

NGEC Technical Subcommittee and Specification Development

NGEC Annual Meeting
February 3, 2023

George Hull, VP Mechanical
National Railroad Passenger Corporation (Amtrak)
Vice Chair NGEC Executive Board
Chair, NGEC Technical subcommittee



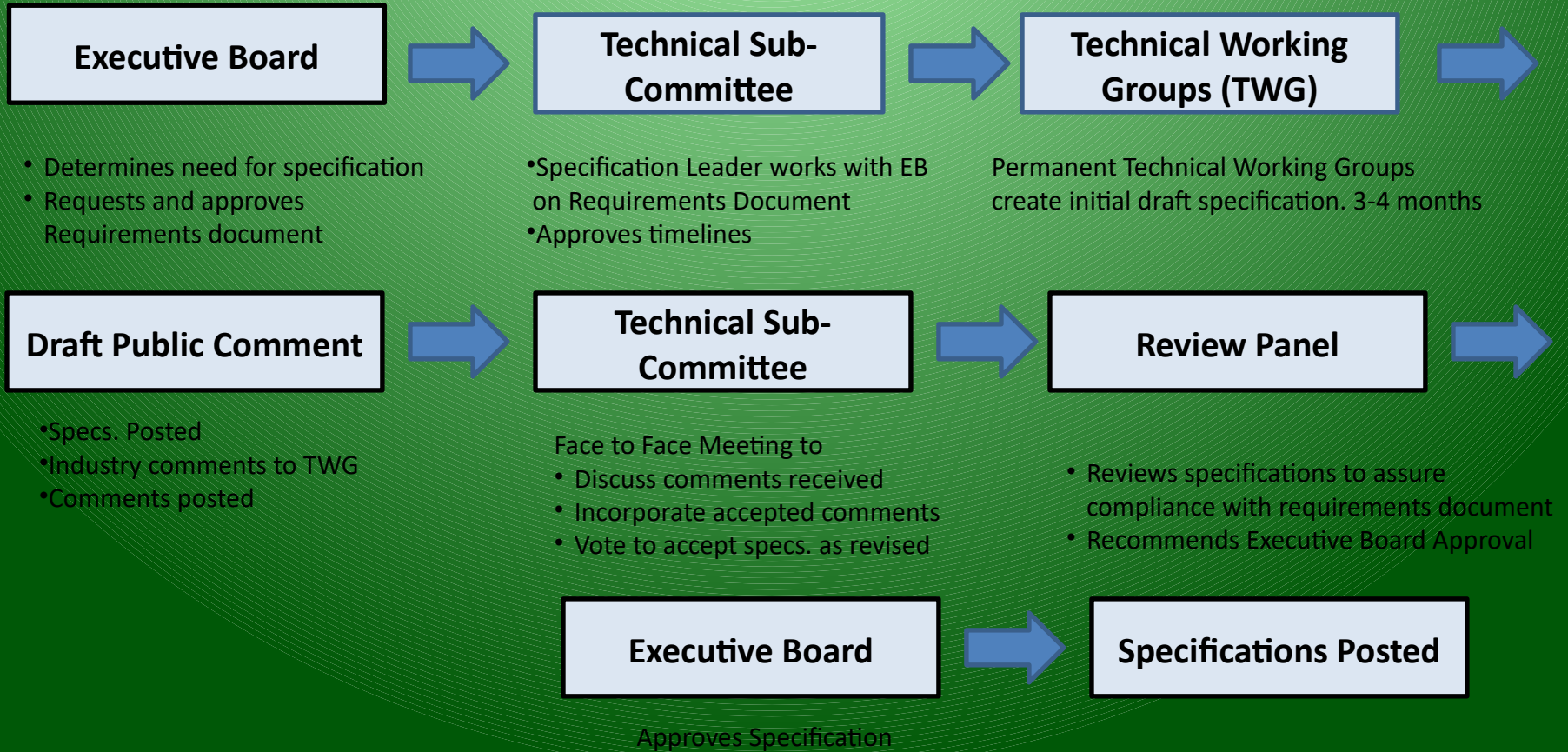
The NGEC will provide national leadership in standardization,
acquisition, financing and management of passenger rail equipment.

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.



Specification Creation Process



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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.



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



Tech Sub Committee 2022 Highlights

- Vehicle Weights Working group progressed industry discussions to develop guidance document
- Created Communications on Cars working group
- Bi-Level Specification Update Rev D – Technical subcommittee work completed in January 2023.



Tech Sub Committee 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
- Locomotive Technology Task Force
 - Pending Reactivation for Energy Alternative and NZ efforts in 2023.



Comments or Questions?



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