the role that ICTs have to solve environmental challenges of cities worldwide; for example: management of water, energy, energy efficiency, solid waste, public transport, traffic, congestion, growth of ICT infrastructure and its environmental impact such as concerns related to EMF, visual aspects and air quality monitoring, etc.

Currently the role that ICTs play to help cities to tackle environmental issues has not been fully identified and recognized.

ITU-T Study Group 5 (ITU-T SG5) is working on environmental and climate change issues including the development of a methodology to assess the environmental impact related to ICT in cities. Taking into consideration that the issue of smart sustainable cities affects various stakeholders this Focus Group would play a key role in providing a platform to share views, develop a series of deliverables and showcasing initiatives, projects, policies and standards activities that are taking place in the area of smart and sustainable cities.

The FG-SSC will analyse ICT solutions and projects that promote environmental sustainability in cities that can be standardized by ITU-T SG5 and will identify best practices which could facilitate the implementation of such solutions in cities.

It will develop a standardization roadmap taking into consideration the activities currently undertaken by the various standards developing organizations (SDOs) and forums.

This "Focus Group on Smart and Sustainable Cities (FG-SSC)" will also invite non ITU-T members and will leverage the role of the ICT sector to foster the growth of smart and sustainable cities worldwide.

The Focus Group is established in accordance with Recommendation ITU-T A.7.

#### 2. Objectives

- Define the role of ICTs in cities that aim to be environmentally sustainable. This will include identifying ICT systems necessary to develop an environmental and sustainable city.
- Establishing liaisons and relationships with other organizations which could contribute to the standardization activities of ICTs, environment and climate change in cities.

- Establish a roadmap of the ICT sector contribution to smart and sustainable cities.
- Suggest future ITU-T study items and related actions within the scope of the ITU-T SG5 (see Appendix 1) for example on:
  - o Concepts, coverage, vision and use cases of smart and sustainable cities.
  - o Characteristics and requirements of smart and sustainable cities.
  - o Efficient services and network infrastructure of smart and sustainable cities, as well as its architectural framework from the environmental impact point of view.
- Identify or develop a set of key performance indicators (KPIs) to assess how the use of ICTs has an impact on the environmental sustainability of cities.
- Foster the development of strategies and best practices related to policies and standards to help cities deliver ICT environmental services including the optimization of the use of scarce resources and build resilience to climate change in cities.
- Identify potential barriers in the use of ICTs to achieve environmental sustainability in cities.
- Help ITU-T Study Group 5 to become a global reference on ICTs and its contribution to smart and sustainable cities.
- Set up a global gateway on ICTs contribution to smart and sustainable cities.

#### 3. Structure

The FG-SSC should establish sub-groups on the following three main areas taking into consideration the objectives listed above:

- ICTs role and roadmap for smart sustainable cities.
- Standardization gaps, KPIs, metrics and efficient ICT for smart sustainable cities.
- Communications, liaisons and members' engagement.

#### 4. Relationships

This Focus Group will work in close collaboration with all ITU-T Study Groups, especially SG 11, SG13, SG15 and SG 16. Within ITU-T SG5, it will interact with the following questions: Q7/5, Q13/5, Q14/5, Q15/5, Q16/5, Q17/5, Q18/5, Q19/5 through collocated meetings where and when possible.

This FG-SSC will collaborate with relevant entities, in accordance with Recommendation ITU-T A.7.

These entities include the following: municipalities, federation of municipalities, non-governmental organizations (NGOs), policy makers, SDOs, industry forums and consortia, companies, academic institutions, research institutions and other relevant organizations.

#### 5. Specific Tasks and deliverables

- Collect and document information on initiatives from the global smart and sustainable cities community on current activities and technical specifications.
- Develop a document which reflects the role of ICTs in environmentally sustainable cities.
- Identify or develop terminology and taxonomy for smart and sustainable cities.
- Develop a stakeholder map which is a document that will map all stakeholders involved in the area of ICTs and smart sustainable cities.

- Develop a document of KPIs to assess the impact of the use of ICT projects in cities.
- Develop a gap analysis of potential barriers for the implementation of ICTs for smart sustainable cities.
- Draft technical reports describing and addressing the gaps and identifying future standardization work for ITU-T SG5 in the field of ICT for smart sustainable cities.
- Send the final deliverables to the parent Study Group, other relevant Study Groups and other SDOs or organizations/consortia/forum as appropriate.

#### 6. Parent group

The parent group is ITU-T Study Group 5.

#### 7. Leadership

See clause 2.3 of Recommendation ITU-T A.7.

Chairman: Silvia Guzman, Telefónica, Spain

Vice-Chairman: Flavio Cucchietti, Telecom Italia, Italy

Vice-Chairman: Pablo Bilbao, Federación Argentina de Municipios, Argentina

Vice-Chairman: Franz Zichy, USA

Vice-Chairman: Nasser Saleh Al Marzougi, UAE

Vice-Chairman: Ziqin Sang, Fiberhome Technologies Group, China

Vice-Chairman: Sekhar Kondepudi, National University of Singapore, Singapore

#### 8. Participation

See clause 3 of Recommendation ITU-T A.7. A list of participants will be maintained for reference purposes and reported to the parent group.

It is important to mention that the participation in this Focus Group has to be based on contributions and active participations.

#### 9. Administrative support

See clause 5 of Recommendation ITU-T A.7.

#### 10. General financing

See clauses 4 and 10.2 of Recommendation ITU-T A.7.

#### 11. Meetings

The frequency and location of meetings will be determined by the Focus Group and the overall meetings plan will be announced as soon as possible. The Focus Group will use remote collaboration tools to the maximum extent, and collocation with existing meetings to the maximum extent. The meetings will be announced by electronic means (e.g., e-mail and website, etc.) at least four weeks in advance.

This group will take advantage of other ITU-T events on ICT, Environment and Climate Change. Some possible dates for future meetings could be:

- 1. Symposium on ICTs, Environment & Climate Change in Turin, May 2013
- 2. FG-SSC Meeting in Latin America hosted by Telefónica, June/July 2013
- 3. Third Green Standards Week, Madrid September 2013
- 4. SG5 meeting in Geneva, September/October/November 2013 (TBD).

#### 12. Technical contributions

Contributions are to be submitted at least twelve calendar days before the meeting takes place.

#### 13. Working language

The working language is English.

#### 14. Approval of deliverables

Approval of deliverables shall be taken by consensus.

#### 15. Working guidelines

Working procedures shall follow the procedures of Rapporteur meetings. No additional working guidelines are defined.

#### 16. Progress reports

See clause 11 of Recommendation ITU-T A.7.

#### 17. Announcement of Focus Group formation

The formation of the Focus Group will be announced via TSB Circular to all ITU membership, via the ITU-T Newslog and other means, including communication with the other involved organizations.

#### 18. Milestones and duration of the Focus Group

The Focus Group lifetime is one year from the first meeting (see ITU-T A7, clause 2.2).

A preliminary set of milestones includes:

- First FG-SSC Meeting: Turin, Italy, May 2013.
- Intermediate presentation of Focus Group SSC and its activities: Green Standards Week, Madrid, September 2013.

#### 19. Patent policy

See clause 9 of Recommendation ITU-T A.7.

## Appendix 1 (to ITU-T FG-SSC Terms of Reference)

#### Study Group 5 - Environment and climate change

Study Group 5 is responsible for studying ICT environmental aspects of electromagnetic phenomena and climate change.

Responsible for studies relating to protection of telecommunication networks and equipment from interference and lightning.

Also responsible for studies related to electromagnetic compatibility (EMC), to safety and to health effects connected with electromagnetic fields produced by telecommunication installations and devices, including cellular phones.

Responsible for studies on the existing copper network outside plant and related indoor installations.

Responsible for studies on methodologies for assessing the environmental impact of ICT, publishing guidelines for using ICTs in an eco-friendly way, tackling e-waste issues, and energy efficiency of the power feeding system.

Responsible for studies on how to use ICT to help countries and the ICT sector to adapt to the effects of environmental challenges, including climate change.

It is also identifying the needs for more consistent and standardised eco-friendly practices for the ICT sector (e.g. labelling, procurement practices, eco-rating schemes for mobile phones).

Study Group 5 is

Lead study group on electromagnetic compatibility and electromagnetic effects Lead Study Group on ICTs and climate change

Additional Information can be found at: http://itu.int/ITU-T/go/sg5.

<sup>&</sup>lt;sup>i</sup> See; http://www.unhabitat.org/downloads/docs/E\_Hot\_Cities.pdf

ii See: http://www.un.org/en/sustainablefuture/cities.shtml

iii See: http://www.unhabitat.org/content.asp?cid=9599&catid=7&typeid=46&subMenuId=0&AllContent=1