Economic Commission for Europe
Inland Transport Committee
Working Party on the Transport of Dangerous Goods
Joint Meeting of the RID Committee of Experts and the
Working Party on the Transport of Dangerous Goods
Bern, 18-22 March 2019
Item 6 of the provisional agenda
Reports of informal working groups

Informal working group on telematics: meeting in Vienna
(12 to 14 November 2018)

Transmitted by the Government of France on behalf of the informal working group on telematics
EU EIP Activity 4.5 Liaison with UNECE Telematic Working Group

MoU fot use of 5.4.0.2
Datex II extension for Dangerous Goods Transport

Vienna 12-14 November 2018
Basis of MoU

• MoU says that reference files:
  – UML
  – XSD
  – WSDL
• Are made available online for developers
• This shall ensure that any developer may design an Internet interface TP1 capable of connecting with other TP1 or competent authorities
Two worlds

Regulatory framework

IT and software
Difficult communication

Regulatory framework

IT and software
A way of understanding

Regulatory framework  IT and software
A way of description of the real world

- UML describes:
  - the data,
  - their codification and
  - the link between them
- It’s a description of the reality in a way designed for IT developers
A way of description of the real world

Composition

- The component of the child Data family disappears when the Data family disappears
UML Model to XML Schema

• XML Schema (.XSD files) is a translation into a language to be understood by Internet services

• Datex II cooperation gave us the tools to extract XML Schema (.XSD files) from the UML model.
UML DG Description
<xs:complexType name="DGDescription">
  <xs:annotation>
    <xs:documentation>???</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="unNumber" type="D2LogicalModel:UnNumber" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>ADN/ADR/RID 5.4.1.1.1 (a) - Identify DG</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="properShippingName" type="D2LogicalModel:MultilingualString" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>ADN/ADR/RID 5.4.1.1.1 (b) - Identify DG</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="technicalName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>ADN/ADR/RID 5.4.1.1.1 (b) - Further characterize generic or N.O.S PSNs</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="dangerLabel" type="D2LogicalModel:DangerLabelEnum" minOccurs="1" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>ADN/ADR/RID 5.4.1.1.1 (c) - Identify additional hazard(s)</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="packingGroup" type="D2LogicalModel:PackingGroupEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>ADN/ADR 1.1.3.6.1 - Automatic calculation of the total maximum quantity per transport unit</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="transportCategory" type="D2LogicalModel:TransportCategoryType" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>ADN/ADR 1.1.3.6.1</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="dgDescriptionRID" type="D2LogicalModel:DGDescriptionRID"/>
    <xs:element name="dgDescriptionADR" type="D2LogicalModel:DGDescriptionADR"/>
    <xs:element name="dgDescriptionExtension" type="D2LogicalModel:_ExtensionType"/>
  </xs:sequence>
</xs:complexType>
<ns1:dgDescription xsi:type="ns1:DGDescriptionClass7">
  <ns1:unNumber>3333</ns1:unNumber>
  <ns1:properShippingName>
    <ns1:values>
      <ns1:value lang="fr">MATIÈRES RADIOACTIVES EN COLIS DE TYPE A, SOUS FORME SPÉCIALE, FISSILES</ns1:value>
      <ns1:value lang="en">RADIOACTIVE MATERIAL, TYPE A PACKAGE, SPECIAL FORM, FISSILE</ns1:value>
    </ns1:values>
  </ns1:properShippingName>
  <ns1:dangerLabel>1</ns1:dangerLabel>
  <ns1:transportIndex>1</ns1:transportIndex>
  <ns1:radioactiveContent/>
</ns1:dgDescription>
WSDL methods for request

- Is a procedure which defines how Internet services have to exchange independently from the development language
**getDGTDocument**

This method is for a TP1 which requests DGT documents to other(s) TP1 for a known transport unit. It must give the reason of the request in order that the transport company can know if the request has origin emergency services or enforcement bodies or others allowed bodies.

**Entry Parameters**

- java.lang.String idTransportUnit: One of the ID of one of the transport units composing the convoy
- java.lang.String countryCode: Country code of the transport unit based on ISO 3166-1 (ex: FR)
- com.geotransmd.schema._1_0.RequestReasonEnum requestReason: Reason of the request from the predefine list emergencyServices, enforcementBodies, customs, infrastructureManagers, trafficManagers, statisticsProducers, preventiveSafety.

**Exit parameters**

eu.datex2.schema._2._2.DGCarryingVehicle: Transport documents issued from the object « DGFloder » out of « contains ».

**Constraints**

Issued from request of the public service, this request is transmitted by the TP1 which is able to associate the reason of the request. The format is given by XSD Schema.
Sequence diagrams

Common WSDL

Proprietary development
• All these elements are complete
• They should allow any IT developer to implement the architecture in its own platform
• Some points may be clarify in a meeting of IT technical expert
Thank you for your attention

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