

IEEE P7003 Working Group Meeting Minutes 2nd December 2021 / 21:00 PM UTC – 23:00 PM UTC Teleconference

1. Call to Order

The meeting was called to order at 21:09 UTC

2. Roll call and Disclosure of Affiliation

The list of attendees is attached. A quorum was reached and noted.

3. Approval of December Agenda

Motion to approve the agenda for the December meeting. The agenda was approved without change.

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 4th November meeting minutes

Motion to approve the minutes from the 4th **November 2021 meeting.** The motion to approve the minutes from the 4th November 2021 meeting was approved.

7. Announcements

- I. IEEE CertifAIEd Framework (based on ECPAIS) awarded first certification The IEEE CertifAIEd Framework for AI Ethics Applied to the City of Vienna IEEE SA It is now possible to get certified, to show compliance with requirements of accountability, transparency, bias, and privacy. This has been in development for a couple of years, and the framework was developed 2 years ago. Gerlinde and Trish from this group have been nominated 'maestros'. Congratulations to them!
 - In May this group is looking towards a more concrete launch and people may be able to get involved.
- II. IEEE Std., 7005-2021 and IEEE Std. 7007-2021 were recently published. Copies for standards development purposes for our WG can be requested.

IEEE P7007 – Ontological Standard for Ethically Driven Robotics and Automation Systems, IEEE 7005-2021 - IEEE Standard for Transparent Employer Data Governance.

Randy was involved in P7007 and he and members of the working group were presented an award for innovation from the IEEE Robotics and Automation Society as part of this. Congratulations Randy!

Ansgar will request both documents to support the development of the work of 7003. May be informative reference and will ensure that we are consistent across the 70xx standards

- III. Dec 6/7 is the the Athens roundtable on AI and the rule of Law
- IV. Next week also Trish, Ansgar, and Christian are running a roundtable session at The Responsible AI Forum (TRAIF) 2021 on the topic of "Operationalisation of AI Ethics: Regulation, certification and Standards".
- V. P7010 which was published last year is looking to launch a sub-standard 7010.1 looking at ESG and SDGs. Christy sent round a call for participation.

8. Structural review of P7003 work

I. Assessments by the section review teams that were assigned during the November call.

Did any of the reviewers find any sections that need greater consideration and deeper review?

Ewelina has provided some editorial comments to the performance section. Randy has made some comments in the working document, highlighting areas he thinks need greater attention.

Julian commented on terminological consistency problems – terms that may have come and gone and/or people not being aware what the preferred terminology should be. This is a major problem with the document as a whole and this is the point at which we need to start sorting that out. There are often differences between sections, using two terms that seem to have the same meaning and these need to be used consistently. The context of terms definitions may also be section dependent. Randy gave the example of stakeholder being ambiguous. There are also some new terms or single use terms that seem incongruous. Ansgar will start a table to try to identify these instances of terminological inconsistency.

There is also a general issue of scope creep, with sections either covering things that should be elsewhere or things being missed out because they are presumed to be covered elsewhere. They've tried to note the former but not the latter. Randy has been trying to flag when sections are ambiguous or when they don't make sense with different sections, that's why he's reading through the whole document.

Question about where to put the comments for review – should they go into the section drafts or the full draft? How best to communicate the changes and sort out the discussion to resolve them? In principle the section documents are further ahead as the master hasn't been updated in a while, and the people working in each section should be looking at the drafts frequently and see when comments have been made from the reviewers. The section lead spreadsheet should still be up to date. Randy suggested listservs for each sub-section to help to communicate. Then if someone from outside the subsection wanted to pass something on, they could ask a member of that subsection to do so.

At the moment the document feels a bit disconnected and not a holistic entity. How do you move from one section to the next? At which point do you use each section? Suggestions we could provide an additional section or pictorial roadmap describing the structure and interaction of the Sections – what we have at the moment may be too high level to guide fully through how to use it. This could be included as a 'how to use this standard' section. It would be useful to map the structure of the standard to when do we conduct them in a 'life cycle'. Figure 1 and figure 2 need to be blended. May need to have some 'piloting' of how the standard works and how to guide people through it, through a case study example.

Julian et al have been looking at the types of bias and starting to map them to the different stages and how they might be detected. The symptom (bias) doesn't necessarily uniquely define the cause.

Is bias that 'does no harm' actionable, or just worth mentioning? Worth mentioning – certain bias bay be completely acceptable based on the use case, it requires no action but should be acknowledged.

Has anyone looked at the informative sections and made sure that it is useful for the normative sections and related to them so that people are guided to use them? – Randy has just started to look at this. The stakeholder section does make reference to the informative sections. We need to be careful not to imply that an informative section is only applied to one section or part of the development process.

Action: All section leads to let Ansgar know which is the most up to date text for each section.

9. Updated Outline Discussion

i. Requirements

Randy has drafted some additional comments and is working on making them coherent and relevant

ii. Stakeholder Identification

Mostly for review. Julian, Roisin, and Clare are reviewing it, got about a third of the way through so the section leads can start to look at these.

iii. Risk and Impact Assessment

In review, also Julian, Roisin, and Clare, but haven't got to it yet.

iv. Data Representation

Roisin is co-leading this now. Had a couple of meetings and moving forward to consolidate everyone's contributions.

v. Performance evaluation

Lots of little bits of content being edited throughout the section. Randy is in progress of reviewing this section.

vi. Taxonomy

Needs to be relabelled to reflect the change in focus. P7007 may be beneficial to look at here, the ontologies in there might be useful to refer to. A high-level ontology could be useful to be included.

Action: Randy to invite someone from P7007 who is an expert to attend the WG and talk to us about how to do it.

vii. Legal frameworks

In review. Not done yet.

- viii. Human Factors No new content.
- ix. Cultural aspects
 No new content.

10. Any Other Business

Other documents that might be useful: SO/IEC 24707:2018, Information technology Common Logic (CL)–A framework for a family of logic based languages3. 18 IEEE Std 1872™-2015, Bias in AI systems and AI aided decision making (PD ISO/IEC TR 24027_2021)

There was discussion of creating versions of the standard that are not visual, e.g., audio versions. It would be good for the whole suite of standards to have this option, so need to talk to someone higher up in IEEE Standards.

11. Dates/times for Future Meetings

Ansgar suggested the following new times for the future meetings, given that the early morning UTC meetings are attended by very few people.

- Thursday 6th January @ 1300 UTC
- Thursday 3rd February @ 2200 UTC
- Thursday 3rd March @ 1300 UTC
- Thursday 7th April @ 2200 UTC
- Thursday 5th May @ 1300 UTC
- Thursday 2nd June @ 2200 UTC

12. Adjourn

The meeting was adjourned at 22:53 UTC

Attendees:

Last Name	First Name	Employer/Affiliation	Voting
Bennett Moses	Lyria	University of New South Wales	
Clifton	Chris	Purdue University	X
Courtney	Patrick	Tec-connection	X
Dowthwaite	Liz	University of Nottingham	X
Howard	Chris	Amazon Web Services	
James	Clair	Independent	X
Koene	Ansgar	University of Nottingham	X
Loughran	Roisin	Dundalk Institute of Technology	X
Padget	Julian	University of Bath	X
Pena	Abel	Code Explorers Worldwide	X
Rannow	Randy K	Silverdraft Supercomputing	X
Szczekocka	Ewelina	Independent	X
Weger	Gerlinde	Independent	X
Whitaker	Jessica	Howard University	X