Section 305 Technical Subcommittee

Chicago IL July 29th-30th 2010
Introduction

Mario Bergeron - Chairman
Purpose of the Meeting

• The Draft Specification has been created for the bi-level passenger cars
• Everyone has worked very hard – thank you all!
• We are close to a final specification for the bi-level
• By the end of this meeting, we shall have it agreed and accepted!
Formation of Technical Subcommittee Core

- Participation Solicited from states, FRA and Amtrak
- Core group of participants formed
- Conference Call schedule established
- Break down of work requirements agreed
- Industry workshop set up and run
PRIIA Section 305 Legislation

• Next Generation Corridor Equipment Pool Committee established
• Comprised of representatives of Amtrak, the Federal Railroad Administration, host freight railroad companies, passenger railroad equipment manufacturers, interested States, and, as appropriate, other passenger railroad operators.
• Purpose -- to design, develop specifications for, and procure standardized next-generation corridor equipment
Industry Participation

• Workshop for industry held in Chicago on April 22\textsuperscript{nd}
• Attendance of over 150 people
• Briefed all participants on the process
• Interested industry participants were allocated to sub-groups
Sub-Groups

- Sub-groups were created for the major sections of the vehicle specification
- Members from the core subcommittee were allocated to lead each group
- Industry participants were, where possible, allocated based on preference
- Preliminary work was undertaken during the Chicago workshop
- Groups created work plans for ongoing review
- Targeted set for June 16th for input to the first of the specification updates
PRIIA 305 Technical Sub Committee
Organizational Structure

- Technical Sub-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
Milestones

• Sub-group established & conf. calls scheduled
• June 16th deadline for data input from Sub-groups to Amtrak engineering team
• July 22nd Compilation of the revised bi-level specification (achieved July 23rd)
• July 26th deadline for proposed written changes (some received up to July 28th)
• July 29th-30th final review meeting
• Work is underway on the locomotive specifications
• Much of the bi-level work will be carried forward into the single level specification
Conceptual Drawing of Bi-Level Cab Car

Upper Level
67 Seats, 8 Tables

CAB/BAGGAGE COACH CAR LAYOUT

NOTE: Drawings are strictly conceptual. They are subject to change for actual design.

Lower Level
8 Seats, 1 ADA Seat, 2 Tables

CABINET
Luggage Rack
Crew Staircase
2 Coach Seats
Enclosed Overhead Luggage Bins Above All Coach Seats (Not Shown)
Recycling & Trash Receptacle
Passageway Door
Space reserved for Crash Energy Management Crush Zone. May be used for Utility Lockers, Luggage Racks, HVAC Air Ducting, Trash and Recycling, Etc.

Cabin Control Compartment
Cabinet
Laundry Area with Luggage shelves/Bike Racks (Space for 16 Bikes)

Crew Staircase
Crew Entry Door

Checked Luggage Area
ADA Space with Energy Absorbing Half Table
Wheelchair Lift
Electric Locker

Staircase to Upper Level
Side Entry Door
Emergency Tools (above) Wheelchair Lift (below)

Carpet

Unisex Restroom
Luggage Rack
Recycling & Trash Receptacle

Space reserved for Crash Energy Management Crush Zone. May be used for Utility Lockers, Luggage Racks, HVAC Air Ducting, Trash and Recycling, Etc.
What Happens to the Specification Next?

• The Executive Board will need to accept the recommended specification of the technical subcommittee
  • A review panel has been established
  • A requirements document has been accepted by the Executive Board
  • The review panel will assess the specification against those requirements and recommend acceptance or further work
  • The Executive Board will then vote on acceptance of the specification
Other Specification Work

• This was the first specification and the quickest. We have met the targets consistently.
• The next two priorities are for end of December 2010:
  – Single Level Corridor Car (coach, cab car, business class and food service)
  – High speed diesel electric locomotive
• Locomotive subgroup is already hard at work
  • Strawman locomotive specification has been published on the web site
• Single level task is getting underway
  • Existing subgroups to continue their work into the single level project
  • Potential strawman specifications being evaluated
Thank You!

• A great deal has been achieved in a short space of time
• However, the task ahead is considerably more complex
• Everyone’s commitment has been appreciated
• Now we need even more from everyone
• The time left for these specifications seems longer but it will soon be gone
• We mustn’t lose sight of what will come after these requirements
• The procurement processes will follow closely and they are what this is all about.
Specification Development and Approval

Dale Engelhardt - Vice Chairman
What Will Happen Over the Next Two Days?

• We have one goal before the meeting is concluded
  – Finalize the specification for the bi-level corridor cars

• How has that specification been produced?

• How are we going to review that work over the next two days?

• Who is going to take us through the process?
Process To Date

• C21 specification was provided on the NGEC website
• Subgroups were created at the previous Chicago meeting on April 22\textsuperscript{nd} 2010
• Conference calls were held approximately every two weeks
• Deadline of submission of comments from the subgroups was June 16\textsuperscript{th} 2010
  • All groups met or exceeded that deadline
• Amtrak rolling stock engineering team integrated the coach and cab car comments into the specifications
• Updated drafts were placed on the website as they became available
Bi-Level Specification Inputs

- Environmental Requirements
- Supplier Input
- Bi-Level Specification
- FRA Input
- Lessons Learned
- C21
- Standardization
- Amtrak Input

Next Generation Equipment Committee
Vehicle Differentiation vs. Standardization

- Standardization Implies “Look Alike” (Myth)
- Operators Want To Market Their Equipment’s Differences
  - **Basics** - Trucks, wheel sets, HVAC units, windows, doors, door openers, PA systems, etc.
  - **Esthetics** - external paint scheme, interior colors, seat pitch, seat coverings, etc.

*Standardization can be achieved without losing supplier identity*
Food Service/Business Class

• Due to a communication mix-up, while this areas were in the draft specification, they were not originally set as a requirement
• The interior subgroup was consulted and accepted these car types with the addition of three proposed changes
• These changes are proposed to be approved along with this specification/incorporated in the final revision.
Sub-Committee Dilemma

Component
Performance
Flexibility

Component
Performance
Standardization

Recommend Selection Choices
Versus a Single Standard Component
What Happens Over the Next Two Days?

- Everyone has had the opportunity to review the draft specifications
- The subgroups and the rolling stock team at Amtrak have agreed to the drafts
- Those who were on different subgroups have had a chance to review areas of interest outside their subgroup
- 21 comments have been received
  - 10 are considered urgent for this issue of the specification
  - 11 are considered suitable for the next version of the specification
- We will review all urgent and as many less urgent changes as time allows
How Will the Review Take Place?

• Each question is allocated 15 minutes maximum
  – 5 minutes for the proposer to explain why they believe a change is necessary
  – 5 minutes for the rolling stock team and subgroup leader to respond
  – 5 minutes for discussion and conclusion

• The decision will be made by the rolling stock team and the subgroup leader based on the discussion held

• When all points are reviewed and decisions made, a vote will be taken by the voting members on the acceptability or otherwise of the specification for submission to the Executive Board

Please Be Concise!
Summary of Work on Technical Specification

PRIIA Bi-Level Car
Summary of Status of Changes Proposed to C21

• Technical Specification consists of 23 chapters - 518 pages

• 5 Working Technical Groups
  – Structure: Glossary (2), Car Body (4), Couplers (6), Materials (18), Testing (19)
  – Interiors: Car Body (4), Interiors (9), Food Service (14), Customer Defined Options (23)
  – Vehicle / Track Interaction: Trucks (5) Brakes (7) Testing (19)
  – Electrical Doors: (8), HVAC (10), Lighting (11), Communications (12), Electrical (13), Food Service (14), Materials (18), Testing (19), Glossary (2)
  – Mechanical: Brakes (7), Doors (8), Water and Waste (14), Cab (16), Glossary (2)
Summary of Changes

• Total of 455 Comments Received for all chapters

• 427 comments were accepted.
  – Of these approximately 30 comments were accepted with amendments.

• 28 comments were not accepted but were reconciled
Standardization Clauses in Chapters 1 and 3

- Various components have been specified by manufacturer and part number in this specification. The Contractor may propose alternate manufacturers components but the use of alternate components or manufacturers must be approved by the Customer. Proposed alternative components must be interchangeable in form, fit and function with components called out herein.

- For safety critical items, introduction of alternative components will only be considered if such components have an established record, in North America, and/or have undergone an appropriate qualification program that demonstrates an acceptable level of safety, service and reliability for intercity or commuter passenger cars. The data shall be submitted to the Customer for approval.

- Component assemblies and subsystems provided on the first build lot of cars under this Specification must be designed so as to facilitate the exchange and substitution of alternative components for form, fit and function. Subsystem, assembly or component level for interchange will be determined by the Customer.