

IEEE P4006 Working Group
 Meeting Minutes
 26 MAY 2023
 WG Chair: Roger Oliva
 WG Secretary: Paolo de Matthaeis

1. Call to Order:

a. *The chair called to order at 9:05 (EDT) and welcomes everybody.*

2. Roll Call and Affiliation

a. *The chair performed a roll call on participants affiliation. All participants provided their affiliation.*

b. *There was a total of 11 participants in attendance.*

Meeting participants:

Roger Oliva (Zenithal Blue technologies / IEEE)	Mingliang Tao (Northwestern Polytechnical University)
Ryo Natsuaki (The University of Tokyo)	Beau Backus (NOAA/NESDIS, JHU APL)
Raúl Díez-García (Telespazio UK/ESA)	Kaushal Buch (Giant Metrewave Radio Telescope, NCRA-TIFR)
Jia Su (Northwestern Polytechnical University)	Adriano Camps (Universitat Politecnica de Catalunya and IEEC/CTE-UPC)
Priscilla Mohammed (Morgan State University)	Adrian Perez Portero (Universitat Politecnica de Catalunya)
Vanessa Lalitte (IEEE SA - Staff)	

c. *Quorum was established when all 11 participants were in attendance.*

3. Approval of agenda

a. *The WG Chair introduced the agenda and called for a motion to approve it.*

i. *Beau Backus made the motion to approve the agenda as presented.*

ii. *Raul Diez-Garcia seconded the motion.*

iii. *The motion passed without opposition.*

4. Approval of previous meeting minutes

a. *The WG Chair called for motion to approve the previous meeting minutes as presented.*

i. *Priscilla Mohammed made the motion to approve the agenda.*

ii. *Beau Backus seconded the motion.*

iii. *The motion passed without opposition.*

5. IEEE Patent Policy

- a. *WG Chair presented the IEEE slides and made a call for potentially essential patents; no one raised concerns for consideration.*
 - b. *WG Chair presented the copyright policy as well. There was no question or comment.*
6. Technical Discussion
- a. We presented the Digital Twins using Artificial Intelligence initiative from a Broad Agency Announcement from NOAA and NESDIS. Beau Backus briefly presents the three proposals pre-selected and explains that the outcome of them is a demonstration. The outcome for all three proposal is a demonstration. The goal of the digital twin is to have an ability to directly interface with the entire datasets, for microwave observations for example.
 - i. Priscilla Mohammed asks if this combines data from different sensors, and not just have them all in one place.
 - ii. Beau Backus mentions that this is correct.
 - b. We present a quick review of the methodology to collaborative writing of the Standard. Beau Backus asks to make sure that when one edits the document, in the upper right corner it appears the field marked as Suggesting.
 - c. We reported on updates made to the outline of the standard, focusing on the updates in section 5.2 update related to the detection of RFI. Raul mentions that a controversial point is whether we define a Probability of False alarm (Pfa) for each band.
 - i. It is asked if Pfa related to the application and the definition of Harmful RFI
 - ii. The WG chair explains that from previous discussions the idea was not to make it dependent on the application, as the same RF level could have different impacts on different applications, but to relate at what is the amount of man-made RF signal that we could detect from remote sensing systems.
 - iii. It is proposed to use the term Detectable Anthropogenic RFI.
 - iv. We agree that this is a term that well defines what we are trying to do in this standard.
 - d. Vanessa Lalitte notices that the meeting is extending beyond the defined time.
 - i. Beau Backus makes a motion to extend the meeting 15 more minutes.
 - ii. *Priscilla Mohammed seconded the motion.*
 - iii. *The motion passed without opposition.*
 - e. We presented the changes introduced regarding the required information the standard users should provide to well define the RFI detection algorithm used.
 - i. Beau Backus makes a motion to approve the changes as written in the draft.
 - ii. Priscilla Mohammed seconded the motion.
 - iii. *The motion passed without opposition.*

- f. We presented the changes introduced by a member regarding usual RFI detection techniques used in passive remote sensing.
 - i. Beau Backus makes a motion to approve the changes as written in the draft.
 - ii. Raul Diez seconded the motion.
 - iii. *The motion passed without opposition.*
- 7. Unfinished Business
 - a. None
- 8. New Business
 - a. None
- 9. Next meeting--date and location
 - a. The WG Chair proposed to hold an in-person/hybrid meeting during the IGARSS 2023 conference in Pasadena in July, either on the 17 or the 18 depending on room availability. The WG chair will inform the Working Group as soon as the room is secured.
- 10. Adjournment
 - a. *The WG Chair adjourned the meeting at 10:15 (EDT).*
 - b. *Minutes submitted by: Roger Oliva, WG chair*