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| Asia-Pacific Telecommunity Member Administrations | | | |
| PROPOSED MODIFICATION TO RESOLUTION 90 | | | |
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| **Abstract:** | This document contains the proposal for modification of WTSA Resolution 90, “Open source in the ITU Telecommunication Standardization Sector” in order to enhance the interaction between open source solutions and international standards. The main proposed modifications include describing the impact of open source solutions for global digital transformation, analyzing the existing coordination of open source solutions and international standards, updating the future actions of ITU-T, and providing editorial changes. | |
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Introduction

With the trend of global digital transformation, open source solutions have been becoming the major innovation mode in global ICT industry and mature open source solutions as *de-facto* standards and international standards have been together establishing the new normalization paradigm, especially in cloud computing, AI, big data, video/audio codec, SDN/NFV, and IoT areas. Open source solutions and international standards can interact with each other for better facilitating innovation, reshaping ecosystems and bridging the standardization gap.

Some other organizations, including ISO/IEC, IETF, IEEE, W3C, OASIS, Linux Foundation, and Eclipse Foundation, have begun to explore the linkage between international standards and open source projects from their respective perspectives, such as developing international standards for specifying open source software elements, e.g. ISO/IEC 5230:2020, establishing open source projects for verifying the pre-published international standards, e.g. W3C open source software, and progressing specifications based on open source software working method, e.g. Runtime Spec v1.2 (2024) of Open Container Initiative (OCI), which is a Linux Foundation project.

Further to the digital transformation of international standards, some SDOs have initiated the study on machine readable standards, e.g. the concept for Standards Machine Applicable, Readable and Transferable (SMART) of IEC/ISO. Open source solutions can facilitate and accelerate the implementation of machine readable standard because of their open realization, fast iteration and wide usage.

Over the last eight years, ITU-T has explored open source software as another standardization form, especially in SG12 and SG16 on audio and video coding, respectively, e.g. ITU-T G.191 (2023) and ITU-T H.266.2 (2022). Additionally, at the WSIS+20 Forum High-Level Event in May 2024, ITU and the Linux Foundation announced their intent to launch the OpenWallet Forum to stimulate global access to the digital wallets that form key technology building blocks for digital public infrastructure. The OpenWallet Forum aims to build on the success of the OpenWallet Foundation, which hosts the core open source components for digital wallets.

Proposal

APT Member Administrations propose to modify Resolution 90 to continue and enhance open source work in ITU-T. The proposed revision of Resolution 90 is attached herewith. The main purpose is to provide constant guidance to specific work in ITU-T’s various SGs and FGs, etc., in ITU-T’s long-term strategies towards global digital transformation and bridging the standardization gap.

MOD APT/37A30/1

RESOLUTION 90 (Rev. New Delhi, 2024)

Open source in the ITU Telecommunication Standardization Sector

(Hammamet, 2016; New Delhi, 2024)

The World Telecommunication Standardization Assembly (New Delhi, 2024),

recalling

*a)* § 10e) and § 23o) of the Geneva Plan of Action of the World Summit on the Information Society (WSIS);

*b)* § 29) of the Tunis Commitment of WSIS;

*c)* § 49) of the Tunis Agenda for the Information Society of WSIS;

*d)* Resolution 44 (Rev. Geneva, 2022) of WTSA, on bridging the standardization gap between developing[[1]](#footnote-1)1 and developed countries;

*e)* Resolution 58 (Rev. Kigali, 2022) of World Telecommunication Development Conference on telecommunication/information and communication technology accessibility for persons with disabilities and persons with specific needs, which resolves to invite Member States to promote and undertake research and development of telecommunication/ICT-accessible equipment and software, with emphasis on free and open-source software and affordable equipment and services;

*f)* UN Sustainable Development Goal (SDG) 9 on building resilient infrastructure, promoting inclusive and sustainable industrialization and fostering innovation,

noting

*a)* that open source solutions play a significant role in the global digital transformation and bridging the standardization gap;

*b)* that some open source software is interpreted as another form of standardization inside ITU-T, especially in SG12 and SG16 on audio and video coding, respectively;

*c)* that several standards development organizations (SDOs) and open source projects, such as ISO/IEC, IETF, IEEE, W3C, OASIS, Linux Foundation, and Eclipse Foundation, have explored the linkage between international standards and open source solutions from their respective perspectives, such as developing international standards for specifying open source software elements and establishing open source projects for verifying the pre-published international standards;

*d)* that providing machine readable standards is one of the future development objectives of ICT standardization and open source solutions can facilitate and accelerate its implementation;

*e)* that at the WSIS+20 Forum High-Level Event in May 2024, ITU and the Linux Foundation announced their intent to launch the OpenWallet Forum, by taking the OpenWallet Foundation as the host of core open source components for secure and interoperable digital wallets, to stimulate global access to the digital wallets that form key technology building blocks for digital public infrastructure,

recognizing

*a)* that mature open source solutions support the development and implementation of international standards in terms of helping to overcome the implementation limitations, accelerating the development, improving the quality, providing the optimization basis, verifying the feasibility, facilitating the implementers’ understanding, advancing the promotion, and improving the interoperability of international standards;

*b)* that international standards support the development of open source solutions in terms of accelerating the wide application, providing stable and evolving standardized technology framework and external interfaces, and facilitating sustainable iteration of open source solutions,

resolves

that the Telecommunication Standardization Advisory Group (TSAG) continue to work on the benefits and disadvantages of the implementation of open-source projects in relation with the work of the ITU Telecommunication Standardization Sector (ITU‑T), as appropriate,

instructs all applicable study groups of the ITU Telecommunication Standardization Sector, within available financial resources

1 to provide inputs to TSAG enquiries on open source as listed in TSAG Report 8, July 2016;

2 to consider output from TSAG on open source, in order to study the value of using open source to develop reference implementations of ITU‑T Recommendations, as appropriate;

3 to consider the output of the studies under *instructs*2 above, to continue using open source as appropriate;

4 to support the use of open-source projects in their work, as appropriate, taking into account the outcome of the TSAG study;

5 to continue engaging with open-source projects;

6 to analyse the relationship with the mature and representative open source projects in the industry within their respective standardization scope, and to consider the feasibility of further cooperation between international standards and open source projects, in order to advance the implementability of international standards,

instructs the Director of the Telecommunication Standardization Bureau

1 to provide open source related training (e.g. tutorials, seminars, workshops) to ITU‑T participants, in collaboration with open-source communities and the Telecommunication Development Bureau, taking into account the ITU‑T objective to bridge the standardization gap and digital gender gap and the budgetary constraints of the Union;

2 to submit a report to TSAG annually on progress achieved in implementing this resolution;

3 to analyse and evaluate the impact of open source software working mechanism on digital transformation of standardization;

4 to encourage exploring and using the collaborative tools for developing Recommendations based on open source software working mechanism;

5 to discuss the further cooperation feasibility with open-source communities, including but not limited to Linux Foundation,

instructs the Telecommunication Standardization Advisory Group

to continue fulfilling of the outcomes of TSAG Report 8 in July 2016 concerning open source,

invites the ITU Council Working Group on financial and human resources

to evaluate any potential financial implications for the Union of implementing this resolution,

invites the ITU membership

to contribute to the implementation of this resolution.

1. 1 These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition. [↑](#footnote-ref-1)