

IEEE P4006 Working Group Meeting Minutes 17 JULY 2023

WG Chair: Roger Oliva
WG Secretary: Paolo de Matthaeis

1. Call to Order:

a. Due to a double-booking problem with the room the meeting started 35 minutes later. The chair called to order at 12:05 (PDT), apologizes for the late meeting start and explains that this is the first in-person meeting.

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 13 participants in attendance.

Meeting participants:

Roger Oliva (Zenithal Blue technologies / IEEE)	Paolo de Matthaeis (NASA Goddard / IEEE)
Ryo Natsuaki (The University of Tokyo)	Adriano Camps (Universitat Politecnica de Catalunya and IEEC/CTE-UPC)
Raúl Díez-García (Telespazio UK/ESA)	Adrian Perez Portero (Universitat Politecnica de Catalunya)
Dazhen Gu (NIST)	Joel Johnson (Ohio State University)
Priscilla Mohammed (Morgan State University)	Yan Soldo (ESA-ESTEC)
Deepak Kumar (Amity University Uttar Pradesh)	Ekhi Uranga (ESA-ESAC)
Ahmed Manavi Alam	

c. Quorum was not established.

3. Approval of agenda

- a. The IEEE representative explained (after the meeting) that, since not enough WG members were attending to reach the quorum, the approval of the agenda was not possible. Nevertheless, the agenda was reviewed.
- 4. Approval of previous meeting minutes
 - a. The WG Chair explained that, since not enough WG members were attending to reach the quorum, the approval of the minutes of the past meeting will be postponed to the next WG meeting.
- 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 reported on the current status of the draft and presented a summary for the new WG members. Raul explained the four-step process for the quantification of the RFI in the remote sensing frequency bands. Step 1 focuses on the RFI detection, Step 2 on the aggregation of the detections on a World Map, Step 3 combines the information from different receivers, Step 4 quantifies the amount of interference using a grading system.
- b. It was introduced the more technical points of the current standard that have triggered some discussion in the past. Raul mentioned that a controversial point is what we do standardize in Step 1. The few options considered were:
 - to define a set of concepts that the researcher should provide when using their own RFI detection method.
 - to define a level of Probability of False alarm (Pfa) that sets a threshold for any RFI detection algorithm (whether is one for each band or one for all bands.
 - to define the methods/algorithm to apply for RFI detection.
- c. It was suggested standardizing the information that the researcher should provide.
- d. It was added a new concept to standardize the type of information provided on RFI by the mission. That is, what a remote sensing mission should inform with respect to RFI.
- e. It was suggested defining structures to be filled in in the mission. That is, to have a set of common parameters common to be reported by the mission. For example, the value of the kurtosis and how has this been calculated.
- f. It was commented that we need to clearly define how we will do the standard.
- g. It was mentioned that the use of PFA might not be common in active remote sensing.

7. Unfinished Business

- a. None
- 8. New Business
 - a. None
- 9. Next meeting--date and location
 - a. The WG Chair proposed to hold the next WG meeting after summer break in September.

10. Adjournment

- a. The WG Chair adjourned the meeting at 12:55 (PDT).
- b. Minutes submitted by: Paolo de Matthaeis, WG chair.

