

Terms of Reference

ITU-T Focus Group on “Smart Cable Television” (FG SmartCable)

1. Scope

The Focus Group (FG), established in accordance with Recommendation ITU-T A.7 and under the auspices and charter of Study Group 9, aims to

- familiarize ITU-T with emerging attributes of “smart cable television,” i.e., advanced services and technologies for cable networks;
- identify potential impacts on standards development;
- investigate potential new ITU-T study items and related actions, and
- encourage collaboration between ITU-T and cable television-related communities;

The Focus Group should collaborate with other SDOs and other cable television-related communities (e.g., research institutes, forums and consortia, and academia).

2. Rationale

The evolution of Information and Communication Technology produces innovation for television service-provided experiences. There are a number of new possibilities: advanced capabilities such as personal video communication; telepresence; vertical applications and services; interactive home environment control/monitoring; as well as enhancements of the broadcasting technology itself such as ultra high-definition television, advanced 3D television, and free-viewpoint television, etc.

In addition, there are many emerging key component technologies for cable television such as very high-efficiency modulation methods being developed in some regions.

The primary aim of this Focus Group is to assist development of globally unique future ITU-T Recommendations on “Smart Cable Television”, taking advantage of the combination of aforementioned technologies with some possible improvements to existing deployed technologies.

The Focus Group should carry out a gap analysis and should produce deliverables based on the existing activities and expertise, but not to duplicate other efforts. The Focus Group should interact with the various research activities within ITU-T and other standardization communities with the emerging attributes of Smart Cable Television.

3. FG objective

The objective of the Focus Group is to collect and analyze the information from the existing relevant activities. The Focus Group is also intended to produce deliverables that would assist the developing work on future Recommendations to support Smart Cable Television including requirements, use cases, possible technical methods, etc.

To achieve this objective, the Focus Group should:

- develop a living list of standards bodies, forums, and consortia dealing with Smart Cable Television-related technologies

- collect visions and value propositions for Smart Cable Television
- provide terminology and taxonomy necessary to support Smart Cable Television
- identify use cases of Smart Cable Television
- analyze cable television system requirements and capabilities to support Smart Cable Television
- gather new ideas relevant to and identify potential study areas to support Smart Cable Television
- suggest future ITU-T study items and related actions
- identify potential impacts on standards development as it relates to cable television networks, e.g., for
 - gaps of standards for cable television networking and equipment to support Smart Cable Television
 - adaptation of advanced capabilities to integrated broadband cable networks including personal video communication and telepresence, vertical applications and services, interactive home environment control/monitoring, etc.
 - enhancements to current television services including Integrated Broadcast and Broadband (IBB) TV, ultra high-definition TV, multi-viewpoint TV, free-viewpoint TV, three-dimensional (3D) TV, etc.
 - support for multiple types of terminal devices and device integration for integrated broadband cable networks
 - application platforms and frameworks
 - user interface and user experience
 - transport network technology for integrated broadband cable networks, e.g., HFC, RFOG, PON-based cable television networks
 - modulation technology for integrated broadband cable networks
 - content creation and authoring
 - security and privacy for integrated broadband cable networks, e.g., digital rights management
 - gateway devices for integrated broadband cable networks
 - home networking technologies utilizing integrated broadband cable networks
 - cloud technologies as applicable to cable networks, e.g., TV application store and/or TV application repository, remote storage DVR, etc.
 - adaptation of M2M/IoT to integrated broadband cable networks
 - energy management as applicable to cable networks
 - support for emergency warning and disaster relief for integrated broadband cable networks
 - adaptation of mitigation techniques of radio signal interference and disturbance to cable networks
 - interoperability
 - accessibility and human factors for smart cable television

4. Relations within and outside ITU-T

The Focus Group should work in close collaboration with all ITU-T study groups (e.g., through collocated meetings, see clause 11), for instance on the coordination of respective work programmes in order to avoid duplication and overlap of work,

The following ITU-T Study Groups have particular relevance to this Focus Group:

- SG 5 on Radio signal interference and disturbance
- SG 11 on M2M/IoT
- SG 13 on service delivery platforms
- SG 15 on transport and modulation technology and home networking
- SG 16 on video coding, IPTV applications and accessibility
- SG 17 on security and privacy

The Focus Group should also cooperate and share its work with the other ITU sectors (ITU-R, ITU-D), and with other relevant bodies outside ITU-T (universities, research institutes, SDOs, forums/consortia, regulators, policy-makers) in accordance with Recommendation ITU-T A.7- via reports and memoranda.

Special attention should be paid to collaboration with SDOs (in particular ISO, IEC, ISO/IEC JTC1, SCTE, IEEE, 3D@Home, ETSI, W3C).

- Particular relevance for this Focus Group includes next generation access technology development projects developed within CableLabs, ETSI, DVB, and ETRI to name a few prominent organizations involved with the advanced cable television transmission technologies

5. Specific tasks and deliverables

- A living list of standards bodies, forums, and consortia dealing with smart cable television-related technologies, including information concerning their activities and documents in the context of Smart Cable Television standards framework
- Collect and summarize vision and value propositions of Smart Cable Television
- Terminology and taxonomy
- Gap analysis of existing standards for cable television systems to support Smart Cable Television
- Analysis of cable television system requirements and capabilities to support Smart Cable Television
- Use cases of services and reference models for cable television systems to support Smart Cable Television
- Roadmap to guide further developments of relevant ITU-T Recommendations

6. Parent group

The parent group is Study Group 9.

7. Leadership

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

Chairman:

- Thomas C. Russell (Society of Cable Telecommunications Engineers)

Vice-Chairmen:

- Satoshi Miyaji (KDDI Corporation)
- Gale Lightfoot (Cisco Systems)

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.

9. Administrative support

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

10. General financing of the FG

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 should be announced as soon as possible. The Focus Group should use remote collaboration tools to the maximum extent, and collocation with existing meetings (e.g. study groups and research activities). The meetings will be announced by electronic means (e.g., e-mail and website, etc.) at least 4 weeks in advance.

12. Technical Contributions

Technical contributions are to be submitted at least 1 week before the meeting takes place.

13. Working language

The working language will be English.

14. Approval of deliverables

Approval of deliverables will be taken by consensus.

15. Working guidelines

Working procedures will follow the procedures of Rapporteur meetings. See <http://www.itu.int/oth/T0A0F000006/en> .

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 by SG 9 via ITU publications and other means, including communication with the other organizations and/or experts, technical journals and the World Wide Web.

18. Milestones and duration of the FG

The Focus Group lifetime is one year from the inaugural meeting.

The following milestones are proposed:

- Holding the inaugural Focus Group meeting (19 – 21 June 2012); Location ITU in Geneva.
- Presentation of the first draft of the deliverables as identified in clause 5 at the SG 9 meeting in 14 – 18 January 2013

19. Patent policy

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