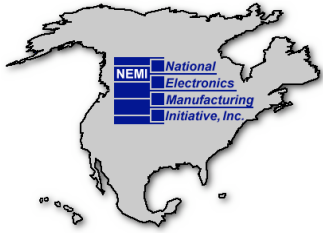


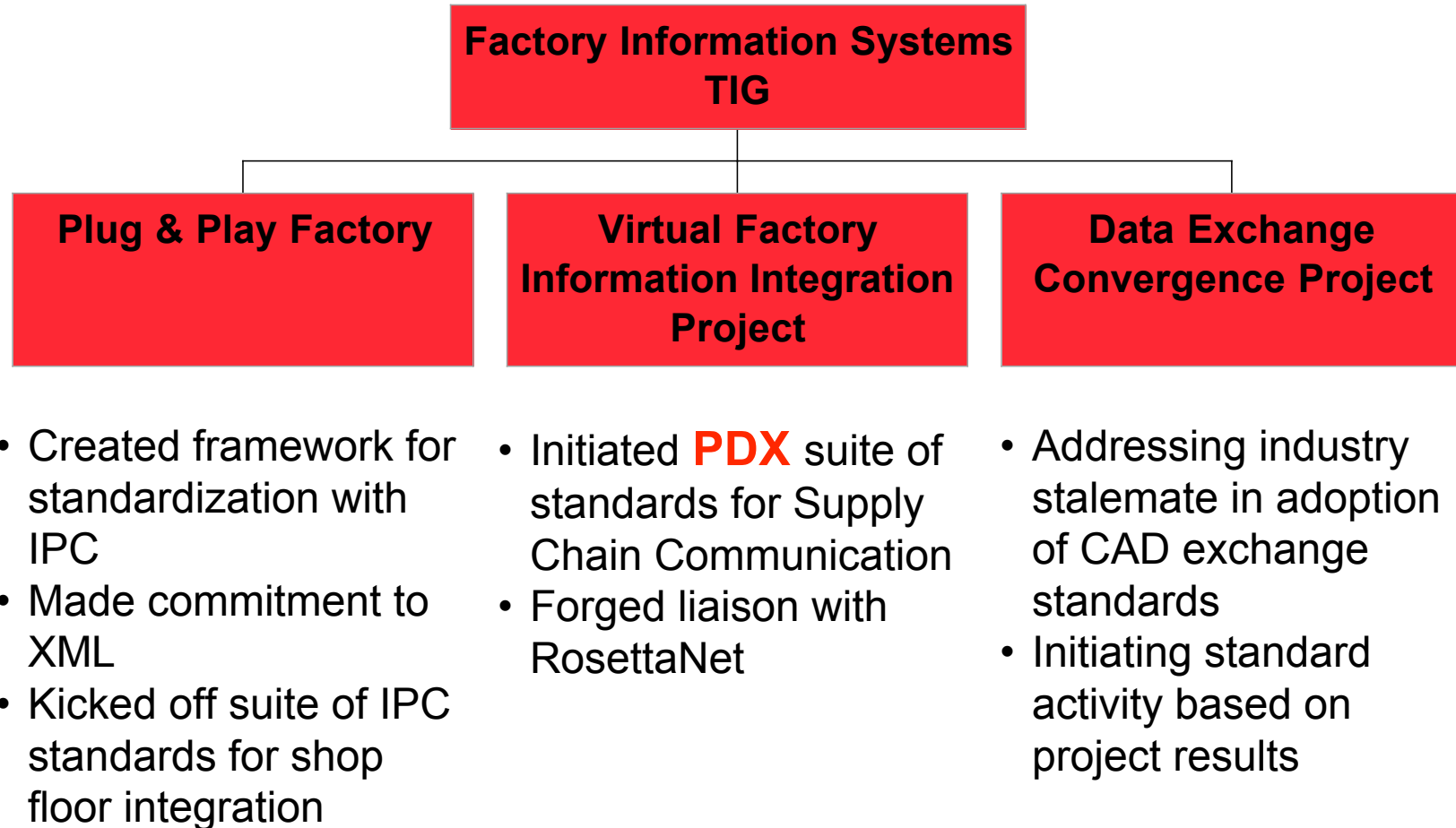
Product Data eXchange Overview and Adoption

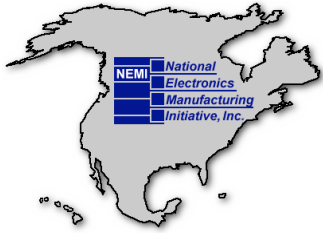


Richard Kubin
NEMI Business Leadership Team
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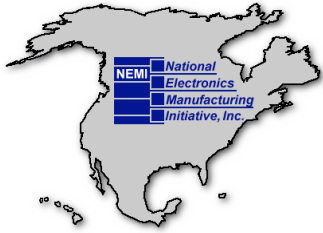
PDX - History





What is PDX?

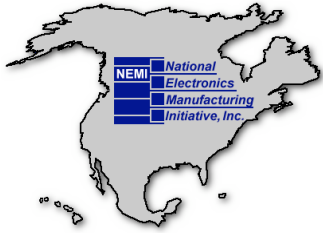
- A **simple** standard
- Developed by NEMI team with broad industry participation
- Published by IPC
- XML format
- Used to exchange BOM, change order, as-built configuration & quality information.



Product Data eXchange (PDX)

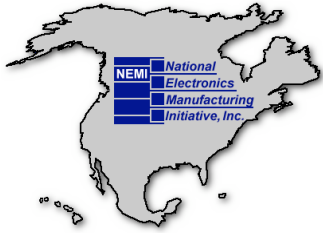
- | | |
|---------------------|--|
| IPC 2571 | Requirements for Product Data eXchange
<i>Standard</i> |
| IPC 2571 DTD | Combined DTD for the IPC 2571, 2576, 2578 |
| IPC 2576 | Sectional Requirements for the Supply
Chain (B2B) Communication of As-Built
Product Data (Genealogy)
<i>Standard</i> |
| IPC 2577 | Product Manufacturing Quality Exchange
<i>Final Draft</i> |
| IPC 2578 | Sectional Requirements for Bill of Materials
Data eXchange (PDX) <i>Standard</i> |

Connect with and Strengthen your Supply Chain

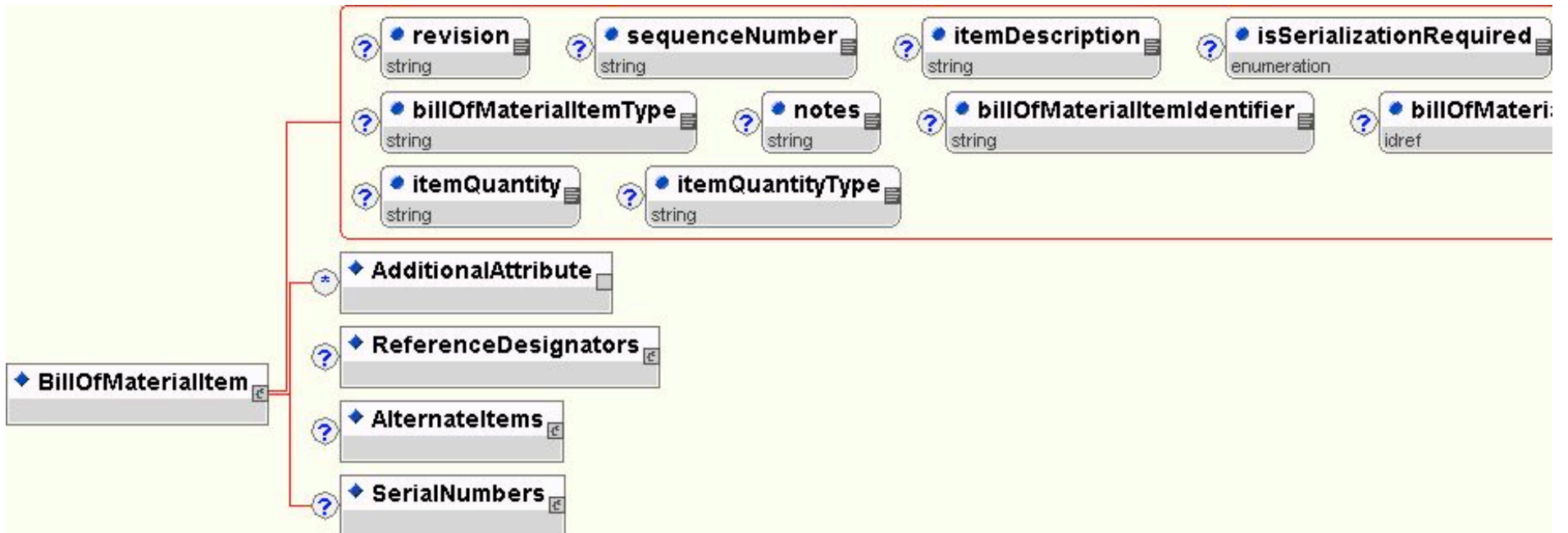


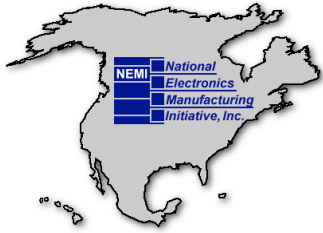
IPC 25xx Series of Data Exchange Standards

IPC Number/ Function	-xxx1 Generic	-xxx2 Administ	-xxx3 Document	-xxx4 Board Fab	-xxx5 Bare Bd Test	-xxx6 Assembly Manufact	-xxx7 Assy Test/Insp.	-xxx8 Comp. & Mat'ls
IPC-2500 CAMX Framework	IPC-2501 Published							
IPC-2510 GenCAM Product Data	IPC-2511A IPC-2511B Published	IPC-2512A Published	IPC-2513A Published	IPC-2514A Published	IPC-2515A Published	IPC-2516A Published	IPC-2517A Published	IPC-2518A Published
IPC-2520 Quality Product Data				IPC-2524 Published				
IPC-2530 SRFF Process Data	IPC-2531 ANSI Draft							
IPC-2540 Shop Floor Communication (CAMX)	IPC-2541 Published					IPC-2546 Published	IPC-2547 Published	
IPC-2550 Execution Communication (MES)	IPC-2551 Working Draft			IPC-2554 Working Draft		IPC-2556 PIN Submitted		
IPC-2560 Enterprise Communication								
IPC-2570 Supply Chain Communication (PDX)	IPC-2571 Published					IPC-2576 Published	IPC-2577 Final draft	IPC-2578 Published
IPC-2580 Application Specific Data	IPC-2581 Proposed Std							



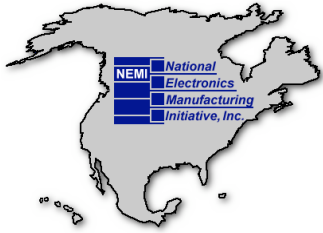
A Standard BOM - A Closer Look



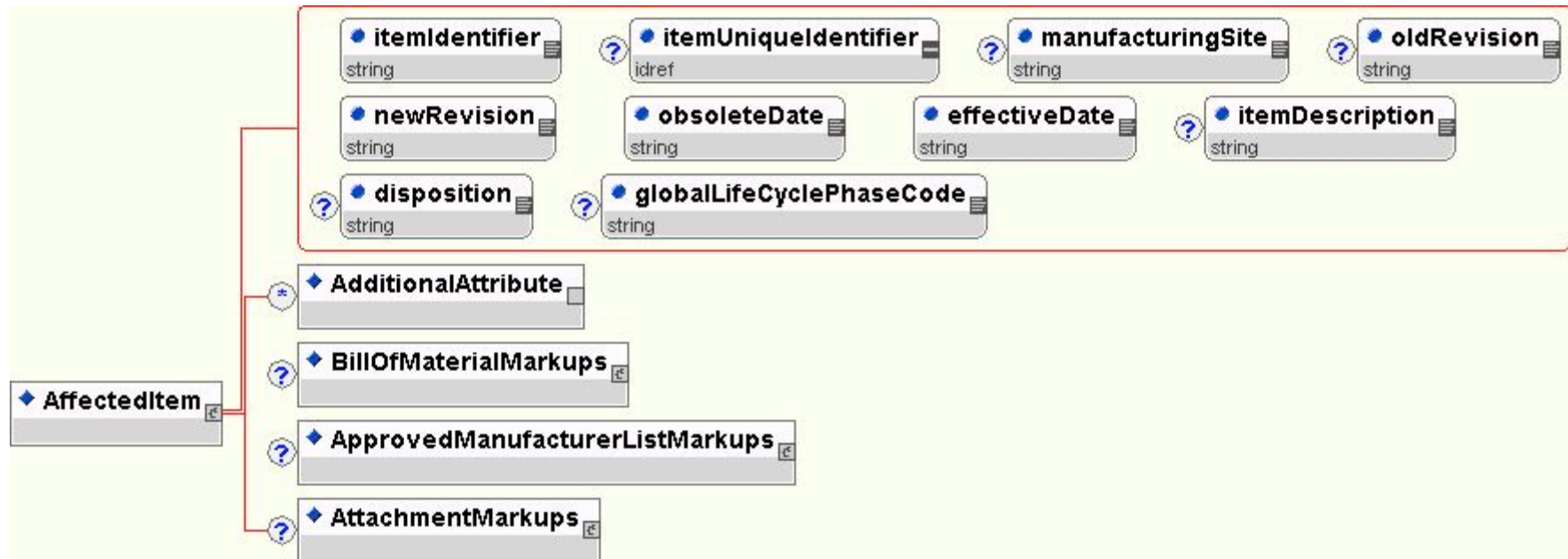


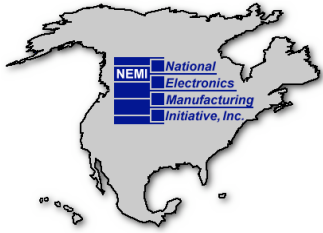
A Standard BOM - A Closer Look



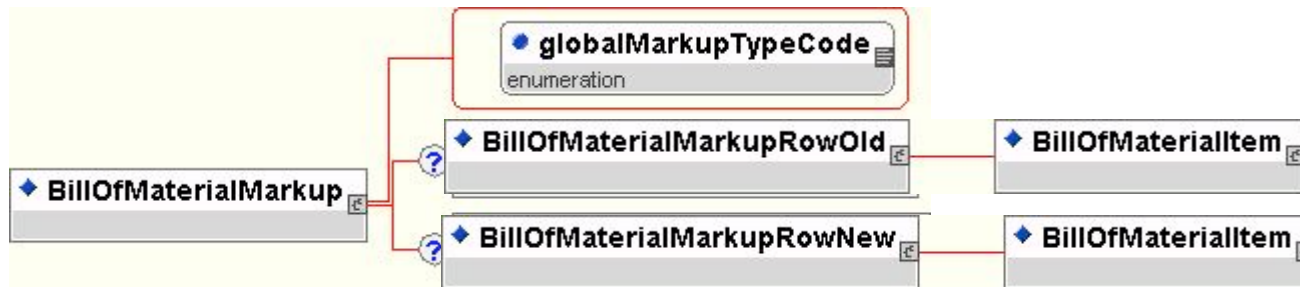


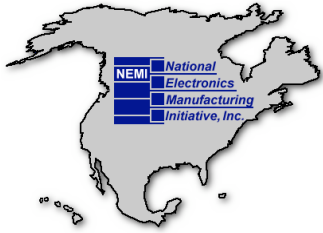
A Standard BOM - A Closer Look





A Standard BOM - A Closer Look





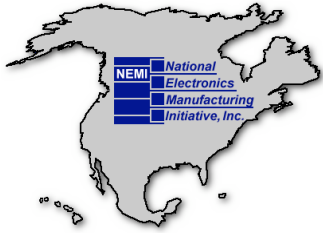
PDX IPC 2577 – Rounding out the Suite of Standards with Quality Data

IPC 2577 - Communication of Quality Product Data Supports 4 Quality Exchange Scenarios

- **Set-up and Update**
 - Key data codes and descriptions
 - Establishes expected reporting requirements
- **Incident Management**
- **Regular Reporting**
- **Repair / Failure Analysis**

Status

- **Released as IPC Final Draft**
- **Expected to be published as a Standard this spring**



PDX Status: Integration With Other Standards

Integration with RosettaNet

Status:

- Currently integrated

Open Actions (for Future Versions):

- Integrate 2577 with PIP 7C6 version 1.2 once its complete
- Collaborate on BOM-level tracking of environmental information

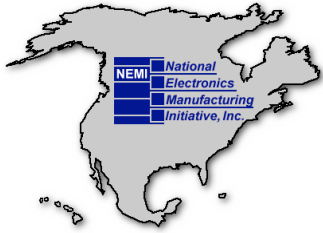
Integration with Other IPC Web Standards

Status:

- Discussions with 2581 team held; no structural incompatibilities between 2581 and PDX found

Open Actions:

- Generate report detailing how to map between PDX and 2581, once 2581 is mature
- Transition PDX from XML DTD to XML Schema
- Review entire matrix for compatibility, harmonization



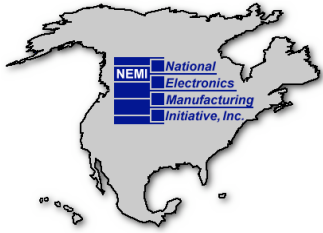
PDX Adoption

Lucent

- Uses PDX for all exchanges that don't involve direct CAD access
- Monthly average:
 - 565 Outbound PDX Exchanges (approximately 95% of all outbound transactions)
 - 75 Inbound PDX Exchanges (approximately 65% of all inbound transactions)

Hewlett Packard

- Active PDX exchanges, via RosettaNet 7C6, with 5 service providers supporting quality/repair data
- Anticipating 500,000 to 750,000 incoming 7C6 transactions per month



PDX Adoption

Agile Software

- Offer free PDX viewer
 - Over the last year, 2,666 distinct users downloaded the PDX viewer

Celestica

- Since 10/03:
 - 2,019 PDX file transmissions
 - 16 unique customers conducting exchanges