## WORLD TELECOMMUNICATION STANDARDIZATION ASSEMBLY New Delhi, 15-24 October 2024

# Resolution 94 – Standardization work in the ITU Telecommunication Standardization Sector for cloud-based event data technology



#### FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, and information and communication technologies (ICTs). The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

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

*b)* 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;

c) the need for ensuring security in cloud computing, and in new and emerging telecommunications/information and communication technologies (ICTs);

*d)* the growing use of cloud-based event data technology in the Internet of Things (IoT) for sustainable development,

#### 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 in new and emerging telecommunications/ICTs;

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 in previous study periods of ITU-T Study Groups 13 (cloud computing, big data analytics), 16 (intelligent transport systems (ITS), connected health care/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 real-time cloud-based event data processing technologies can provide benefits in terms of availability, reliability, scalability and cost-effectiveness,

resolves to instruct Study Groups 13, 20 and 21 of the ITU Telecommunication Standardization Sector, each within their mandates

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

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,

instructs Study Group 17 of the ITU Telecommunication Standardization Sector

to develop ITU-T Recommendations and technical reports on the end-to-end security of cloud-based event data technology, including event data handling,

#### 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, in particular developing countries<sup>1</sup>;

2 to organize (a) workshop(s) to collect requirements and inputs on cloud-based event data technology from a wide range of stakeholders;

3 to assist Member States through knowledge-sharing and capacity building on cloud-based event data technology,

#### invites Member States, Sector Members, Associates and Academia

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

<sup>&</sup>lt;sup>1</sup> These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.