

# **NGEC Technical Subcommittee and Specification Development**

**NGEC Annual Meeting  
February 2, 2024**

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Vice Chair, NGEC Technical subcommittee**



**The NGEC will provide national leadership  
in standardization, acquisition, and  
management of passenger rail equipment.**

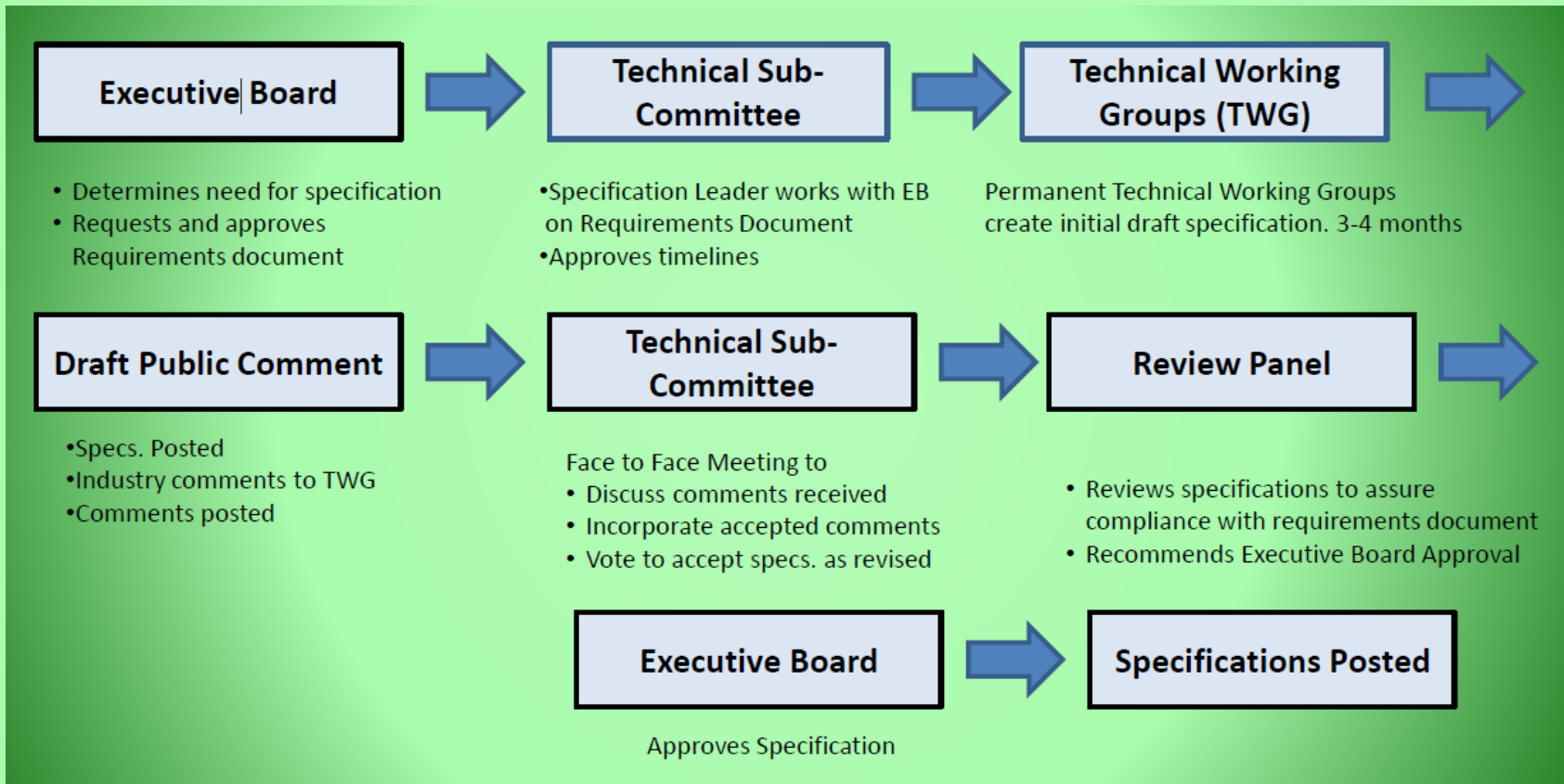
# PRIIA 305 Technical Subcommittee

- Main purpose is to develop specifications as requested by the Executive Board.
- Comprised of representatives from Amtrak, FRA, States, and rail equipment manufacturers and suppliers.
- Currently we have 11 states involved; California, Connecticut, Illinois, Iowa, Maine, Missouri, New York, North Carolina, Oregon, Washington and Wisconsin.
- Presently over 200 volunteer industry participants. Open to anyone from companies/consultants involved in rail.
- Majority of spec writing done by members of the 6 permanent working groups on a volunteer basis with support from a technical writer and the document control manager.



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# Specification Creation Process



# Revising Specifications

New specifications are issued as initial release, version IR. A thorough process for managing change control and Revision approval is in place. This process can take months, typically DCR's are processed, and a specification is revised after several DCRs have been received.

- There is an Urgent DCR process to address issues that may come up during a procurement. This pushes a DCR through the system in less than two weeks.

## Document Change Request Form (DCR)

- Changes can be proposed by anyone using a DCR.
- Evaluated by the TWG responsible for the section affected.
- Approved by the TWG.
- Approved by the Technical Subcommittee
- Sent to Executive Board
- Review panel reviews for compliance with requirements document.
- Executive Board approves.



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# Equipment Specifications Created and Updated To Date

- **Bi-Level: Rev D – 02/2023**
- **Locomotive: Rev B – 06/2017**
- **Single Level: Rev B.2 – 02/2019**
- **Trainset: Rev B – 1/2022**
- **DMU: Rev A – 1/2022**
- **Dual Mode Loco: IR – 02/2016**



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# Tech Subcommittee Active Efforts

- **Active working Groups and Studies**
  - **Permanent Technical Working Groups**
    - **Structural, Interiors, Mechanical, Propulsion, Electrical, and VTI**
- **Carbody Materials Working Group**
- **Vehicle Weights Working Group**
- **Communications on Rail Cars Working Group**
- **University of Nebraska/FRA High Speed Wireless Study**



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# Tech Subcommittee 2023 Highlights

- The PRIIA Bi-Level Specification 305-001 Revision D was adopted on 2-21-23
- September 2023 - PRIIA Reference Specification 305-901 Revision A approved by the Executive Board.
- The University of Nebraska Advanced Telecommunications Engineering Lab studying the sub giga-Hertz frequencies for rail applications continued field testing during the summer of 2023.
- November 2023 - The Communications Working Group finalized their changes to the DTL Section of the Single Level Specification.
- The Weight Working Group submitted their final recommendations to the TSC in December for discussion at the next TSC meeting in January.



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# Comments or Questions



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