

PRIIA 305
Rail Vehicle Specification Development

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PRIIA 305 Legislation

- Function-Determine Equipment Based on Operational Needs

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- Cooperative Agreements- Amtrak and States may enter into agreements for funding, procurement, remanufacture, and management of corridor equipment, including equipment currently owned or leased, and may establish a corporation to perform these functions.

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- **Function-Determine Equipment Based on Operational Needs**
- **Cooperative Agreements-** Amtrak and States may enter into agreements for funding, procurement, remanufacture, and management of corridor equipment, including equipment currently owned or leased, and may establish a corporation to perform these functions.
- **Funding-Capital projects to carry out these purposes shall be eligible for grants pursuant to chapter 244 of title 49**

PRIIA 305 Organizational Structure

- Executive Committee
 - William Bronte Chairman
- Finance Sub-Committee
 - D.J. Stadler Chairman
- Technical Sub-Committee
 - Mario Bergeron Chairman

PRIIA 305 Technical Sub Committee

- Purpose-to design, develop specifications for, and procure standardized next-generation corridor equipment.

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- Comprised of representatives of Amtrak, the Federal Railroad Administration, host freight railroad companies, passenger railroad equipment manufactures, interested states, and other passenger railroad operators.

PRIIA 305 Technical Sub Committee

- Current Assignments

- Bi-Level Coach Car July 2010
- Single Level Coach December 2010
- Diesel Locomotive December 2010

All Capable of Operating at 125 MPH

PRIIA 305 Technical Sub Committee Organizational Structure

- Break-Out Teams Composed of Volunteers
- Break-Out Teams Provide Change Recommendations to Amtrak
 - Number Each Recommendation
 - Identify Current Specification Language
 - Identify the Reason for Change
 - Provide Suggested Wording for Change

PRIIA 305 Technical Sub Committee Organizational Structure

- **Breakout Groups**

Locomotive Sub-Group – Steve Fretwell

Car Sub-Group – Ken Uznanski

Mechanical Sub-Group – Jeff Gordon

Structural Sub-Group – Eloy Martinez

VTI Sub-Group – John Tunna

Interior Sub-Group – Andrew Wood

Electric Sub-Group – Tammy Krause

PRIIA 305 Technical Sub Committee Specification Development

- In-Process Specification Posted on AASHTO Web Site

www.Hispeed-Rail.org

Next Generation Equipment Committee

- Final Specification Completed by 7/16/10
- Tech Team Review Completed Specification
- Final Team Face-to Face Review 7/29-7/30
- Team Submittal to Executive Team 7/30/10

Sub-Group: VTI Team Lead: John Tunna

Activities:

Meeting: April 22

Conf. calls: May 7, 14 and 21 (planned weekly to June 16)

Accomplishments:

Review of C21 Chapter 5 complete

30 paragraphs re-worded or deleted

Design Requirements Introducing New Technology:

Air secondary suspension and orifice damping allowed

Trailing arm primary suspension allowed

Sub-Group: Locomotive Team Lead: Steve Fretwell

- **Activities:**
 - Two committees have been established. One to study the performance parameters of the locomotive. The other committee is looking at the environmental characteristics of the locomotive. A third group will be formed to study new technologies available for the locomotive. This committee will be formed later.
 - Both committees have been holding weekly conference calls since the first of May. Even though both committees are working within their respective groups, the team leader participates in both conference calls to keep the group focused and on track. Both Committees studies will be completed by the end of June
- **Accomplishments:**
 - No major accomplishments. The committees are still discussing design parameters but have decided on an inverter HEP system and AC traction motors.
- **Design Requirements Introducing New Technology:**
 - The committee is looking at several new technology devices for the locomotive. The use of digital gauges, electronic air brakes, regenerative braking, and Ni-Cad locomotives batteries are being considered. Regenerative braking would use the energy from the dynamic brake operations to operate the HEP function instead of dissipating the generated electricity through grids.

Sub-Group: MECHANICAL Team Lead: Jeff Gordon

- **Activities:**
 - Initial meeting April 22 (Chicago)
 - Teleconferences weekly through June 16 (April 26, May 3, 10, 17, 25)
- **Accomplishments:**
 - Responsible for brakes, doors, diaphragms, waste & water system and relevant Material & Workmanship and Testing portions of specification
 - Group comments formulated substantially for brakes and doors
- **Design Requirements Introducing New Technology:**
 - Subgroup generally in favor of performance-based specification for brake system

Sub-Group: Interiors Team Lead: Andrew Wood

- Activities:
 - Conference Calls: 4/28, 5/5, 5/10, 5/17
 - Frequent emails between subgroup members on topics.
- Accomplishments:
 - Assigned interior items from C-21 Chapter 9 specification to sub-group team members to review.
 - Developing draft recommendation and reviewing them on conference calls.
- Design Requirements Introducing New Technology:
 - LED lighting appears to be an emerging recommendation.

Sub-Group: Electrical Team Lead: Tammy Krause

- Activities:
 - Weekly conference calls, Tuesday at 1:00pm
 - Calls held on 5/11 and 5/18
 - Next call 5/25
- Accomplishments:
 - Have reviewed the following chapters;
 - Chapter 8 - Doors
 - Chapter 11 – Lighting
 - Chapter 14 – Food Service
- Design Requirements Introducing New Technology:
 - Lighting will be predominately LED
 - Doors may be Plug Doors

Sub-Group: Cars Team Lead: Ken Uznanski

- **Activities:**
 - April 22 Chicago meeting with representation from most global manufacturers
 - Developed, reviewed and commented on “Buy America” white paper to express industry’s issues and concerns with proposed policy
 - Added element to design change recommendation process to provide integration function for all sub-groups – will involve regular meetings (weekly or as needed)
- **Accomplishments:**
 - Prepared draft “Buy America” white paper for review and discussion by Section 305 Executive Committee
- **Design Requirements Introducing New Technology:**
 - none to date

Sub-Group: Structural Group Team Lead: Eloy Martinez

- **Activities:**
 - Meeting: April 22
 - Conf. calls: April 28, May 5 and 11 (planned weekly to June 16)
- **Accomplishments:**
 - Reviewing C21 Chapters 2, 4, 6, 16, 18, and 19
 - Additionally, using SCRRA/MetroLink CEM specification
 - Introducing CEM on top of fully compliant carbody structures
- **Design Requirements Introducing New Technology:**
 - Push-back Couplers
 - Crush zone energy absorbers

Summary

- PRIIA 305 Is a Legislative Tool to Establish a Common Pool of Passenger Rail Cars for Use by Passenger Rail Operators
- Through Standardization and Modularization Vehicle Commonality Will Simplify Supplier Manufacture and Facilitate Passenger Operators Supporting Each Other
- The Process Utilizes An Open Input Format Utilizing Rail Experts