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| itu_logo | World Telecommunication Standardization Assembly (WTSA-16) Hammamet, 25 October - 3 November 2016 | | CCITT/ITU-T 60th Anniversary logo |
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| COMMITTEE 4 | | Addendum 27 to Document 43 (Rev.1)-E | |
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| Arab States Administrations | | | |
| Draft new Resolution [ARB-5] - Enable open source as a work methodology in ITU-T | | | |
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| **Abstract:** | This contribution contains an Arab Common Proposal for the World Telecommunication Standardization Assembly (WTSA-16), which proposes a new Resolution to enable open source as a work methodology in ITU-T. |

ADD ARB/43A27/1

DRAFT NEW RESOLUTION [ARB-5]

Enable open source as a work methodology in ITU-T

(Hammamet, 2016)

The World Telecommunication Standardization Assembly (Hammamet, 2016),

bearing in mind

*a)* the purposes of the Union are, *inter alia*, to promote and enhance participation of entities and organizations in the activities of the Union and foster fruitful cooperation and partnership between them and Member States for the fulfilment of the overall objectives as embodied in the purposes of the Union, to promote the extension of the benefits of the new telecommunication technologies to all the world's inhabitants and to harmonize the actions of Member States and Sector Members in the attainment of those ends (cf. the outcomes of the World Summit on the Information Society);

*b)* the Union, including its members, is committed to working together and collaborating with all stakeholders in the telecommunication/ICT environment in order to enable and foster access to and increased use of telecommunications/ICTs;

*c)* The World Summit on the Information Society (WSIS), in both its first and second phases (Geneva, 2003; and Tunis, 2005), recognized the important role played by open-source software in bridging the digital divide and realizing an inclusive information society;

*d)* ITU-T Objectives in Resolution 71 (Rev. Busan, 2014) of the Plenipotentiary Conference, and in particular (T.5) which mandates ITU-T to extend and facilitate cooperation with international, regional and national standardization bodies,

recalling

*a)* § 10e) and § 23o) of the Geneva Plan of Action of the WSIS, in which the research and promote awareness among all stakeholders of the possibilities offered by different software models, and the means of their creation, including open-source, were encouraged;

*b)* § 29) of the Tunis Commitment of the WSIS, in which the utilization of various technologies and licensing models, including those developed under proprietary schemes and those developed under open-source and free modalities is encouraged;

*c)* § 49) of the Tunis Agenda of the WSIS, in which the representatives of the peoples of the world support the development of software that renders itself easily to localization, and enables users to choose appropriate solutions from different software models including open-source, free and proprietary software;

*d)* Resolution 197 (Busan, 2014) of Plenipotentiary Conference, on facilitating the Internet of Things to prepare for a globally connected world;

*e)* Resolution 44 (Rev. Dubai, 2012) of World Telecommunication Standardization Assembly (WTSA), on bridging the standardization gap between developing and developed countries;

*f)* Resolution 77 (Dubai, 2012) of World Telecommunication Standardization Assembly (WTSA), on standardization work in the ITU Telecommunication Standardization Sector (ITU-T) for software-defined networking (SDN);

*g)* Resolution 58 (Rev. Dubai, 2014) of World Telecommunication Development Conference (WTDC), which invites members states to promote and undertake research and development of ICT-accessible equipment, services and software, with emphasis on free and open‑source software and affordable equipment and services,

considering

*a)* that innovative SMEs are actively participating in open-source activities;

*b)* that open-source software production is based on a commitment to share resources among a community of peers;

*c)* that more and more *de-facto* standards are fueled by open-source projects andinitiatives, especially in the software-defined networking (SDN) and network function virtualisation (NFV), cloud computing, video coding, IoT and IMT-2020 core network areas;

*d)* that the chief technology officers (CTO) meeting in 2015 were of the view that collaboration between the standardization and open-source communities will provide further impetus to ICT convergence, and they encouraged ITU-T to study how it might accommodate the open-source community, beginning with an analysis of open-source activities underway to identify the communities with which ITU-T could build collaboration in areas such as network function virtualization (NFV), software-defined networking (SDN), cloud computing, internet of things (IoT), and video coding;

*e)* More and more standards and open-source code development is performed in conjunction by the same group of people; open source has become a work methodology of standardization in more and more SDOs,

noting

*a)* the complexity and incompatibility of licensing terms are causing fragmentation in open‑source projects;

*b)* that the open‑source projects could benefit from collaborating with ITU-T with overall architecture and system design, quality, interoperability, roadmap, maintenance and support;

*c)* that open-source projects have much shorter release intervals than ITU-T Recommendations and a much more flexible organization of work,

recognizing

*a)* that open-source software benefits include: reducing the costs, improving security given that the source code can be checked by a large number of developers, encouraging vendor independence through open standards, increasing technical skills of the software developers;

*b)* that the benefits of open source to standardization include in particular:

i. in the developing process of functional specification, interoperability specification and test specification, early open‑source implementation can provide very useful feedback to pre-verify many specifications in detail therefore improving the standard;

ii. open-source implementations of standards augment their influence, breadth of application and ease of deployment;

*c)* the opportunities resulting from encouraging open-source projects in developing countries that include, *inter alia*: i) promoting the development of local software capabilities, thereby improving the growth of ICT industry and developing a knowledge-based economy; ii) improving the localization of software such that it meets local needs and develops local expertise in providing support services in a timely manner; iii) expanding applications aimed at satisfying the basic needs in the large socio-economic sectors of education and Government; iv) developing partnerships and expanding collaborative work, thereby leading to international networks and capacity-building;

*d)* that developers can build end-to-end IoT solutions based on open-source software projects which will foster connecting the world and facilitate the connection between the tiniest of devices and sensors;

*e)* that open-source projects could be very helpful to the pre-verification of many specifications in detail, and also could improving the implementations of these ITU-T Recommendations in the ICT industry,

recognizing further

*a)* the urgency to create within ITU-T an ecosystem of tools and collaboration around ITU‑T standardization that allows for the ITU membership to implement ITU Recommendations more easily so as to improve the dissemination and proliferation of these ITU-T Recommendations in the ICT industry;

*b)* the importance to maintain the competiveness and relevance of ITU-T as an SDO in keeping abreast with the open‑source evolution of ICT technologies and the ICT standardization environment;

*c)* ITU’s experience with reference implementations developed by using collaborative tools and additional open‑source implementations outside of ITU of these same ITU Recommendations/reference implementations;

*d)* initiative in related ITU-T Groups (e.g., FG IMT-2020) to collaborate with international open‑source communities on developing common‑interest specifications or ITU-T Recommendations, and sharing related open‑source software,

resolves to instruct all groups within ITU-T

1 to encourage the use of open source as a work methodology in its work, to develop reference implementations of functional specification, interoperability specification and test specification of ITU-T Recommendations;

2 to collaborate with open‑source projects as appropriate and necessary in order to develop and improve capacity of participants to this end,

instructs the Director of the Telecommunication Standardization Bureau

1 to provide necessary infrastructure and facilities to enable open‑source as a work methodology in ITU-T; in particular, to prepare the necessary tools, suites, analysers within ITU-T to facilitate interoperability testing opportunities and support to assist developers who are implementing ITU-T standards;

2 to take appropriate actions to facilitate and provide all necessary assistance to expedite the activities for implementation of this Resolution including facilitating the participation of SMEs involved in open‑source software development or implementation;

3 to provide open source related BSG training to ITU-T participants, in collaboration with open-source communities, BDT, etc.,

invites ITU membership

1 to contribute to open-source implementation to facilitate the development and deployment of ITU-T Recommendations;

2 to contribute expertise and facilities for open source related BSG training.