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| The International Teleocmmunication Union - Connecting the World. | **International telecommunication union****Telecommunication Standardization Bureau** |  |
|  | Geneva, 11 January 2022 |
| Ref: | TSB Circular 374TSB Events/SC | **To:**- Administrations of Member States ofthe Union;- ITU-T Sector Members;- ITU-T Associates;- ITU Academia |
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| E-mail: | tsbevents@itu.int  | **Copy to:**- The Chairmen and Vice-Chairmen ofITU-T Study Groups;- The Director of the Radiocommunication Bureau;- The Director of the Telecommunication Development Bureau;- The Director of the ITU regional office for the Americas |
| **Subject**: | **Workshop on AI and multimedia: Exploration of new frontiers and cross-SDO synergy (Fully virtual, 18 January 2022)** |

Dear Sir/Madam,

1 The **International Telecommunication Union (ITU)** together with the **International Organization for Standardization (ISO)** and the **International Electrotechnical Commission (IEC)** JTC1 SC29 are organizing a workshop on **"AI and Multimedia: Exploration of new frontiers and cross-SDO synergy**" which will take place virtually on **18 January 2021** from 1300 to 1630 hours, Geneva time. The workshop will be held in conjunction with the ITU-T Study Group 16 meeting taking place online, 17- 28 January 2022.

2 AI and multimedia enjoy a natural close relationship. The two areas have been nourishing each other and stimulating developments in both domains. The connections between these two are natural, intrinsic and mutually complementary. They are both based on the utilization of the most advanced mathematical tools, e.g., modelling, transforms and optimization techniques: multimedia provides a vast application area for AI applications, while AI empowers multimedia by ushering revolutionary technologies and enriches use cases and scenarios.

3 AI and multimedia today constitute a very strategic group of subjects under study in ITU-T SG16, ISO/IEC JTC 1/SC29, and various other organizations.

5 AI is revolutionizing many technical areas in the general area of multimedia, impacting topics such video, audio data coding, representation, utilization, services, and applications. AI algorithms can be tools embedded in traditional multimedia data coding, processing and generation methods; however, complete new paradigms powered by AI can also become a reality in the near future and give birth to new standards.

6 Multimedia data, which constitutes the bulk of all the internet data nowadays, will be consumed by both humans and machines. Investigation of innovative technologies such as video coding for machines has been under study in the JPEG and MPEG working groups of SC29, and it is believed that these technologies will be deployed in various digital multimedia applications and services being (or to be) developed in SG16.

7 At the high-level conference of senior industry representatives known as ITU CXO meeting held in Dubai, 7 December 2021, the matter of AI and multimedia was thoroughly discussed and led to the following conclusion to be included in the CXO meeting's communique: *CxOs highlighted their support for ITU to stimulate closer collaboration among communities contributing the development of AI/ML-enriched multimedia standards, recognizing the leading role played by ITU, ISO and IEC in the field.*

8 The SDOs that are closely involved in the technical study and standardization of AI and multimedia as an integrated subject rather than as two separate disciplines are encouraged to have a platform for:

* Information sharing, views exchange to facilitate mutual understanding building
* Coordination and synchronization
* Awareness promotion targeting industry, academia, regulators, etc., to uncover new use cases and scenarios
* Exploration of the way forward and opening of new frontiers
* Addressing issues of common interest e.g., privacy, trust, security, regulatory matters

9 Also, some SDOs with well-established capabilities and history in developing multimedia standards investigate future directions after recent significant milestones. This is the situation facing ITU-T SG16 and ISO/IEC JTC 1/SC29 when their joint efforts successfully developed Versatile Video Coding (VVC) in mid-2020.

10 Coordination and synchronization amongst different SDOs means not only a well-developed mutual understanding to avoid duplication and overlap, but also a model in which each SDO's strength can be best leveraged through a reasonable division of work. For example, low-level underlying technical standards from JPEG & MPEG can make useful building blocks for work in several key Questions in ITU-T SG16 like Q5/16, Q12/16, Q23/16, Q21/16 and Q28/16.

11 Therefore, ITU-T SG16 and ISO/IEC JTC 1/SC29 are organizing a joint workshop on the subject of AI and multimedia in the hope to boost the upcoming work in the common areas between AI and multimedia.

12 Participation in the workshop is free of charge and open to all and in particular to

* Major SDOs that are involved in the general direction and AI and multimedia such as ITU-T SG16, ISO/IEC JTC 1/SC29, IEEE, etc.
* Private sector entities engaged in development of hardware and software for AI and multimedia applications
* Contents providers and vendors for both conventional audio/visual contents and AR/VR contents
* Game developed and vendors
* Academia
* Regulators
* Anyone who wishes to contribute to the work.

13 All pertinent information relating to this virtual workshop, including the draft programme, speakers, remote connection link and registration details, will be updated regularly on the event website at https://www.itu.int/en/ITU-T/Workshops-and-Seminars/2022/0118 as new or modified information becomes available. Participants are requested to check periodically for new updates.

Yours faithfully,

Chaesub Lee

Director of the Telecommunication

Standardization Bureau