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| PROPOSED MODIFICATION TO RESOLUTION 94 |
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| **Abstract:** | This document contains the proposal for modification of the WTSA Resolution 94, “Standardization work in the ITU Telecommunication Standardization sector for cloud-based event data technology”. The main modifications include *resolves to instruct* various study groups to make recommendations on data localization and end-to-end information security of cloud-based event data technology and to instruct Director of TSB to assist Member States through knowledge sharing and capacity building, providing workshops, webinars, tools on cloud-based event data technology and the development of reports on the technology, its current state and use cases. |
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Introduction

There has been a digital revolution propelled by advancement of internet and communication technology, low-cost data storage, mobile computing, generative artificial intelligence, software as a service (SaaS), cloud computing and Internet of Things (IoT).

The evolving advancements and constant innovation of technologies such as Generative AI, Large Language Model (LLM), and cloud security in the management of cloud computing and Internet of Things (IoT) provide the agility and resilience of cloud-based event data technology.

The relevant achievements and commitments of Study Groups 13, 16, 17 and 20 of the ITU Telecommunication Standardization Sector have proven that there is continuing effort made to support this cloud-based event data technology requirements.

* SG13 works on cloud computing and big data analytics.
* SG16 works on intelligent transport systems (ITS), connected healthcare/e‑health, requirements and reference framework of cloud-edge collaboration in industrial machine vision systems.
* SG17 works on cloud-computing security, guideline on edge computing data security, security architecture of edge cloud, security guidelines for selecting computing methods and resources from cloud service providers, security guidelines for cloud-based data recorders in automotive environment.
* SG20 works on IoT and its applications, functional architecture of AI enabled device-edge-cloud collaborative services for IoT and smart city, convergence framework for enhancement of service intelligence based on IoT, framework of cross edge decentralized service by using DLT and edge computing technologies for IoT devices.

Proposal

APT Member Administrations propose to modify WTSA Resolution 94 on “Standardization Work in the ITU Telecommunication Standardization Sector for Cloud-Based Event Data Technology”.

ITU-T shall continue the standardization work on cloud-based event data technology, provide necessary assistance to speed up the standardization work and to encourage participation and contributions from Member States particularly developing countries and Sector Members.

MOD APT/37A33/1

RESOLUTION 94 (Rev. New Delhi, 2024)

Standardization work in the ITU Telecommunication Standardization
Sector for cloud‑based event data technology

(Hammamet, 2016; New Delhi, 2024)

The World Telecommunication Standardization Assembly (New Delhi, 2024)

recalling

the relevant provisions of Article 1 of the ITU Constitution, in particular No. 17, which stipulates that the Union is to promote the adoption of measures for ensuring the safety of life through the cooperation of telecommunication services,

considering

*a)* the importance of cockpit voice recorder (CVR)/flight data recorder (FDR) as tools for increasing aviation safety;

*b)* the growing interest in event data recorders (EDR) to improve the safety and quality of life in all industries, e.g. EDR for transportation (automated driving), digital fault recorder (DFR) for utilities (smart grid, smart water management), and cardiac event recorder (CER) for healthcare (connected medical devices/implants);

*c)* the important role of cloud computing as an enabler of network access to a scalable and elastic pool of shareable physical or virtual resources with self-service provisioning and administration on demand;

*d)* the advancement of internet and communication technology, low-cost data storage, mobile computing, generative artificial intelligence, software as a service (SaaS), cloud computing and Internet of things (IoT) has led to digital revolution in electronics and computing fields, with massive proliferation of smart devices, low-cost sensors technologies, Big Data, High Performance Computing (HPC) capabilities and Wireless Sensor Networks (WSNs);

*e)* the need for ensuring information security in cloud computing, IoT, Big Data, mobile/wireless networks and the new emerging technologies;

*f)* the growing deployment of IoT in applications related to sustainable growth such as agriculture, smart cities, etc.;

*g)* the growing deployment of applications allowing the exchange of digital versions of currencies in developing as well as developed countries,

noting

*a)* that the ITU Telecommunication Standardization Sector (ITU‑T) should play a leading role in the development of standards for EDR application in cloud computing and IoT, Big Data, mobile/wireless networks and the new emerging technologies;

*b)* that a standards ecosystem should be created, with ITU‑T at its centre,

recognizing

*a)* the recommendations made by the ITU‑T Focus Group on aviation applications of cloud computing for flight data monitoring (FG‑AC), studying the feasibility of using cloud computing in an aviation context and of streaming flight data;

*b)* the relevant achievements of ITU‑T Study Groups 13 (cloud computing, big data analytics), 16 (intelligent transport systems (ITS), connected healthcare/e‑health), 17 (cloud-computing security) and 20 (IoT and its applications, with an initial focus on smart cities and communities);

*c)* that ITU‑T has unmatched advantages when it comes to requirements and architecture standards;

*d)* that foundation work on EDR requirements and architecture standards be initiated so that a set of standards may be developed through industry-wide synergy;

*e)* that the design of a real-time processing event-driven cloud-based architecture based on open-source technologies is able to provide high availability, high reliability, high throughput low latency and cost-effective solutions;

*f)* that a real-time data processing (streaming) approach, built upon message-driven reactive systems, offers a high degree of resilience and scalability for cloud-based event data technology,

resolves to instruct Study Groups 13, 16, 17 and 20 of the ITU Telecommunication Standardization Sector

1 to further study and evaluate existing, evolving and new Recommendations with respect to cloud-based event data technology;

2 to make recommendations to the Telecommunication Standardization Advisory Group on how to address the topics that are outside the mandate of the study groups;

3 to make recommendations on data localization and end-to-end information security of cloud-based event data technology,

instructs the Telecommunication Standardization Advisory Group

to drive a concerted effort across relevant study groups to accelerate standardization work on cloud‑based event data technology,

instructs the Director of the Telecommunication Standardization Bureau

1 to provide the necessary assistance to speed up standardization work on cloud-based event data technology and to encourage participation and contributions from Member States, particularly developing countries;

2 to assist Member States through knowledge sharing and capacity building, providing workshops, webinars, tools on cloud-based event data technology and the development of reports on the technology, its current state and use cases;

3 to organize (a) workshop(s) to collect requirements and inputs on this technology from a wide range of various stakeholders,

invites Member States, Sector Members, Associates and academia

to submit contributions for developing standards for cloud-based event data technology.