

# SECTION 305 TECH SUB COMM

MINUTES

AUGUST 25, 2011

3:00PM

CONFERENCE CALL

<b>FACILITATOR</b>	<i>Mario Bergeron, 305 Technical Subcommittee Vice Chair</i>
<b>ATTENDEES</b>	<i>Mario Bergeron, Dale Engelhardt, Greg Gagarin, Dave Warner, Michael Burshtin, Andrew Wood, Melissa Shurland, Anand Prabhakaran, Jeff Gordon, Michael Coltman, Stan Hunter, Steve Fretwell, Camren Cordell, Jack Madden, Jeff Schultz, Kevin Lawson, Jeannie Beckett, Phillip Meraz, Steve Hewitt <b>Industry Participants:</b> Michael Weinman, Ted Schaefer, Rick DeBella, Joe Moore, Keith Frazier, Tony Sanchez, Tim Buchanan, Jolene Molitoris, Mandy Bishop, Tak Ishigami, Peter Mazeo, Gabriel Dinu, Mark Kaidy, Scott Braverman, Chuck Wochele, Eloy Martinez, Paul Jamieson, George Mekosh, Don Itzkoff</i>
<b>ABSENTEES</b>	<i>Ken Uznanski, Tammy Krause, Mike Trosino, Kevin Kesler, Devin Rouse, Chad Edison, Whitney Phend, Charles Bielitz, Brian Marquis, Allan Paul, Curtis McDowell, Charlie Poltenson, George Weber, Art Peterson, Ron Adams, John Oimoen, Michael Treazise, Don Damron, Shayne Gill, Leo Penne</i>

## DISCUSSION/DECISIONS MADE

Chairman Bergeron opened the meeting and reviewed the agenda.

Steve Hewitt took the roll of the "Core Team" members present and reported that Connecticut DOT has joined the subcommittee and will be represented by Jeff Schultz. Steve also reported that Iowa DOT has changed its Technical subcommittee representative from Tammy Nicholson to Phillip Meraz. Industry participants were asked to email a notification of their attendance to Steve at [shewitt109@aol.com](mailto:shewitt109@aol.com).

On a motion by, Mario Bergeron (noting that Kevin Kesler, FRA representative was not on the call, but would be given a chance to weigh in if he sees anything in the agenda that is incorrect or missing) and a second by, Jack Madden, NYSDOT, the minutes of the August 11, 2011 conference call of the Technical subcommittee, were approved without objection.

Steve Hewitt reviewed the open action items and provided a brief update on those items that were not on the agenda: (Note, a few items to be addressed by Kevin Kesler, were removed from today's agenda and will be addressed on the next call)

### **Maintaining Industry Participation List:**

Steve Hewitt reported that since the last update the subcommittee has added one additional industry participant. The list has been updated, and now includes **183** members! The list is posted on line at the AASHTO website at [www.highspeed-rail.org](http://www.highspeed-rail.org) in the subcommittee link and is included in the monthly S305 NGEC activities report.

### **Dual Mode Locomotive Requirements Document:**

As previously reported, the Dual Mode Locomotive Requirements Document has been submitted from the subcommittee to the Board, and the Board has been asked not to consider the document until the issue of CEM has been resolved. The next Board call is August 30, 2011, and it is anticipated that the CEM position paper will come before the Board on the call.

### **Formation of a Cars Technology Task Force:**

This action item remains as an open item for future consideration once the LTTF has completed its work and if it is determined that the subcommittee has the capacity to do it.

### **Status: FRA-CEM Position paper:**

In Kevin's absence, there will be no status update on this item. Carried over till next call.

### **Questions on 110-125 mph – re: Tier III and Tier IV being developed for the LTTF:**

In Kevin's absence this item is tabled till next call.

**Agenda Items:**

**Update: Standardization Pilot Program Review – Michael Burshtin:**

Michael Burshtin reported that work with the subgroup leaders to identify pilot candidates for Standardization has continued, and he anticipates that there will be approximately 2-3 candidates for standardization to be submitted to the Executive Board around the first or second week of September for consideration.

It was agreed, at the suggestion of Chairman Bergeron, that the Technical subcommittee, at least in this first instance, have an opportunity to review the pilot candidates before they are submitted to the Executive Board.

Michael pointed out that one issue that has not yet been discussed or decided is once a family of standards has been assembled – how will it be handled and by whom. Steve Hewitt suggested that the Standardization Working Group provide a recommendation to the subcommittee for its consideration.

Larry Salci noted that at some point in time it will become "inappropriate for the industry to have input in standardization candidates because of competitive interests". This, he believes, will really come in to play in the procurement process. Larry agreed to reach out to Michael Burshtin to discuss this further – off line.

**Update: Document Control Pilot process status – Dave Warner**

Dave Warner submitted the following report for inclusion in the Minutes:

*"The Document Change Summary for Bi-Level Specification Revision A was distributed to the Technical Subcommittee on August 18, with the intention of voting on it today. I received no requests for the original Document Change Request documents, nor did I receive any emails requesting clarifications of the contents.*

*Assuming approval of the changes today, the Document Change Summary will next go to the Review Panel for its assessment of the changes vis-à-vis the requirements document. I would recommend that the Review Panel that reviewed the Bi-Level Specification be re-assembled for this effort. Ideally, this will not take more than two weeks, and then the Executive Board will vote on the Changes, hopefully on September 13. (this should be September 15<sup>th</sup> – as the Board will meet in person on that day – in Charlotte, NC and will not have its regularly scheduled call on the 13<sup>th</sup> – SH)*

*In the past week the question has come up about how to provide Amtrak specifications and drawings reference d in vehicle specifications to industry. I am working with Tammy Krause on a solution that will create clones of the existing Amtrak specifications and drawings, and assign them a PRIIA-only number. (This is different than what was done in 2010 when the first Amtrak-for-PRIIA documents were assigned numbers within Amtrak's own system.) We envision the documents with the PRIIA-only number will be posted on the AASHTO web site. Any changes to them would be made through the DCR process. The basic Amtrak specifications and drawings would not be affected, and could, themselves, be changed internally within Amtrak without affecting the PRIIA-only document. In short, today we have two documents that are identical except for their number. In a year or so we'll conceivably have two documents that are not the same.*

*We have noticed that some Amtrak drawings are also APTA drawings, and are researching whether those are thus already in the public domain, and thus do not need an additional PRIIA number.*

*We hope to have the PRIIA-number assignments made by the end of the week, and have the coversheets done next week. Further, we'll take care of the DCRs that will have to be submitted to change references to existing document numbers in vehicle specifications."*

Stan Hunter raised a number of concerns about having PRIIA and Amtrak documents and ending up with non compatibility or conflicts. Dave Warner commented that, although Stan has a good point, it is unlikely that the conflict he describes will occur.

PRIIA will, hopefully, become ingrained into the process – if Amtrak makes changes to its specs and/or if changes are made to PRIIA specs each should talk to one another and, possibly will make the same change to stay consistent. It is not automatic, but should be relatively common.

Stan suggested this be brought to the Systems Engineering group as they have overall oversight. Dave Warner agreed to talk off line to Jeff Gordon.

Mario emphasized that the effort here was to try to make this a clearer process.

**Update: Locomotive Technology Taskforce – Dave Warner:**

Dave Warner submitted the following report for inclusion in the Minutes:

*"Two reports were distributed to the Technical Subcommittee on August 16. I don't believe there is a need to summarize them on this call; they speak for themselves.*

*I would say the "take away" point for the Locomotive Vehicle/Technology Report is that, as of today, the state of the art is such that for a 110 or 125 mph top speed vehicle would dictate that we would build what we have been building. Some form of hybrid technology is promising for implementation within perhaps ten years, and building one or two test vehicles is something for the FRA Office of R&D to consider.*

*Regarding the Top Speed Variation Impact Study, the results are very mixed, but it does not appear that the mere fact that PRIIA may be ordering 125 mph/Tier IV locomotives would necessarily result in a doubling of current locomotive prices, which, in essence, was the concern that resulted in this study being done. A major cost driver, because it is still an untried technology is the Tier IV emission requirements.*

*Both of these reports, along with the "other Locations for Dual Modes" report previously submitted, are awaiting the creation of a PRIIA information disclaimer prior to their posting on the web site.*

*Finally, two calls ago, the Task Force was tasked to take a look at fuel consumption and what the impact would be along with different top speeds. Preliminary results based on a theoretical, 90 mile, two station/two terminal route, is that fuel consumption goes up about 40-45% as the maximum speed is increased from 90 to 125 mph. But, if you assume a 90 mph top speed trip uses 100 gallons of fuel, doing the trip at 125 mph top speed used 45 additional gallons. I don't want to go into more details right now because I'm working through differences in how the data was reported to me. But, this is a good, ballpark number (40-45%) increase in fuel for this question."*

Steve Hewitt explained the issue of developing a disclaimer statement as mentioned in Dave's report. Basically, because these reports represent opinions, it makes sense to have an information disclaimer statement that addresses that fact. This had been assigned to the Administrative Task Force as such policy issues are under its purview. However, the Task Force Chair and Executive Board member, Rod Massman, has left his state DOT and currently there is no Chair of the Administrative Task Force. The Board expects to fill this vacancy in the short term, but until then it likely will not address the disclaimer issue.

**Review Proposed Locomotive Requirements Document Revision – Dale Engelhardt:**

Dale Engelhardt provided a brief overview of the proposed changes to the Diesel-Electric Locomotive Requirements document to change the maximum speed from 125 mph to 110 mph. This request for a change came from the Executive Board, and is primarily meant to help in the first procurement of locomotives by CALTRANS which will be about 35 or 36 locomotives, and, if required to be built to 125 mph, with much larger freight orders coming in at 110 mph requirements, the ability to place the order and attract industry interest would be greatly impacted and the procurement may be in jeopardy.

Dale described the three main changes made to the document:

1. Maximum speed from 125 to 110 mph
2. The fuel tank for 125 mph is smaller than for 110 (impact of weight) At 110 requirements the fuel tank can be bigger.
3. Head End Power – in order for the locomotive to get traction to get to 125 mph the HEP is limited to about 600 kilo watts – if the max is changed to 110 mph the HEP can be increased to 800 Kilo watts.

Jack Madden noted that in two of the three examples, the Dual Mode Locomotive Requirements document used the same requirements and may need to be changed. He also mentioned that the format needs to be consistent with the other requirements documents so this revision document may need to be reconfigured.

Mario commented that it is possible that the Board would also want to change the Dual mode document, but not certain at this point, particularly when there is no planned procurement until 2015. There is time. The driver here is the procurement of 35 or 36 locomotives that is going forward.

Mike Weinman asked why it was necessary to have either or (125 or 110) Why not put it out for the purchaser to select which speed.

Stan Hunter commented that this would "defeat the point of standardization. Customer options are meant to be superficial in nature – something like this would be major and not acceptable and would be very difficult to administer." He also noted that 'giving an option is not as appealing as otherwise' especially with a small order going up against a large freight order.

Stan also noted that the technology is still early in the development stage regarding 125 mph and Tier IV. Jeff Schultz, concurred there is so much that needs to be researched.

Don Itzkoff asked if changing the maximum speed in the document will impact EPA compliance. Generally, the response was that once the Board approves the change to the requirements document, the specification would also need to be updated, but requirements documents do not address emissions. The spec alludes to reaching Tier IV and would need to change the spec to state "compliance with Federal Regulations". The spec, in other words must comply with current emission regs.

After additional discussion, it was decided that, although the Board owns the requirements documents, it asked the subcommittee to provide a recommended revision to it, and it would be reasonable to take a poll of the Technical subcommittee members present to see if they approve of the draft revision. Recognizing that Kevin Kesler is not present, the Chairman asked Dale Engelhardt to reach out to him prior to the Board meeting on Tuesday, to give him a chance to weigh in.

After a motion was made by Jack Madden, NYSDOT and seconded by Jeff Schultz, Connecticut DOT, to approve the revisions to the Diesel-electric locomotive requirements document as presented, a poll was taken, and all voting members present, as well as Jeff Gordon, Volpe, and Melissa Shurland, FRA, agreed with the revisions and agreed to move it to the Board for its consideration

**Poll:**

Mario Bergeron, Amtrak – aye  
Jack Madden, NYSDOT – aye  
Kevin Lawson, Louisiana DOT – aye  
Jeannie Beckett, Washington DOT – aye  
Stan Hunter, CALTRANS – aye  
Jeffery Gordon, Volpe – aye  
Melissa Shurland, FRA – aye  
Jeff Schultz, Connecticut DOT – aye  
Phillip Meraz, Iowa DOT – aye

**DMU specification**

Mario Bergeron noted that the primary reason for the surveys to be taken was to try to get a sense of resources and demand for a potential DMU specification.

a. State survey responses – Steve Hewitt:

Steve Hewitt reported that eleven states have expressed their support for the development of a 305 DMU specification. One state responded with what the best uses of a DMU would be and gave input on a DMU spec, but never said whether or not they would support a 305 DMU specification development. Five states expressed no interest in having a 305 DMU spec developed and no plans to use DMUs. Of the 11 states supporting the DMU specification, four are members of the NGEN Executive Board.

b. Supplier survey response – David Warner:

Dave Warner reported that "nine individuals (up from six two weeks ago), including four consultants and five vendor representatives, have confirmed interest" in assisting in the effort to develop a 305 DMU specification.

c. Draft Requirements Document submitted by US Railcar – Dale Engelhardt:

Dale Engelhardt reported that he had reviewed the DMU Requirements document submitted by US Railcar and identified changes that would be needed. In part, he felt, the document is requirements, and in part it is advertising.

Dale agreed to develop a draft 305 requirements document, with input from the US Railcar document and all comments received by those who have reviewed the document thus far. Bob Highfill agreed to send Dale a mark-up he had done on the draft document as well.

Dale will also format the document consistent with all 305 Requirements documents.

At the suggestion of Paul Jamieson, Jeff Gordon agreed to set up a conference call of the mechanical subgroup to provide its input to Dale as well.

Dale will have a draft document developed and distributed to the subcommittee in four weeks. (In time for the September 22<sup>nd</sup> Technical subcommittee call).

In the meantime, Mario Bergeron asked Steve Hewitt to be sure to note in the minutes of this call, the results of the survey, and to ensure this was an agenda item on the Tuesday Executive Board call.

**Update: ADA working group progress –Melissa Shurland:**

Steve Hewitt's phone cut off and he did not hear Melissa's report, but Melissa provided him with the following summary:

*"The Working Group met on August 17<sup>th</sup>. The main topic of discussion was the possibility of increasing the design load of the wheelchair lifts for the PRIIA cars to 800 lbs. This 200lb increase over the ADA regulation minimum design load (600 lbs) will accommodate the modern heavier power chairs and scooters. The car-builders on the call (Kawasaki, Talgo, Bombardier) took the action to discuss the proposed loading increase internally and provide feedback on whether their car designs can accommodate such an increase, and if not, why? The issue of operating these lifts on curved tracks with super elevation was discussed at length. FRA is working with Amtrak to understand how many accessible stations with low-level boarding are on curved tracks with super-elevation. The next meeting will be on August 31, 2011.*

**Update: Buy America survey work – Jeff Gordon:**

Jeff Gordon reported that the survey of 9 manufacturers had gone out, and that 8 of 9 recipients/respondents had been engaged by FRA in follow up – detailed- hour long phone calls. There is one follow up call remaining (today - I believe). Once that has taken place, all 9 survey recipients will have been called.

The next step will be to compile the information and make it a sterile report (no identification of who the participants were). A presentation of the information will be given (most likely by Kevin Kesler) to the FRA Administrator and USDOT Secretary. Once this has happened, and it has been approved, the presentation will be given to the S305 Executive Board and Technical subcommittee members via webinar.

This item will remain an agenda item to keep the subcommittee apprised as to its status.

**Other – all:**

Steve Hewitt asked if the intent was to wait until the next subcommittee call to officially vote on the Document Change Summary for submission to the Executive Board. Chairman Bergeron affirmed that this will be taken up on the next call when Kevin Kesler is present and a quorum is assured. At that time, we will also reform the bi-level specification Review Panel.

**Action Items Update (New)**

The Standardization working group expects to have candidate items (2 or 3) for Board consideration by early to mid-September. The group will bring those to the subcommittee first prior to going to the Board. The Standardization Group will also make a recommendation for handling the items assembled and approved Standardization items.

Steve Hewitt will send an email out to new industry members to solicit involvement in the various subgroups that the subcommittee has established for purposes of developing specifications and for identifying standardization candidates. The sub groups are: Interiors, Mechanical, Electrical, VTI, Structural and Locomotive.



- |  |                  |
|--|------------------|
| 6. Update: Standardization pilot program             | Michael Burshtin |
| 7. Update: Document control pilot process status     | David Warner     |
| a. Document Control Change Summary                   |                  |
| 8. Update: Locomotive Technology Taskforce           | David Warner     |
| a. 110-125mph white paper – discussion               |                  |
| b. Fuel consumption issues - report                  |                  |
| 9. Questions on 110-125 mph – re: Tier III – Tier IV | Kevin Kesler     |
| 10. Review Proposed Locomotive Requirements Document | Dale Engelhardt  |
| 11. DMU specification                                |                  |
| a. State survey responses -                          | Steve Hewitt     |
| b. Industry survey responses –                       | David Warner     |
| c. Draft req. document submitted by US Railcar –     | Dale Engelhardt  |
| 12. Update: ADA working group progress               | Melissa Shurland |
| 13. Update: Buy America survey work                  | Kevin Kesler     |
| 14. Review this meeting:                             | Steve Hewitt     |
| a. Decisions   |                  |
| a) New Action Items                                  |                  |

***Technical Sub Committee Conference Call Meeting:  
Thursday August 25, 2011 3:00 EST: 1-866-209-1307 / passcode 6486648#***

Go to meeting invitation link: <https://www1.gotomeeting.com/join/608558625>

***Please call in a few minutes early so all is in attendance for Roll Call.  
Thank you***