



**USEPA Clean Diesel Engine Implementation Workshop** 

**Timeline for Vehicle and Engine Integration – Facilitating Field Testing** 

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# **Integration and Field Testing**

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## Integration Requirements

- Engine development traditionally "leads" vehicle integration
- Concurrent development and validation
- Definition of major installation impacts and solutions need to occur before "early" vehicles for field test ready
- Customer field test plan as an integral component of production validation



### **Timeline for Vehicle and Engine Integration – Facilitating Field Testing**

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2007 Emissions Schedule - Draft																																								
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Strategic Product Planning																								ļ					ļ											
Concept Development and Early Design							_				_													ł																
Prototype Design, Tooling, Build Activities																			_					ļ			_													
Prototype Test and Validation																					_			Ļ					į		_									
Prod. Intent Design / Release Activities					_																		_	ļ					ļ								_			
Customer Field Test - Proposed																													ļ			_	_							
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### Field Test Requirements

- Fuel availability
- Field service support from OEM and engine manufacturer
- Production intent hardware and installations
- 18 months in service customer need
- Coverage of product lines



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## **Field Test Benefits**

- Operational
- Maintenance
- Early feedback to OEM and engine manufacturer
- Customer confidence