USMTF XML SCHEMA

Using

NIEM Methodology

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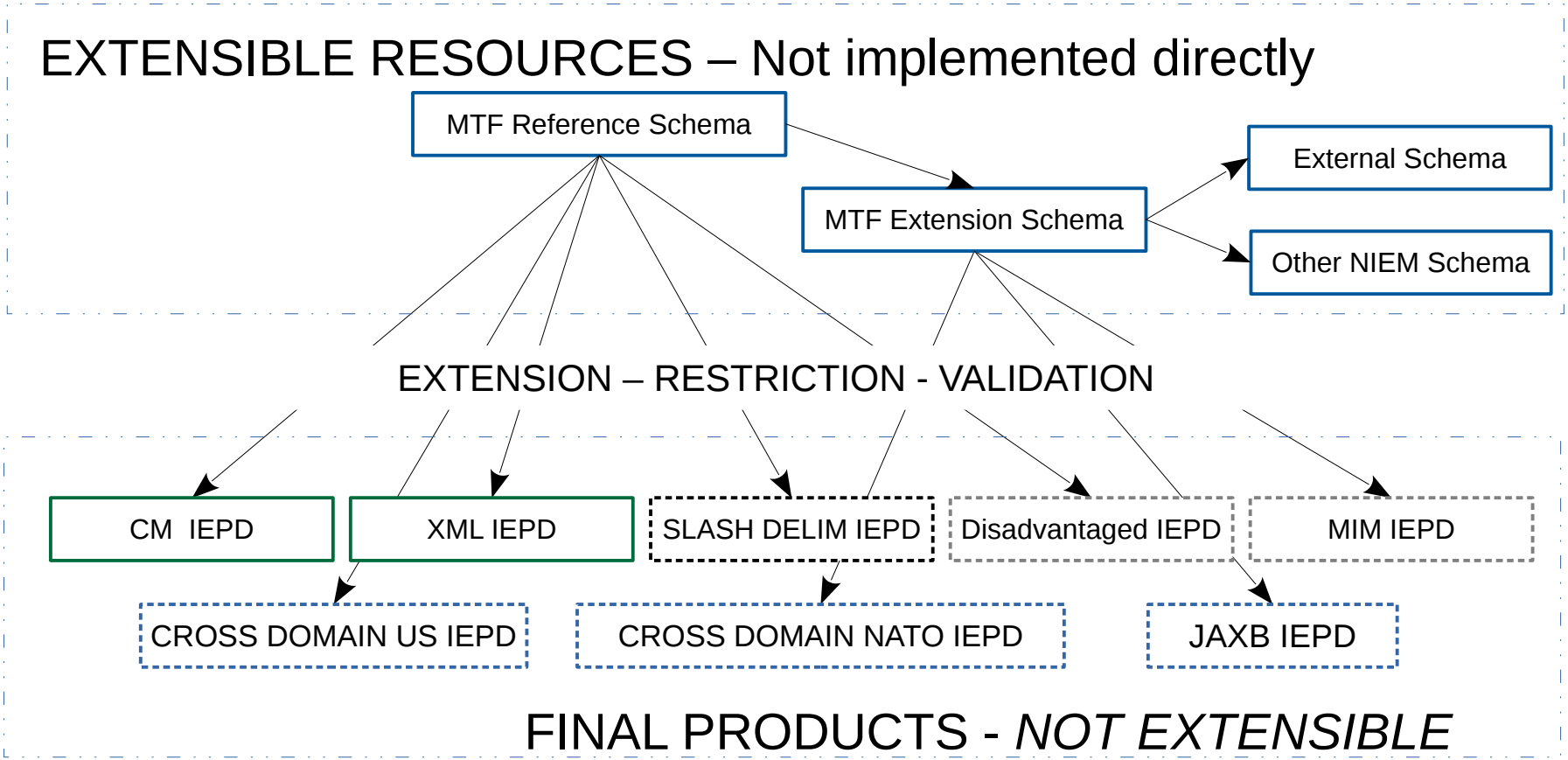
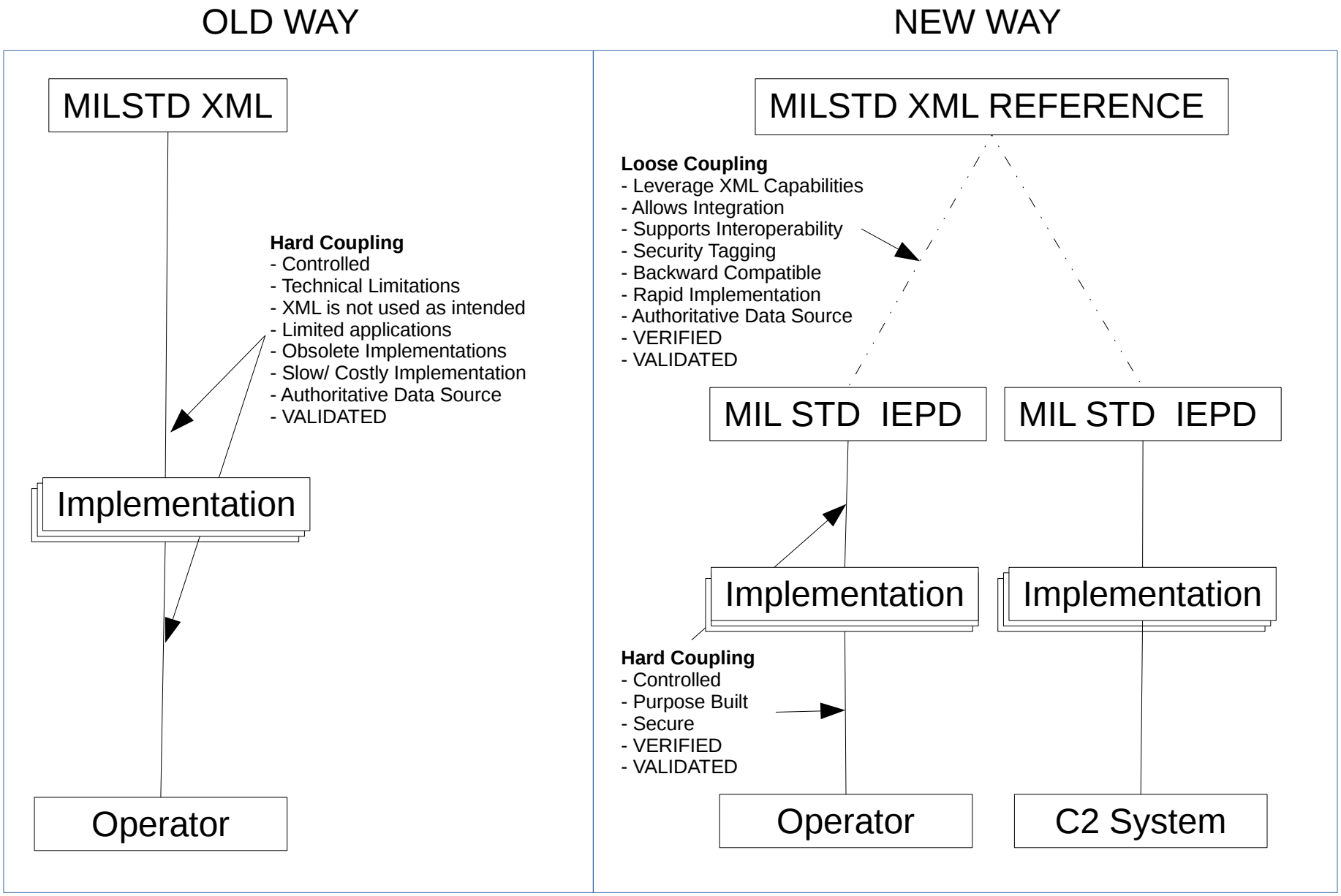
USMTF XML SCHEMA IMPLEMENTATION

NIEM METHODOLOGY

- *Employ Uniform XML Schema design principles to maximize extensibility in order to achieve Interoperabilty between complex data models.*
- *Data component "Re-Use" is achieved using XML Extension and Restriction for purposes of validation and independent verification.*



MOTIVATION
MTF Modernization and Interoperability



Project Status

All US and NATO MTF Messages have been refactored to achieve:

1. Cumulative NIEM Conformant Reference XML Schema for each standard using a single XML Namespace
2. Separate Reference XML Schema for each Message
3. Cumulative Implementation XML Schema for the entire standard against which all instances are valid.
4. Separate Implementation XML Schema for each Message for which all instances are valid against the both Implementation and Reference Schema.

Implementations

Current Plans include development of IEPDs for:

1. XML based information exchange of US and NATO MTF
2. Conversion between US and NATO MTF
3. Slash Delimited Information Exchange
4. Backward Compatibility
5. Configuration Management Implementation

In Work

Remaining tasks to complete full MTF Representation:

1. Generate tests to verify full representation of MTF standards
2. Convert existing Structural Relationships to XPath / Schematron notations
3. Generate Code and Code Tests
4. Complete Collaborative tools to allow adjustments and changes to current products without full regeneration
5. Add 4774/4778 extensions for NATO Security markings

Collaborative Efforts

1. All Products are available to Partner Nations for use in Exercises and Demonstrations in order to identify issues and allow recommendations for improvement

2. All software used to generate these documents, as well as guidance on how to implement them will be publicly available at:

   https://github.com/mil-oss/MTFXML

3. Information Exchange solutions using these products will follow the Information Exchange Product Documentation principles provided in the NIEM methodology which ensures that all necessary resources for a specific implementation are provided with a data model implementation.

Way Forward

1. Provide USMTF NIEM MTF XML as “Alpha” for next any ACTDs, JCTDs and partner nations who want to engage (Canada and Australia use USMTF)

2. Incorporate inputs into “Beta” version for 2020, and update implementers

3. Incorporate inputs and propose alternate/upgrade version of USMTF NIEM XML in 2021

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