



National Information Exchange Model

The RFI and NIEM Challenges

17 February 2009

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DHS OCIO Enterprise Data Management Office

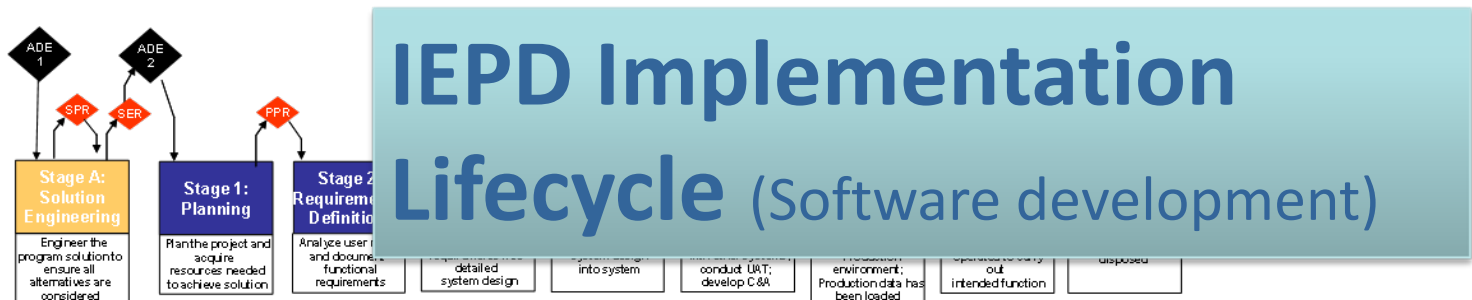
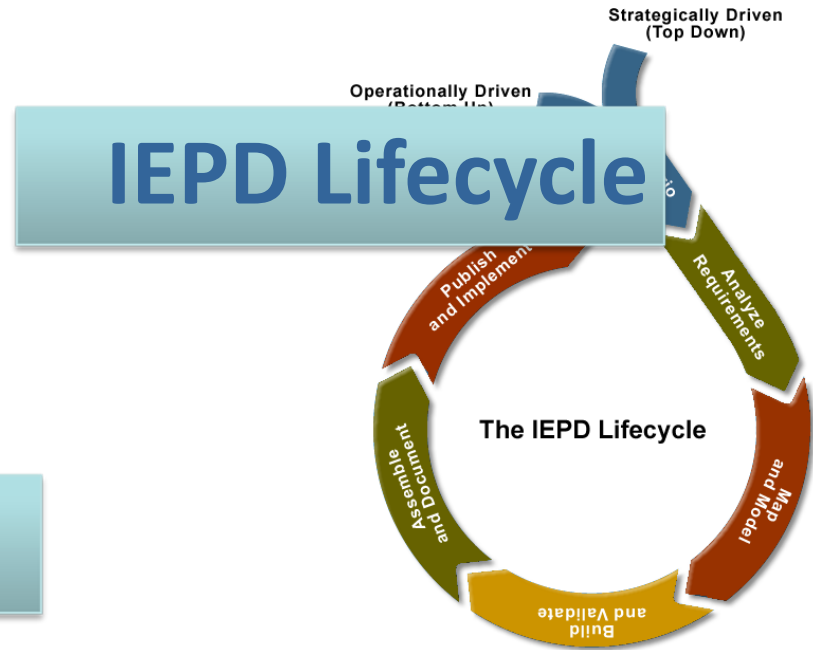
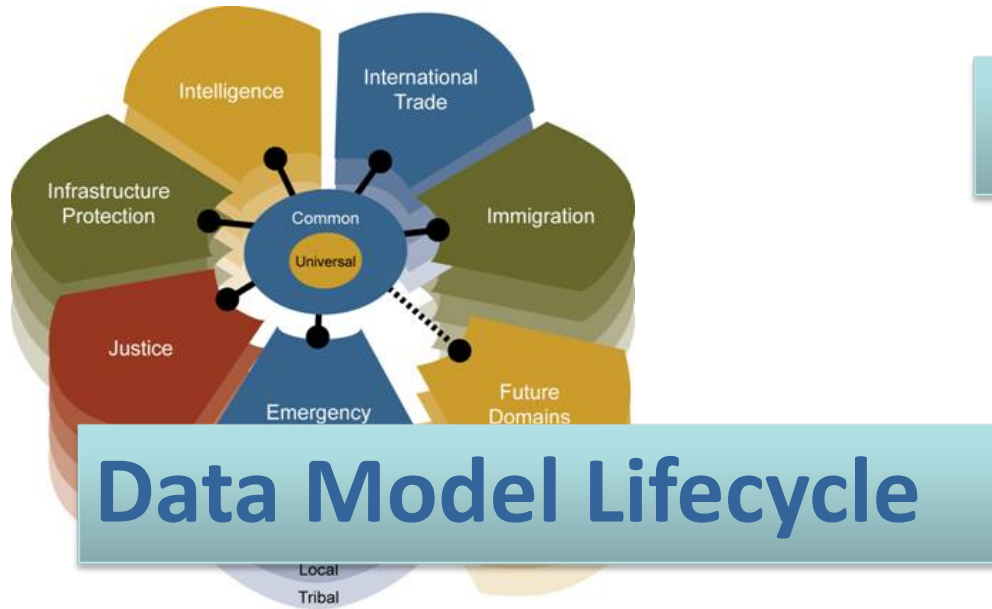


Purpose of the RFI

“The purpose of this RFI is to ***solicit industry’s best ideas*** for overcoming challenges to the NIEM program by providing technical solutions across the ***entirety of the NIEM lifecycle.***”



“...entirety of the NIEM lifecycle”



Key

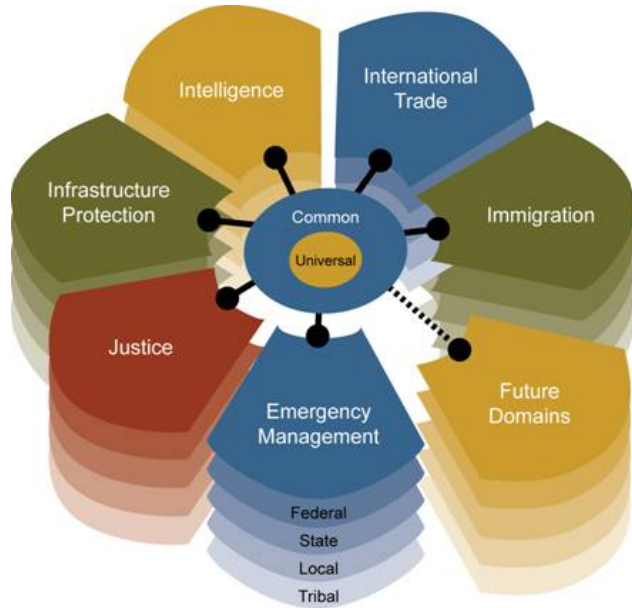
SPR: Study Plan Review
SER: Solution Engineering Review
PPR: Project Planning Review
SDR: System Definition Review
PDR: Preliminary Design Review
CDR: Critical Design Review

TRR: Test Readiness Review
PRR: Production Readiness Review
ORR: Operational Readiness Review
PIR: Post Implementation Review

Note: A Project Tailoring Plan must be developed that defines what stages, activities, and artifacts will be completed for the project. The Project Tailoring Plan should reflect the unique characteristics of the project and provide the best opportunity to deliver the system effectively.



“...entirety of the NIEM lifecycle”



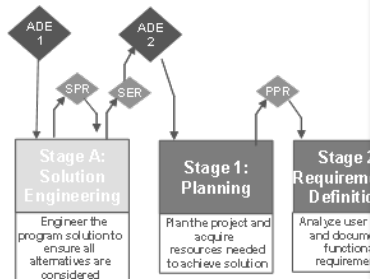
Strategically Driven
(Top Down)

Operationally Driven

Data Model Lifecycle

- Iterative enhancement of a “Common Language” for Information Exchange with a *Core* model and multiple domain models
- Governed by the business users at Federal, State, Local, Tribal and Private Sectors

- Key challenges: Independent domain versioning with self-service/management capability



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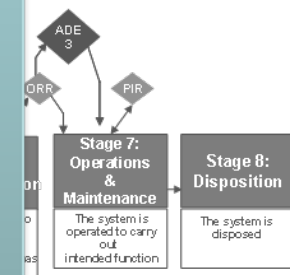
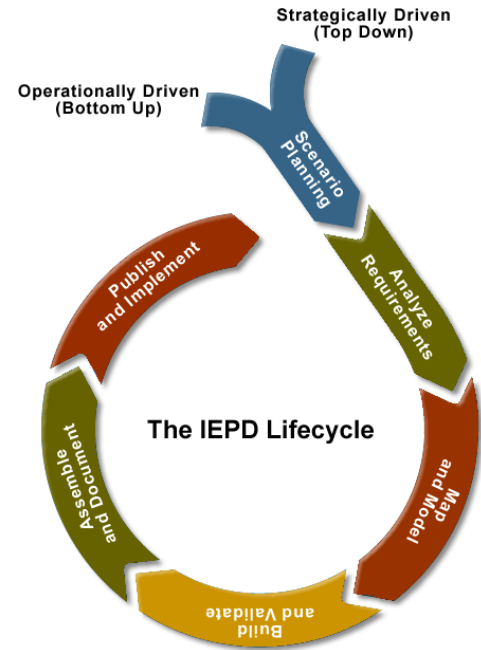


“...entirety of the NIEM lifecycle”

IEPD Lifecycle

- Repeatable, reusable process for business users to document information exchange requirements
- NIEM practitioners trained at the Federal, State, Local, Tribal and Private Sector level

- Key challenges: NIEM mapping and modeling stage, IEPD reuse, rapid development, and round-trip engineering – closing loop with downstream IEPD implementers



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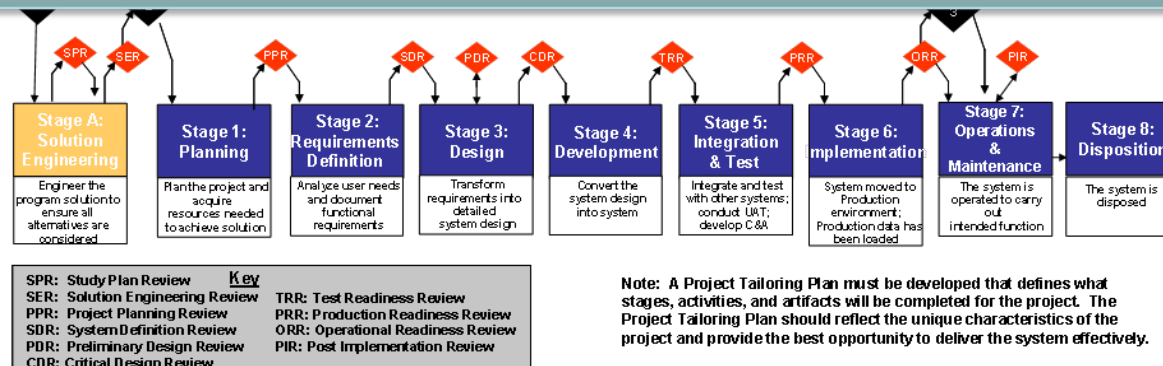


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Strategically Driven
(Top Down)

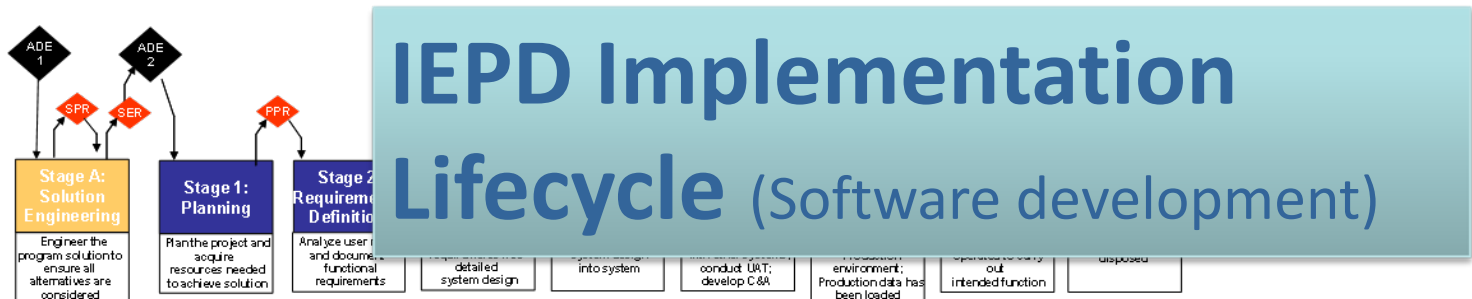
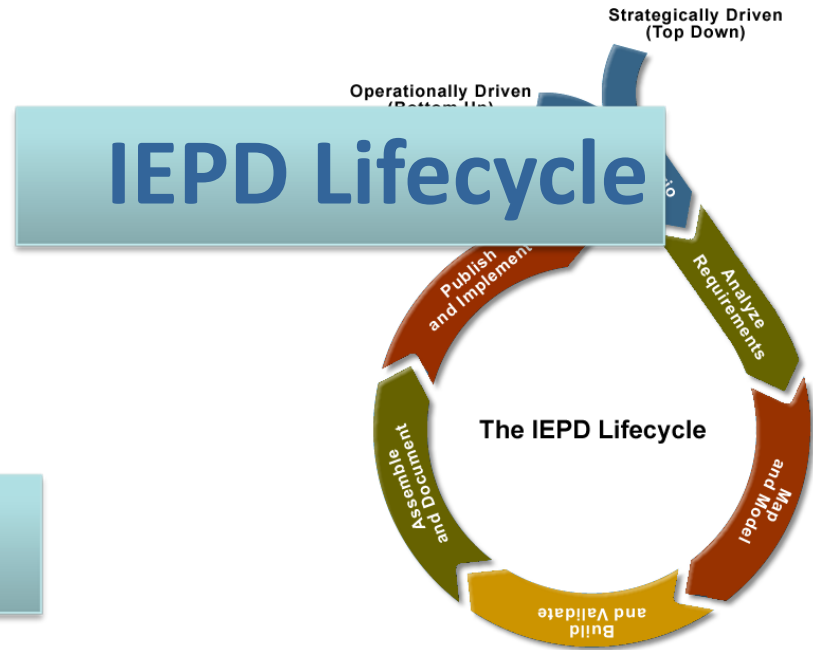
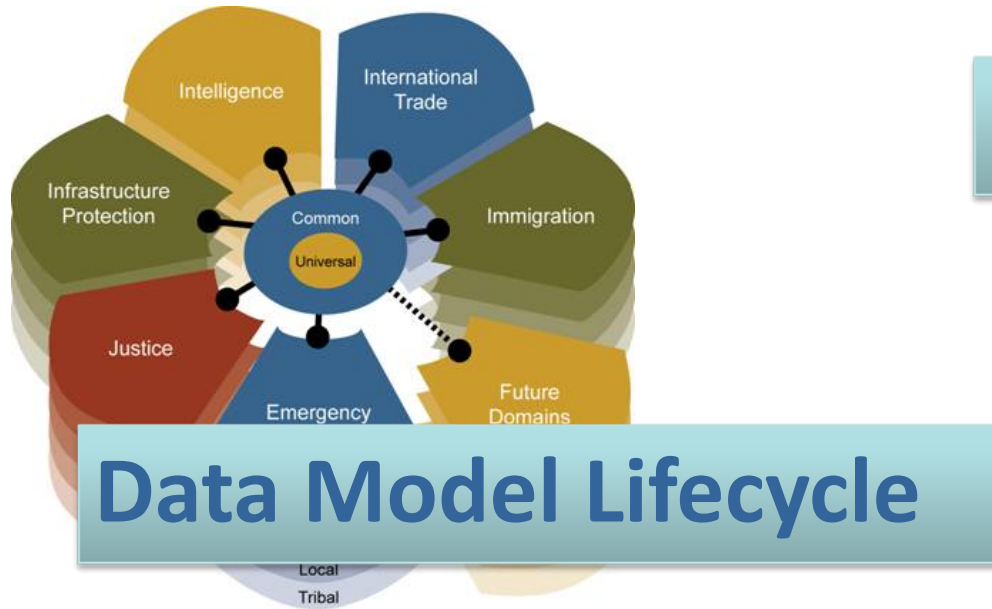
IEPD Implementation Lifecycle

- Rapid deployment of NIEM IEPD-based services on ESBs and other information exchange platforms
- Integrate IEPDs with messaging frameworks: UCore, LEXS, EDXL
- Key challenges: Close the loop between IEPD developers, SOA architects and software developers; Integrating with other layers in interoperability stack—transport, service, business process





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Five Categories of NIEM Tools

- **Five categories of tools**
 - IEPD Development Tools
 - IEPD Implementation Tools
 - Conformance Checking Tools
 - Domain Management Tools
 - Registry and Repository Tools
- **Tools should align to the NIEM High-Level Tools Architecture (HLTA)**



NIEM High-Level Tools Architecture

- HLTA is a ***blueprint for how NIEM tools interact*** and interface with each other.
- Ensures that different types of ***tools can be mixed and matched and more importantly, integrated.***
- Ensures that the NIEM tools platform is adaptable, flexible, and designed around an open IT architecture that ***encourages the development of interoperable NIEM tools and services.***
- See: <http://www.NIEM.gov> for HLTA document



RFI Next Steps



NIEM RFI Timeline

Date	Time	Activity
February 17, 2009	1:00pm – 4:00pm EST	NIEM RFI Event held at location in SW Washington, DC
February 24, 2009	NLT 4:00pm EST	Government to respond to DRAFT RFI questions via Fed Biz Opps website
February 27, 2009	NLT 4:00pm EST	Government to post FINAL version of RFI on Fed Biz Opps website
March 13, 2009	NLT 5:00pm EST	FINAL RFI responses due to Contracting Specialist, NIEM-RFI@dhs.gov



NIEM Executive Panel