AIDC – INTEGRATION - EPCIS

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In the near future, every single object will be connected to the Internet through a wireless address and unique identifier.
Longer
More complex
Agile
Faster
Effective
AIDC
Integration
Visibility
Supply chain

Closed/internal systems

Common/mapping

Closed/internal systems
Data & data carrier
Common standards cover Master Data

- **Meta Data**
  - (Data definitions, Business rules, format, length, etc.)

- **Reference Master Data**
  - (e.g. Plant configurations, Product classifications, Vendor classifications, cross organizational code lists)

- **Master Data**
  - (e.g. Item, Vendor, Customer)

- **Conditional Master Data**
  - (e.g. Price & Price Brackets)

- **Transactional Data**
  - (e.g. order, invoice)

- **Reporting**

  - Enterprise reporting
    - Depends on
    - Transactional activity

  - Trading Partner Performance Management,
    - Goals and measurements,
    - Scorecard and electronic exchange

  - INVOICE, ORDER,
    - DISPATCH ADVICE,
    - RECEIVING ADVICE
    - and many other

  - PRICE & PRICE BRACKETS,
    - Delivery conditions,
    - Payment conditions

  - TRADE ITEM (what),
    - PARTY (who & where)

  - GPC-classification,
    - ISO-Country Code
    - UNSPSC, GS1-Party Role

  - GDD GLOBAL DATA DICTIONARY

  - Common business
    - Information understanding

  - Referenced by master data,
    - conditional master data and
    - transactional data

  - Master Data
    - Definitions like Item, Customer, Vendor

  - If this customer and this product, then this price today

  - Transactional data depends on master data, conditional master data and reference master data
**What is EPCIS Data?**

EPC Events answer 4 questions – *What, Where, When, and Why*

<table>
<thead>
<tr>
<th>What</th>
<th>Why</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPC number (can leverage master data - GTIN)</td>
<td>Business Process Step – e.g.: Receiving, Shipping</td>
</tr>
<tr>
<td>Manufacturing Data (lot, batch, expiration date)</td>
<td>Product State – e.g.: Saleable, Active, In Transit</td>
</tr>
<tr>
<td>Transactional Data (PO, Shipment, Invoice)</td>
<td>Current Conditions – e.g.: Temperature</td>
</tr>
<tr>
<td>Location (can be fixed or moving – leverage master data - GLN)</td>
<td></td>
</tr>
<tr>
<td>Event Time</td>
<td></td>
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<tr>
<td>Record Time</td>
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</tbody>
</table>

The EPCIS standard enables extending event data in each direction.
Visibility made visible

**Event**
- Tagging
- Gate in
- Loading
- Gate out
- Unloading
- Disaggregation
- Gate in
- Tag printer
- Procedure: Customs Clearance
Standardisation

International
- International Organization for Standardization (ISO)
- International Electrotechnical Commission (IEC)
- ITU-T (fka CCITT) Telecommunications
- ITU-R (fka CCIR & IFBR) Radio-frequency Issues
- ITU-D (fka BDT) Telecommunications Development
- Universal Postal Union (UPU) (United Nations)

Regional
- Comité Européen Normalisation (CEN)
- QDETTE
- ECMA
- Comité Européen Normalisation Electrotechnique (CENELEC)
- Comité Européen Postal & Telegraph (CEPT)

National
- Standards Assoc of China (SAC)
- British Standards Institution (BSI)
- AFNOR
- ANSI
- Deutches Institut fur Normung (DIN)
- JISC

Industry
- DoD
- ATA
- CEA
- AIA
- HIBCC
- AIAG
- GS 1
- Other
- VDA

Other

WG 1 - Symbology
WG 2 - Data Content
WG 3 - Conformance
WG 4 - RFID
WG 5 - RTLS
SC 17 IC Cards
SC 6 Telecom & info exch btwn systems
TC 122 Packaging
TC 104 Freight Containers
TC 122/104 JWG SC Apps RFID
TC 8 Ships & Marine Tech

ECMA
AIM
GS 1
CEA
IEEE
INCITS

DoD ATA CEA AIA HIBCC AIAG GS 1 Other

TS B10

AIM MHI GS 1 CEA

Industry

National

Regional

International
Take away

- Analyse value streams and supply chain
- Think structures & master data
- Use standards where possible
- Seek advice
- Prepare your business case
http://www.gs1.org/epcglobal

www.AIMDanmark.dk

Thank You!