PTC Interoperability Lessons Learned

Bill Everett
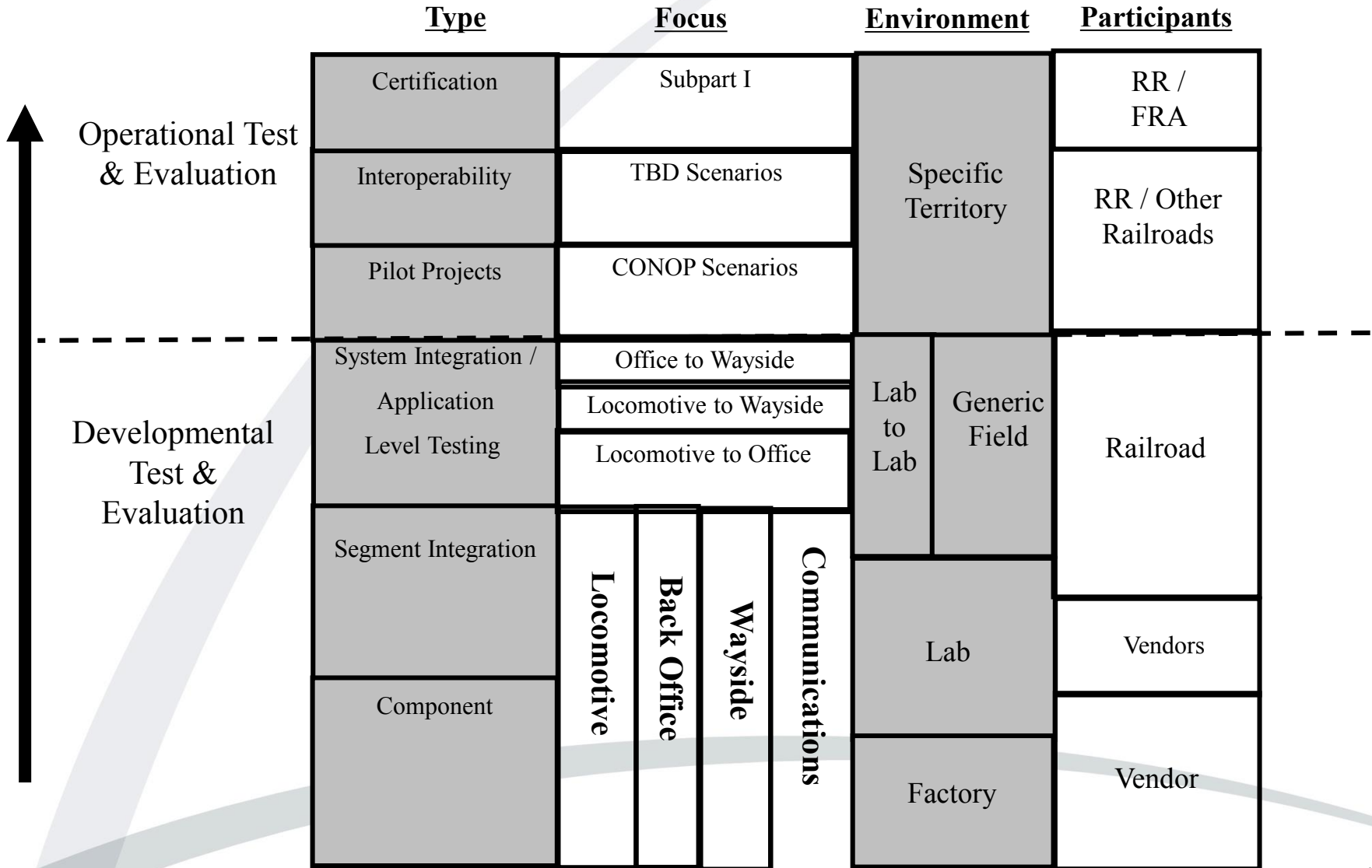
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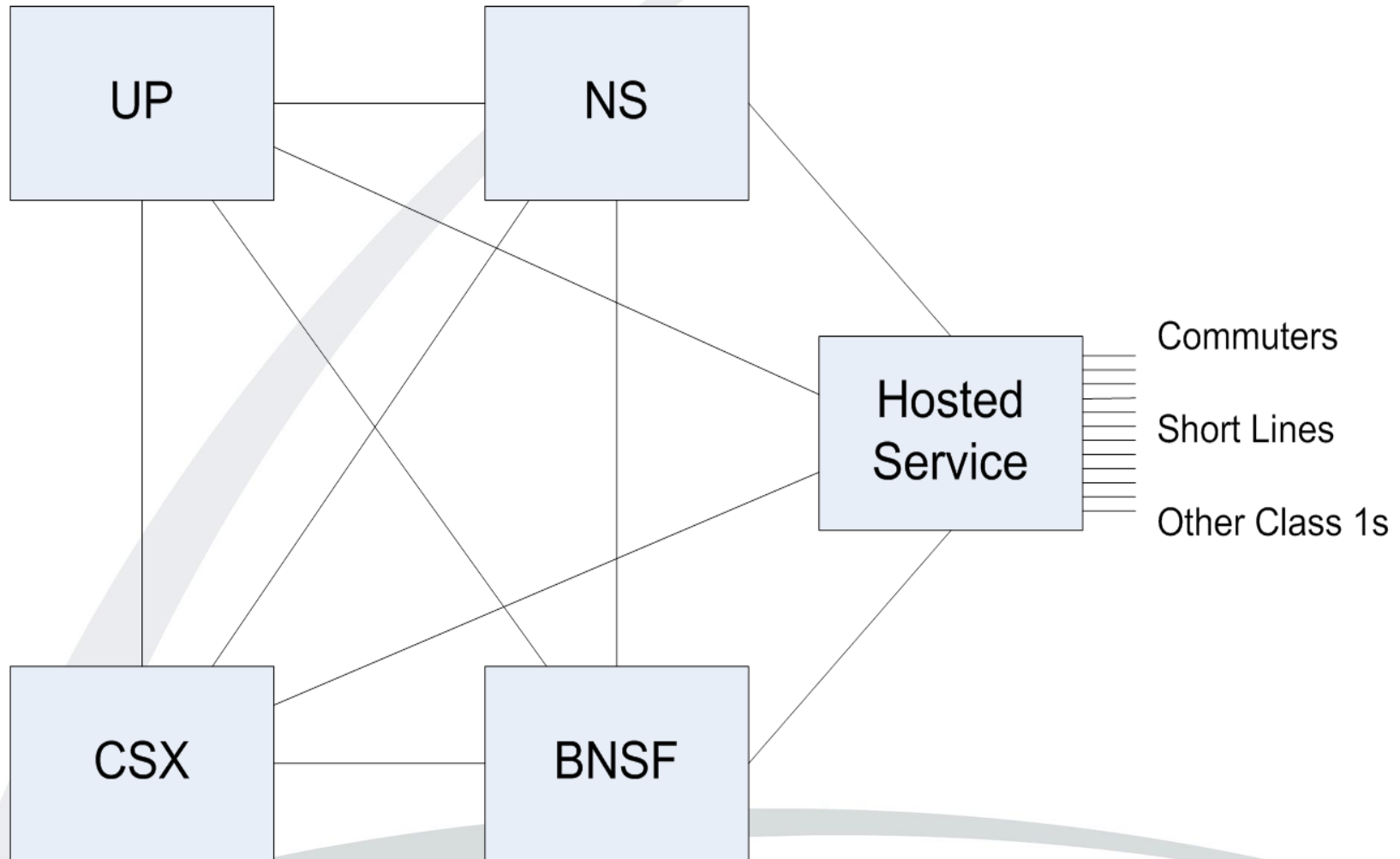
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- Background
  - What is Interoperability for IETMS?
  - FRA Guidance – Jan 10th, Feb 10th

- Environment for discussion
  - RailwayNet^{SM}, Amtrak Locomotive, CSX Back Office

- Review of Interoperability Testing
  - Lab and field

- Lessons Learned

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Background

	Type	Focus				Environment		Participants
Operational Test & Evaluation	Certification	Subpart I				Specific Territory		RR / FRA
	Interoperability	TBD Scenarios						RR / Other Railroads
	Pilot Projects	CONOP Scenarios						
Developmental Test & Evaluation	System Integration / Application Level Testing	Office to Wayside				Lab to Lab	Generic Field	Railroad
		Locomotive to Wayside						
		Locomotive to Office						
	Segment Integration	Locomotive	Back Office	Wayside	Communications	Lab		Vendors
	Component					Factory		Vendor

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# Environment - RailwayNet^{SM} Hosted PTC Service

PTC Interoperability Scenario

- ***Objective:***
  - Successfully initialize an Amtrak Locomotive and operate on CSX Aberdeen subdivision

- ***Keys to success:***
  - Clear expectations discussed and agreed to.

  - Amtrak obtained permission from Wabtec to use a hosted version of the BOS for the test.

  - Thorough planning with all key stakeholders both. Both Technical and Management.

  - Deep technical expertise and tools in all areas.

  - Maximum use of lab test environments before field testing.

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Environment – Amtrak Interoperability Testing with CSX
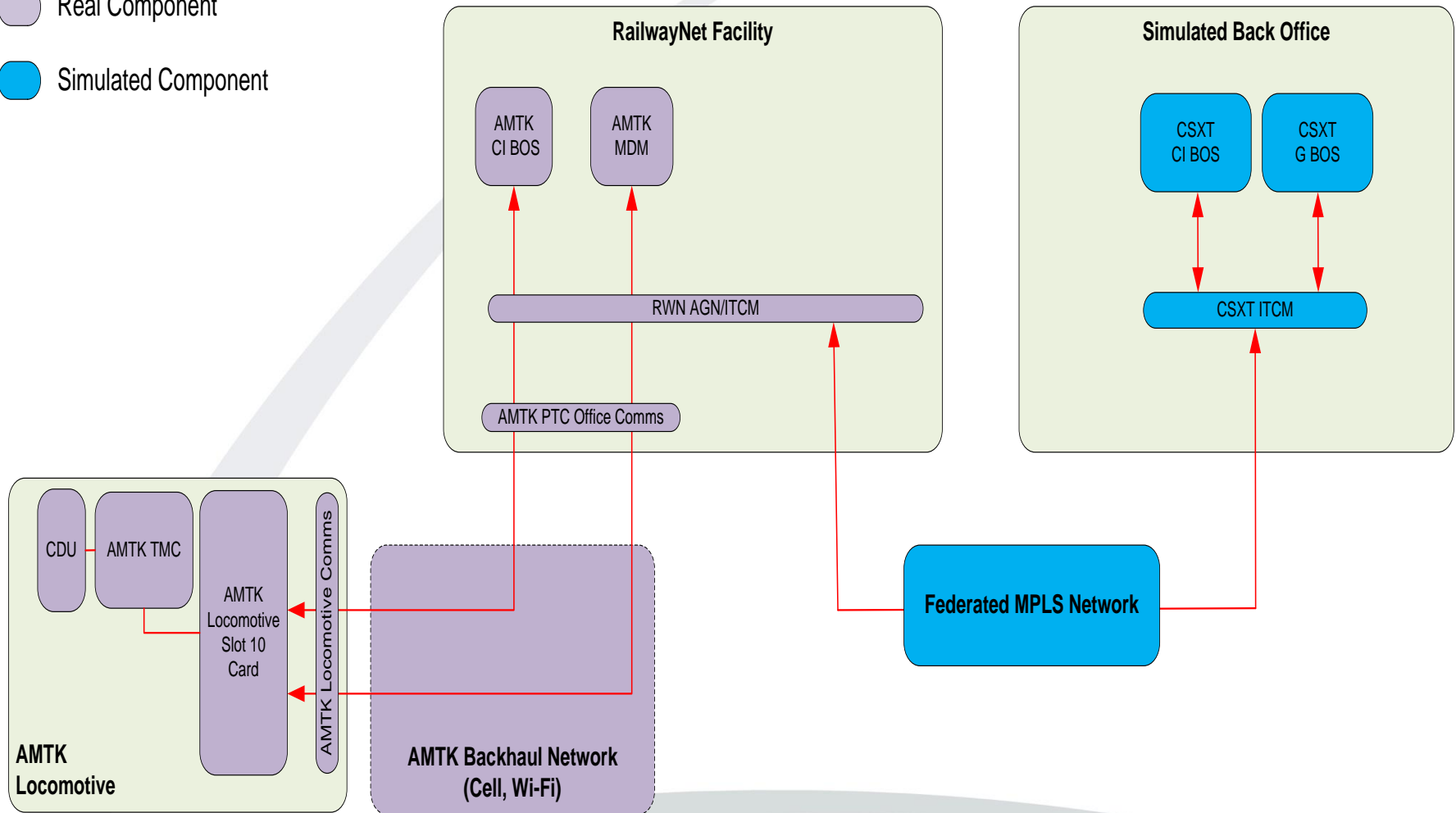
Summary of Lessons Learned

- Keep frequent and open communications between all stakeholders from start to finish.

- Review and understand issues that have occurred in the current RSD operation in the subdivision.

- Anticipate and test as many potential failure scenarios as possible in lab environments.

- Something unanticipated will happen. Be prepared to react and adjust.

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