



Department of Telecommunications  
Telecommunication Engineering Centre  
K.L. Bhawan, Janpath, New Delhi – 110001  
(Convergence & Broadcasting Division)



No: - 4-16/2018-C&B/TEC/NWG-9

dated: 16.08.2022

**Sub: Minutes of Meeting held on 16-08-2022 of the National Working Group 9 (NWG-9) corresponding to ITU-T Study Group 9 (SG9) for the Study Period 2022- 2024.**

The fourth meeting of the reconstituted National Working Group-9 (NWG-9) corresponding to the ITU-T Study Group 9 (SG9) for Study Period 2022-24 regarding "Audio visual content transmission and integrated broadband cable networks" or "Broadband Cable and TV" was held on 16-08-2022 under the chairmanship of Sh. Avinash Agarwal, DDG (Convergence & Broadcasting), TEC through video-conferencing. List of participants is placed at Annexure-I.

2. At the outset, Sh. Rakesh Desai, Director (C&B-II) TEC & Convenor NWG-9, welcomed all the participants and briefly explained about the discussions held during the previous three meetings. He explained the members about the Agenda of the meeting and mentioned that seven draft contributions, proposing two new Recommendations and two new Technical Reports, were circulated among the members on 15<sup>th</sup> August, 2022 for their perusal and suggestions/ inputs and further deliberation in this meeting.
3. Shri Avinash Agarwal, Chairman NWG-9 & DDG (C&B) TEC, in his introductory remarks, explained about progress made in preparing the draft contributions. He highlighted that the next meeting of ITU-T SG9 is scheduled from 6th to 14th September 2022 and last date to upload contributions on ITU-T portal is 24th August 2022, and therefore, NWG-9 has to finalise the contributions by 17<sup>th</sup> August, 2022.
4. After the introduction, Sh. Avinash Agarwal presented draft contributions prepared on the basis of inputs/ comments from the members in the following areas: -
  - i. Draft new Recommendation on “Functional requirements of Conditional Access Systems (CAS) for factual subscriber-base reporting and protected delivery of content”;
  - ii. Draft new Technical Report regarding “Secondary distribution of digital television and audiovisual content to portable devices using WiFi”;
  - iii. Draft new Technical Report regarding “Technical advances, challenges, and best practices in live captioning”;
  - iv. Draft new Recommendation on "Functional requirements for terminal devices of the Broadcast Direct to Mobile (D2M) networks”.
5. Sh. Avinash Agarwal also apprised the participants about the members who actively contributed for preparing the proposed contributions. Each contribution was discussed in detail and members endorsed all the seven draft contributions. Major General Dr. Pritam Bisnoi, TSDSI volunteered to

support on behalf of TSDSI the draft contributions on “Functional requirements of Conditional Access Systems (CAS) for factual subscriber-base reporting and protected delivery of content”.

6. Dr. Pradipta Biswas, IISc Bengaluru & Vice-Chair NWG-9, clarified the difference between mandatory requirements and functional requirements. He stated that he is working on a contribution regarding “Common user profile format for audio-visual content distribution” and will share the same to the Group in due course.
7. Sh.Pallab Dutta, C-DoT requested to include the name of Shri Manavdeep Singh, C-DOT in respect of contributions on “Secondary distribution of digital television and audiovisual content to portable devices using WiFi”.
8. Ms. Meenakshi Singhvi, Prasar Bharati, explained the context of the draft contribution regarding "Functional requirements for terminal devices of the Broadcast Direct to Mobile (D2M) networks” and emphasised the need of such requirements.
9. Sh.Rajiv Khattar outlined the objectives and scope of the proposed technical report on “Technical advances, challenges, and best practices in live captioning” and stated that this report aims to provide a roadmap to make accessibility faster, accurate, and simpler using advanced technologies such as AI/ ML.
10. Sh. Avinash Agarwal requested to all the participants to go through the draft contributions and send their suggestions by today EOD so that the same may be considered and drafts amended immediately, if required.
11. Sh. Avinash Agarwal summarised the inputs of the members in respect of each of the aforesaid draft contributions. He stated that finalised draft contributions will be uploaded on ITU-T website within the prescribed time after approval of the competent authority in D/o Telecommunications.
12. **The key action points emerged from the meeting are as under: -**
  - a. NWG-9 endorsed all the seven contributions and recommended to forward them to ITU-T SG9 after due approvals. The members may suggest corrections in the draft contributions, if any, by 16<sup>th</sup> August, 2022.
  - b. The finalised draft contributions will be uploaded on ITU-T website within the prescribed time after getting approval of the competent authority in D/o Telecommunications.
13. The meeting ended with the vote of thanks to the chair.

*R.S. Desai*

(Rakesh Desai)  
Convener, NWG-9 &  
Director, (C&B-II), TEC

Encl.: Annexure-I

To,  
All members of the NWG-9

Copy for kind information to:  
Sr.DDG & Head TEC, New Delhi

## ANNEXURE-I

### **List of Participants:**

1. Sh. Avinash Agarwal, Chairman NWG-9 and DDG C&B, TEC.
2. Dr. Pradipta Biswas, IISc Bengaluru, Vice-Chair NWG-9 & Vice-Chair SG9.
3. Prof. Rajendra Kumar Pandey, IIT BHU.
4. Ms. Meenakshi Singhvi, Director (Engg.), AIR & Doordarshan (WR).
5. Sh.A.K.Mittal, TSDSI.
6. Major General Dr. Pritam Bishnoi, TSDSI.
7. Sh. Pallab Dutta, C-DoT.
8. Sh. Rajiv Khattar, Researcher & Industry specialist
9. Sh. Subhash Kumar, DS, MIB.
10. Sh. Sunil Gautam, Director (SPPI), DoT.
11. Sh. Naveen Khichar, ADET, DoT.
12. Sh. Rakesh Desai, Convener, NWG-9 & Director (C&B)-II), TEC.
13. Ms. Muskan Chaudhary, Intern, TEC.
14. Mr Adil Shaharyar, Intern, TEC.