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Government of India

Department of Telecommunications Telecommunications Engineering Centre Khurshid Lal Bhawan, Janpath, New Delhi-110001

(Future Networks Division)

Dated: 04.12.2024

Circular

Subject: Inviting nominations for National Working Group (NWG)-12 corresponding to ITU-T Study Group-12 regarding "Performance, Quality of Service (QoS), Quality of Experience (QoE) and end to end service", for the Study Period 2025-2028.

Telecommunication Engineering Centre (TEC) is the nodal authority of Department of Telecommunications (DoT), Government of India, for constituting various National Working Groups (NWGs) corresponding to respective International Telecommunication Union (ITU) Study Groups (SGs). The Study Groups of ITU's Telecommunication Standardization Sector (ITU-T) assemble domain experts from around the world to develop international standards known as ITU-T Recommendations which act as defining elements in the global infrastructure of information and communication technologies (ICTs).

- 2. TEC has re-constituted National Working Group (NWG)-12 corresponding to ITU-T SG-12 titled "Performance, Quality of Service (QoS), Quality of Experience (QoE) and end to end service " for the study period 2025-2028, under the chair-ship of Dy. Director General (Future Networks), TEC. NWG-12 has the responsibility of submitting the contributions in ITU-T SG- 12 as Indian Contribution.
- 3. ITU T Study Group 12 is responsible for Recommendations on Performance, Quality of Service (QoS) and Quality of Experience (QoE) for the full spectrum of terminals, networks, services and applications, ranging from speech over fixed circuit-based networks to multimedia applications over networks that are mobile and packet based. Included in this scope are the operational aspects of performance, QoS and QoE; the end-to-end quality aspects of interoperability and the development of multimedia quality assessment methodologies, both subjective and objective. It covers following series of recommendations in related responsibility areas:

<u>E series</u>: Overall network operation, telephone service, service operation and human factors

G series: Transmission systems and media, digital systems and networks

I series: Integrated services digital network

J series: Cable networks and transmission of television, sound programme and other multimedia signals

<u>P series</u>: Telephone transmission quality, telephone installations, local line networks <u>Y series</u>: Global information infrastructure, Internet protocol aspects, nextgeneration networks, Internet of Things and smart cities

- The list of ITU-T SG-12 questions under study is as follows:
 - i. Q1/12: SG12 work programme and quality of service/quality of experience (QoS/QoE) coordination in ITU.
 - ii. Q2/12: Definitions, guides and frameworks related to quality of service/quality of experience (QoS/QoE).
 - iii. Q 4 /12 : Objective methods for speech and audio evaluation in vehicles.
 - iv. Q5/12: Telephonometric methodologies for handset and headset terminals.
 - v. Q6/12: Analysis methods for speech and audio using complex measurement
- vi. Q7/12: Methodologies, tools and test plans for the subjective assessment of speech, audio and audiovisual quality interaction.
- vii. Q9/12 Perceptual-based objective methods and corresponding evaluation guidelines for voice and audio quality measurements in telecommunication services.
- viii. Q10/12 Conferencing and telemeeting assessment.
- ix. Q12/12 Operational aspects of telecommunication network service quality and end-to-end performance consideration.
- x. Q13/12 Quality of experience (QoE), quality of service (QoS) and performance requirements and assessment methods for multimedia applications.
- xi. Q14/12 Development of models and tools for multimedia quality assessment of packet-based video services.
- xii. Q15/12 Parametric and E-model-based planning, prediction and monitoring of conversational speech and audio-visual quality.
- xiii. Q17/12 Performance of packet-based networks and other networking technologies.
- xiv. Q19/12 Objective and subjective methods for evaluating perceptual audiovisual quality in multimedia and television services.
- xv. Q20/12 Perceptual and field assessment principles for quality of service (QoS) and quality of experience (QoE) of digital financial services (DFS).

As standardisation is a consultative process, nominations of subject matter/ domain experts are solicited for membership in the NWG-12. It is expected that members would bring either new ideas or contributes to existing studies at SG12.

5. Stakeholders, Academia, Industry Associations, Startups or Organizations with related working domain may kindly send their nominations for the membership in NWG-12, to adgn.tec@gov.in with a copy to dirn1.tec@gov.in, ddgn.tec@gov.in latest by 11.12.2024 in the following format:

Name	Organization	Designation	Email ID	Contact No.	Working Domain

(BRAJESH KUMAR) Director(FN), TEC

- All stakeholders through DoT/TEC website.
 ADET(IT), DoT HQ- for uploading on DoT website.
 AD(IT), TEC- for uploading on TEC website.

Copy to:

1. Sr. DDG, TEC- for kind info pl.