What's up with the RAC?

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IEEE Registration Authority Committee (RAC)

- standing committee of the IEEE Standards Association Board of Governors (BoG)
- IEEE Standards Association Operations Manual:

The IEEE Registration Authority Committee (RAC) shall provide oversight of all registration activities defined or referenced in IEEE standards... include, but are not necessarily limited to, assignment of unique numbers or identifiers used by implementers of the standard, or listings of products or services defined by the standard. This committee is responsible for both the registry process and the registration-activity-related technical content of standards using a RAC administered* registry.

Each IEEE standard that contains a registration activity shall have such registration activity presented to the IEEE RAC for consideration as a RAC administered* registry. The IEEE maintains the right of first refusal to be the registration authority for all registries described in an IEEE Standard.

*I consider "RAC administered" a typo. The RA, not the RAC, is the administrator. The RAC provides advice but no direct control.

IEEE Standards Board role

IEEE Standards Board Operations Manual:

Mandatory coordination

The Standards Committee shall coordinate with the following entities via circulation of drafts and materials that are developed by the Working Group and incorporated by reference in the draft, if any:

• The IEEE Registration Authority Committee (RAC) when the draft includes registration activity

The RAC, IEEE Standards editorial staff, or RevCom may request RAC review of a draft.*

Comments from mandatory coordination entities shall be given appropriate consideration and response by the Standards Committee. At the time of project submittal to the IEEE SA Standards Board for approval consideration as an IEEE standard, the Standards Committee shall supply the most recent mandatory coordination comments and indicate either acceptance or a request for a waiver.

*Note: Not only when PAR ticks the box "Is the Standards Committee aware of possible registration activity related to this project?"

RAC Mission

- The IEEE Registration Authority Committee (IEEE RAC) is the oversight committee for the IEEE Registration Authority.
- The IEEE RAC is international in scope, assisting standard developing organizations in their establishment of unambiguous, sustainable registration authorities.
- The IEEE RAC considers the long-term interests of the ultimate users of these standards, while pragmatically addressing the needs of the affected organizations, industries, and the IEEE.

RAC Members

Generally serving three-year terms:

- Roger Marks, Chair
- Marc Holness (C/LMSC) IEEE 802 (primary)*
- Geoff Thompson (C/LMSC) IEEE 802 (secondary)
- Leonard Tsai (C/MSC)
- William Whyte (VT/ITS) IEEE 1609
- Geoffrey Garner (IM) IEEE 1451
- Michael Montemurro (C/SAB)
- Non-Voting (ex-officio or appointed by RAC Chair)
 - Joseph Levy, ex-officio (C/SAB Chair's designee)
 - Glenn Parsons (expert, RAC Past Chair)
 - Robert Grow (expert, RAC Past Chair)
 - Angela Thomas (ex-officio, RAC Secretary/Administrator)

*Note: IEEE 802 primary representative does not plan to continue past current term (ending 2024)

Existing IEEE RA Registries

• 12 current registries

new ones created as necessary, usually driven by needs of an IEEE standard

6 registries are directly applicable to IEEE 802

MAC Address blocks (MA-L, MA-M, MA-S)

Group MAC Address

CID

EtherTypeTM

Logical Link Control (LLC)

IEEE 802.16 Operator ID

• IEEE has been authorized by the ISO Council to act as the exclusive registration authority for the implementation of International Standards in the ISO/IEC 8802 series.

https://datatracker.ietf.org/doc/html/draft-ieee-rac-oui-restructuring-01

RAC Activities

Mandatory Coordination

Typically aligned with SA ballot process
Approximately 20 projects in 2024 so far; in many cases over multiple recirculations

In some cases, meeting with WGs or other IEEE standard-related committees regarding mandatory coordination

- Maintenance and update of registries
 - Have focused on EtherType Glenn Parsons has led an hoc toward improvements
- One primary in-person meeting per year usually at an IEEE 802 Plenary
- Occasional ad hoc meetings
 Including many EtherType ad hoc meetings
- Trying to improve process (not easy)

Thoughts on RAC Participation

- Lots of time spent analyzing drafts of various topics and identifying registration issues that the WG didn't consider.
- Lots of time spent researching the history of technical decisions.
- It's often very interesting.
- It takes diligence.

Much work needs done.

It's often frustrating.