

**IEEE P7003 Working Group
Meeting Minutes
4th February 2021 / 9:00 P.M. – 11:00 P.M. UTC
Teleconference**

1. Call to Order

The meeting was called to order at 21:04 UTC.
A quorum was established and noted

2. Roll call and Disclosure of [Affiliation](#)

The list of attendees is attached

3. Approval of February Agenda

Motion to approve the meeting agenda for February 4th 2021. The agenda was approved as submitted without objection.

4. [IEEE Patent Policy](#) (Call for Patents)

The call for patents was raised; no one raised any concerns or any comments for consideration

5. [IEEE SA Copyright](#)

The copyright policy was presented.

6. Approval of 7th January meeting minutes

Motion to approve the minutes from 7th January 2021. The minutes from the November meeting were approved without objection.

7. Announcements

A number of standards (7002, 7005, and 7007) are currently going to ballot, members should have seen the emails. Invitations for 7002 are now closed but the others are still open.

Stand ICT funded by European Commission has funds for engaging in standards activities – currently evaluating the first call for submissions, and a second call is being announced. If you are engaging in standards activities you can put in a submission explaining how you are contributing, how much time it requires and why you need some financial support to dedicate time.

8. Structural review of P7003 document

I. Graphical representations of P7003 structure and concepts

Should we include more graphical representations to help people to understand the different sections? Has anyone thought about what might be useful? Abel has been looking at the AI cycle which could maybe be used as a reference for a general idea of the different components. Some other life cycle models might also be appropriate. It is probably a good idea to have some of these involved to help people understand, but there are often complexities with the types of technology eg machine learning, AI, algorithmic systems. What are the most relevant that we should reflect on? The life cycle incorporates everything from the business case onwards, with things eg stakeholders being reassessed as various stages.

The current image in the document is not specifically the lifecycle – Abel could provide an image that is his idea of what to use. Randy also has some ideas that could be re-used. Julian reported that the ISO SC42 WG2 was looking at similar things surrounding data, would be useful to liaise with them to cohere some of the views. How to coordinate this sort of liaison activity needs clarifying but would be good to do.

Randy shared a diagram including a re-use cycle, which could include different parts and stages.

II. Collecting key terms for bias taxonomy

Lots of work going on in this group – including request on input about the bias types and related nomenclature within the sections that people are working on so they can build out the taxonomy.

Lyria – please can everyone take a look at the words in their own sections that need to be included in the taxonomy eg causes, effects etc. Paola has been leading this charge. There is some confusion about what is needed from each section and maybe a suggestion of an Annexe with different definitions, as some sections have not specifically defined effects and so on.

We need to be really careful, that this is within scope of this particular standard. Suggestion that maybe a full taxonomy like this is not what we need, the understanding was that it was to support people who are looking to use the standard and help them in their thinking about what algorithmic bias means, by describing different types and contexts of bias.

There are different types and understandings of taxonomy. It is important that we consider the different meanings of bias. This might be part of the psychology section too.

Reminder that this is not about removing all bias, but might be about leveraging intentional bias or removing unintentional bias.

Need to clarify what is being asked and what should be contributed, that doesn't require additional work that won't benefit the standard

III. Review of gaps in P7003 development that require attention.

Has anybody noticed in the last period of work any gaps in the standard in the way that we are currently approaching it?

Rahaf raised an issue about the integration of the system design section components into the evaluations section. The other elements of the evaluation section, e.g. output bias evaluation, have fairly clearly defined specification of what is being evaluated. For system design this seems less clear. What should be included in this? How can this be formulated as normative instructions?

System design evaluation should focus on the testing procedures that were used to validate the system design choice. Document how the appropriateness of the system architecture was tested and what the results of those test were.

System design subsection in Requirements section will focus on documentation of the decision criteria that led to the chosen system design architecture (e.g. why Machine Learning using GANs was selected as methods for this particular algorithmic application) [note: the documentation created for this sub-section is likely to get classified as containing sensitive IP, limiting public transparency]

9. Updated Outline Discussion

- i. (Pre)requisites - renamed Requirements
Ansgar has made some progress, specifically on (organisational and project requirements subsections) eg can't ask that the project team develops values for their organisation. So introduced second values clarification section on the project level. What are the core basis for making decisions? What are the requirements for the system?
- ii. Stakeholder Identification
Randy asked about the stakeholder discussion which also needs further comments. Gerlinde tried to address some points but would be good to have an offline discussion – this week they had a stakeholder call and all current suggestions have been incorporated into the document. Lots of comments/edits were provided, so thanks, and most have reached resolutions for edits, but comments may need a bit more looking at.
- iii. Risk and Impact Assessment
Written 2 years ago. There are some comments from last year but please can people have a look and see if it's a go or if things need to be edited? Should we have types of risks and types of impacts? This could be a length of string thing, there are so many types, and from different fields eg psychology etc. What would be the added value of having that as a section? Please can everyone have a good think? Are there other documents that we could refer to that give a list of examples of risk and impact?
Mathana: move to create a cumulative literature review that aggregates all of our sources. This would speak to the bibliography which we should start thinking about. Liz offered to start collecting sources that have been referenced in previous minutes etc.
Some of these questions will be answered when we do a whole read through to make sure things are lined up with each section.
- iv. Representativeness of data
Had a meeting with Rahaf to make sure sections line up. A lot was written that was condensed and refactored and has now grown again. Generally happy with the progress, just needs to be written to present the information clearly in order to get input.
- v. Performance evaluation

Frequent meetings. Good progress on the 4 subsections format, adding info to those regularly, and having meetings for each section. Not ready for input yet, but soon will have a good draft.

- vi. Documenting
No longer section on its own, to be removed.
- vii. Taxonomy
See above.
- viii. Legal frameworks
Completed section.
- ix. Psychology
Has conceptual ideas about how to think about causes of bias through the psychology of humans engaged in developing algorithmic system. Needs to be revisited. Not in a huge hurry as we probably need to focus on the normative sections first. Please if you feel you want to get involved, have a look at it and comment.
Mathana – is psychology appropriate? Lots of other fields, sociology, anthropology etc. Liz – perhaps human factors is more appropriate
Need to think about what is relevant and how to fit in the standards structure so it's useful to the user.
- x. Cultural aspects
Abel – pointed out that things like culture should be throughout the document and not entirely separate.
The group are having two calls a week in different time zones, making sure to get examples and ideas from all different areas of the world, and things that people can relate to. They have been discussing polarisation and the role algorithms play in that.
Mathana – what is the impact that we are aiming for?
Not necessarily for end users to read but documentation from the way the system is developed and used will be impacted for algorithmic audit.
We need to make sure that the rest of the document references the informative parts of the standard, eg reference the need to understand the cultural background of the group you are serving. Part of the work of the culture section is to identify things that could go in as normative statements, which will help.

10. Any Other Business

11. Future Meetings

- Thursday 4th March 2021 @ 0500 UTC
- Thursday 1st April 2021 @ 1300 UTC – aim for going to ballot
- Thursday 6th May 2021 @ 2100 UTC
- Thursday 3rd June 2021 @ 0500 UTC

12. Adjourn

The meeting was adjourned at 22:47 UTC

Attendees:

<u>Last Name</u>	<u>First Name</u>	<u>Employer/Affiliation</u>	Voting
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Albalkhi	Rahaf	Independent	X
Bennet Moses	Lyria	University of New South Wales	
Courtney	Patrick	tec-connection	X
Dowthwaite	Liz	University of Nottingham	X
Farley	Tim	Insitu, Inc.	
Gardner	Allison	Keele University	X
James	Clare	Independent	X
Koene	Ansgar	University of Nottingham	X
Novak	Theodore	Pacific Northwestern National Laboratory	
Padget	Julian	Independent	X
Pena	Abel	Code Explorers Worldwide	X
Rannow	Randy K	Silverdraft Supercomputing	X
Rivas	Pablo	Baylor University	X
Stender	Mathana	Independent	X
Weger	Gerlinde	Independent	X