Department of Telecommunications
Telecommunication Engineering Centre
Khurshid Lal Bhawan, Janpath, New Delhi -110001
(Convergence & Broadcasting Division)

F.No. 4-3/2022-C&B/TEC/AI-Fairness   dated September 14, 2022

Subject: Record of Discussions- Consultation Meeting on Framework for Fairness Certification of Artificial Intelligence / Machine Learning Systems

      The Consultation Meeting on " Framework for Fairness Certification of Artificial Intelligence (AI) / Machine Learning (ML) Systems" was held on 1st September, 2022 at 3:00 p.m. through video-conferencing under the chairmanship of Sr. DDG & Head, TEC wherein industries, academia, research organisations, Government organisation / Departments and other stakeholders were invited. This meeting was attended by more than 50 participants.

Welcome address by Sh. Rakesh Desai, Director (C&B-II), TEC

1. At the outset, Sh. Rakesh Desai welcomed all the participants to the Consultation Meeting. He apprised the participants about the Agenda of the meeting and proceedings of the meeting

2. He briefly explained the participants about the need for fairness assessment and certification of AI/ ML systems in view of possibilities of unintended biases in such systems; relevant provisions in NDCP-2018 and TEC webinar dated 22nd March, 2022 on this subject. He further requested Sh. Ritu Ranjan Mittar, Senior DDG & Head, TEC to deliver his keynote address.

Keynote address by Sh. Ritu Ranjan Mittar, Senior DDG & Head, TEC

3. Sh. R.R. Mittar briefly mentioned about the core function and activities of TEC. He mentioned that AI/ ML applications are the state-of-the art technologies predominately used in social and economy sectors and Government Organisations are using these technologies for delivery of public services and e-governance. He emphasized the need for adoption of AI in a responsible manner keeping in view the potential threat of bias in these applications and further added that the TEC initative will lead to build public trust in the use of these systems.

4. He also pointed out that Governments globally can play an important role in facilitating dialogues about AI/ML systems between different stakeholders and the communities as well as in keeping the trust of citizens on such systems, while ensuring advancements in technology and innovation in AI/ML systems.

5. He invited all the participants for fruitful and positive discussions and to give their suggestions / inputs in the matter so that TEC may pursue the matter of fairness in AI/ML systems further in overall benefit of the sector and citizen of the country.

After the keynote address by Sr DDG & Head, TEC, Sh. Avinash Agarwal, DDG (Convergence & Broadcasting), TEC was requested to set the context and address the meeting.

Setting the Context and Presentation on Fairness in AI/ML systems by Sh. Avinash Agarwal, DDG (C&B), TEC

6. Sh. Avinash Agarwal, in his opening remarks, stated that AI/ML applications have been increasingly used in various domains and biases can enter into these systems due to imperfect training datasets, algorithms used for learning and predictions, user interactions, etc. While citing different cases of bias in AI/ML applications, he informed that various researchers have demonstrated that many AI Systems deployed by leading organisations and governments were biased and favoured a particular demography or discriminated against some demography.

7. To explain the subject further, he made a presentation on TEC initiative on AI Fairness Assessment Framework. He explained the concept of fairness in AI and the need of independent audits for assessing fairness of AI/ML systems. He also apprised the participants about the prevailing policy framework and Government initiatives in AI/ML areas. He also discussed in detail about the responses received from various stakeholders during TEC webinar dated 22nd March, 2022.

8. He stated that TEC has been working on voluntary fairness assessment of AI/ ML systems by generating fairness score of AI systems in objective manner to benefit every citizen of the country, startups and MSMEs in particular and even large enterprises. He further added that TEC is also considering to frame suitable guidelines for the fairness assessment of AI/ ML Systems as well as to issue fairness rating/ certification as a benchmark of fairness.

9. He highlighted the need of a standardised operating procedure (SOP) as well as a standard score to evaluate and compare different AI Systems for fairness. He also clarified that one SOP may not be sufficient for different situations or different types of AI Systems. He mentioned that various fairness metrics are already being used to measure AI fairness and suggested that a common score for comparison on top of these metrics may be more effective and insightful in respect of assessing fairness in AI/ML systems. He requested the participants to give their suggestions on SOP and its implementation in India.

10. He presented the proposed action plan of TEC for developing a Standard for fairness assessment and rating of AI Systems, which would follow the public consultation process at various stages.

11. He suggested that a Working Group (WG), comprising domain experts from industry, academia, research organizations, and Government, may be formed to provide technical inputs for preparing the initial draft of the proposed Standard for fairness assessment and rating of AI Systems. He requested participants to volunteer for the active participation in the proposed working group.

After the presentation by DDG (C&B), TEC, all the participants were requested to share their inputs / comments. Many participants volunteered for the proposed WG. Further, some inputs / comments received from the participants are listed as under:

12. Sh. Anand Mahalingam, Vice President - Data Labs - HDFC Life, Bengaluru:

- India should learn from the best practices in this matter from other countries like Europe, Japan, and Singapore and devise policy accordingly. He also suggested for comparative study of the prevalent policies in advanced countries in assessing fairness in AI/ML applications.

13. Sh. Tejasi Panjar, Internet Freedom Foundation:

- An oversight authority or compliance authority is requited to enforce fairness in AI/ML applications.

14. Sh. Ramesh, C-DAC, Bengaluru:

- Domain-wise SOP is suggested.

15. Sh. Tirumala V Kaggundi, Jt DGFT, Delhi:

- He appreciated the concept of fairness in AI/ML systems. He pointed out that customization is required at the application level to assess fairness.

- He expressed his concern on leakage of government data due to bias in AI/ML systems deployed in Government organization / departments.

16. Sh. Mr Durai Ramachandiran, Vice President of Products, Raapid.ai:

- At Raapid.ai, they are adopting tools / methods to ensure fairness in their AI/ML applications utilized in healthcare sectors.

17. Ms. Alka Kumar, A.I. Division, C-DOT, Delhi:

- C-DOT has formed a committee on similar areas in last year for assessing transparent and accountable system.

Concluding Remarks by Sh. Avinash Agarwal, DDG (C&B), TEC:

18. Sh. Avinash Agarwal summarised the major and relevant inputs received from the participants. He thanked all the participants for sparing their valuable time and providing inputs and suggestions that will help TEC to further build over this task. He also appreciated that participants have endorsed the suggestion for forming a working group of experts from Industry, Academia, Associations, Government and other stakeholders in this matter. He requested all the participants to convey their willingness to TEC at the earliest to be the member of the proposed working Group.

Vote of Thanks by Sh. Rakesh Desai, Director, TEC

19. The meeting ended with vote of thanks to the Chairperson, DDG (C&B), TEC, Industry experts, representatives from Government departments, officers from TEC and other participants.

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List of Participants:

1. Sh. Avinash Agarwal, DDG (C&B), TEC.
2. Dr. Diptikalyan Saha, IBM
3. Ms. Preeti Banzal, O/o PSA, New Delhi
4. S Irene CDAC
5. Sh. Ramesh C-DAC
6. Ms. A Kumar, C-DOT
7. Sh. Yashvardhan Sharma
8. Sh. Sundar Narayanan.
9. Sh. Kumar Deep ITI Council
10. Sh. Mahesh Hari Haran, M/s Zupervise
11. Sh. Nitin Sharma (Qualcomm)
12. Ms. Tanvi Thomas (IIC MeitY)
13. Sh. Tirumala V Kaggundi (Jt. DGFT)
14. Sh. Vipin Gupta, Ericsson
15. Sh. Vivek Abraham, Salesforce
16. Charmaine (Schneider Electric)
17. Ms. Bindya Pandey CDAC Pune
18. Sh. Vipin Gupta, Ericsson
19. Dr Tene Ramakrishnudu
20. Dr Anand Mahalingam, HDFC Life
21. Sh. Durai Ramachandiran, RAAPID AI
22. Sh. Anurag Awasthi
23. Sh.Yashvardhan Sharma
24. Sh. Amit Raj Pune CDAC, Pune
25. Ms. Anvitaa Khandekar
26. Ms. Nandita Nagar
27. Ms. Sonia Dosanjh, CDAC, Mohali.
28. Sh. Pinal Patel, RAAPID AI
29. Sh.Jagdeep Walia
30. Sh. Maunendra
31. Sh. Harsh
32. Sh. Abhinav
33. Sh. Kshitij
34. Ms. Panya Mathur
35. Sh. Sanjay Madan, C-DAC, Mohali
36. Sh. Shayan Ghosh, SmartShift Logistics Solutions Private Limited. (PORTER).
37. Sh. Vijay Jain
38. Sh. Surinder Kalra
39. Ms. Supriya Pal
40. Sh. Varun
41. Sh. V.J
42. Sh. A.S.Verma, TEC.

43. Sh.Shashi Mohan, DDG(IT), TEC
44. Ms. Ratna Thakur, Director, TEC.
45. Sh. Rakesh Desai, Director, TEC
46. Mr. Mahmood, Director IT, TEC
47. Sh. Brajesh Kumar, Director, TEC
48. Sh.Subhash Chand, Dir(SRI)- DoT
49. Dir(NR-II), TEC
50. Mr. Aftab Alam, ADG, TEC
51. Mr. Adil Shaharyar Intern, TEC.
52. Ms. Muskan, Intern, TEC

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