

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**

3 January 2019

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 for 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 on line 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



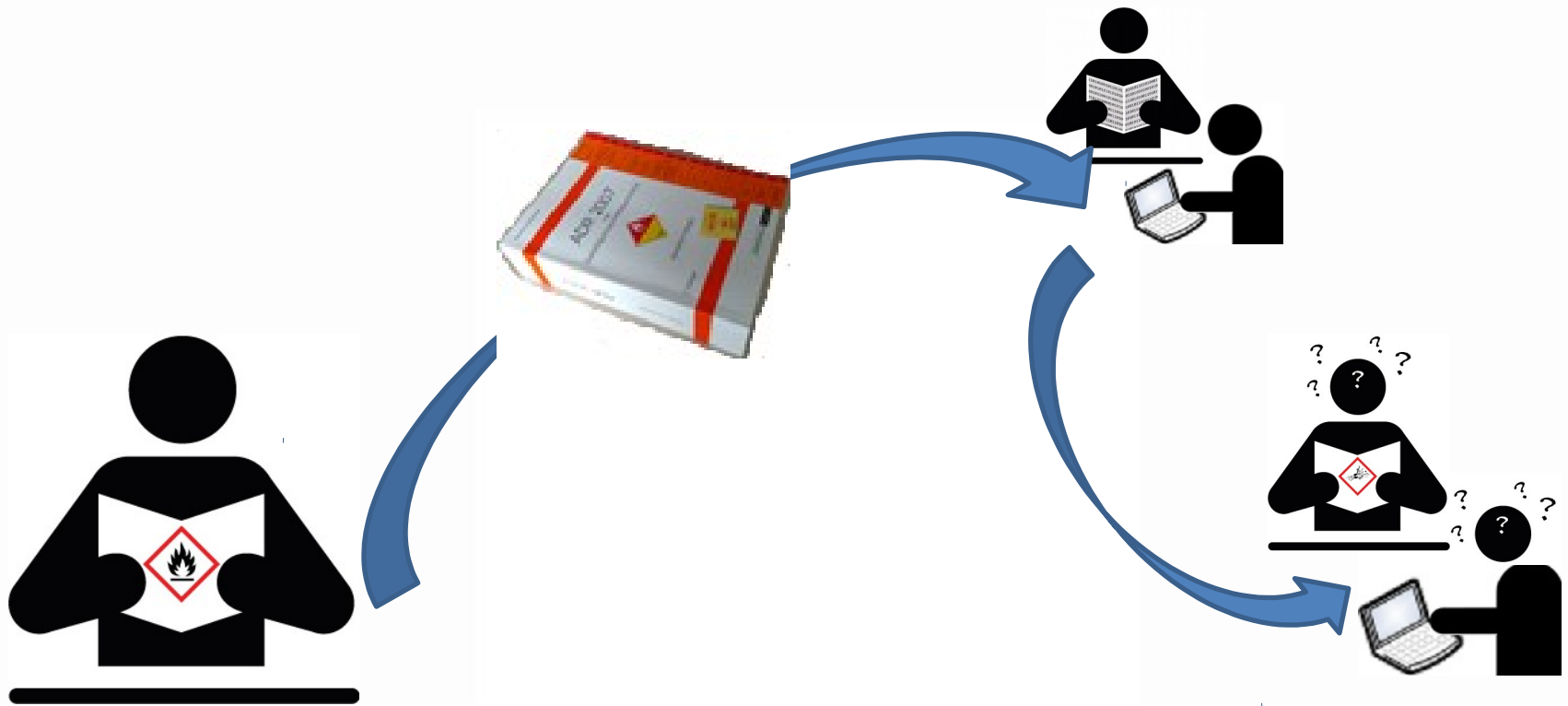
IT and software



Difficult communication

Regulatory framework

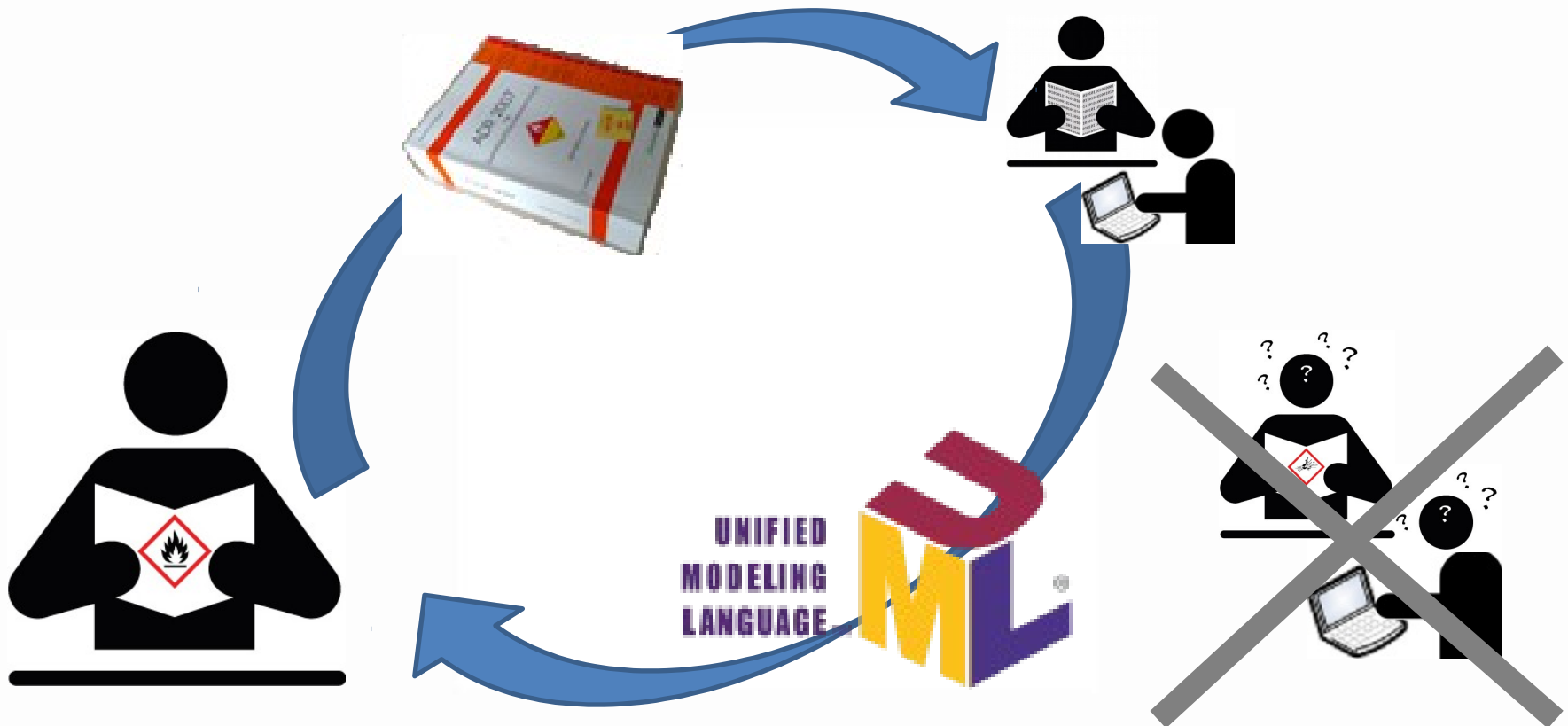
IT and software



A way of understanding

Regulatory framework

IT and software

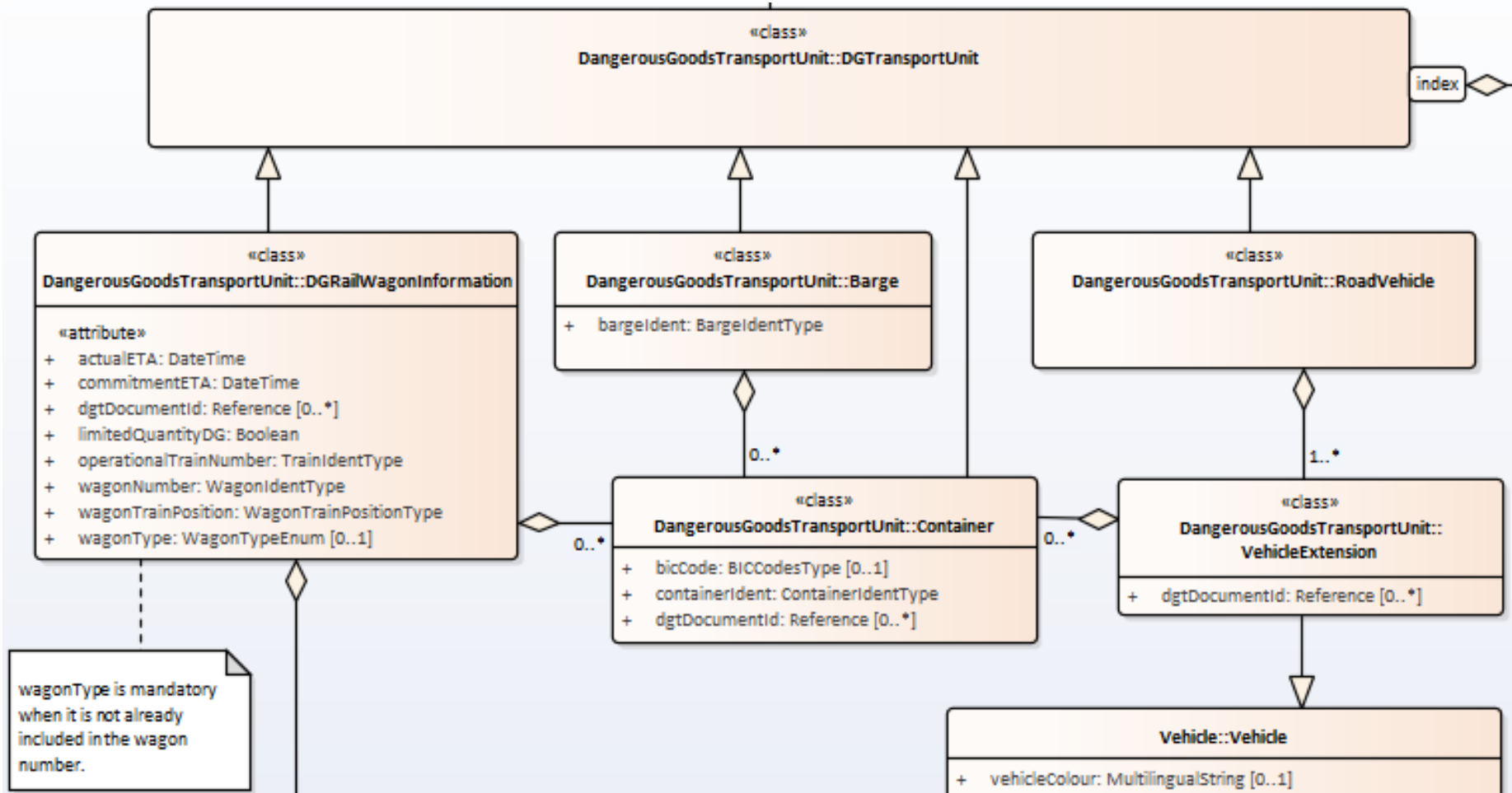


A way of description of the real world

- [https://
en.wikipedia.org/wiki/Unified_Modeling_Lan
guage](https://en.wikipedia.org/wiki/Unified_Modeling_Language)
- 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

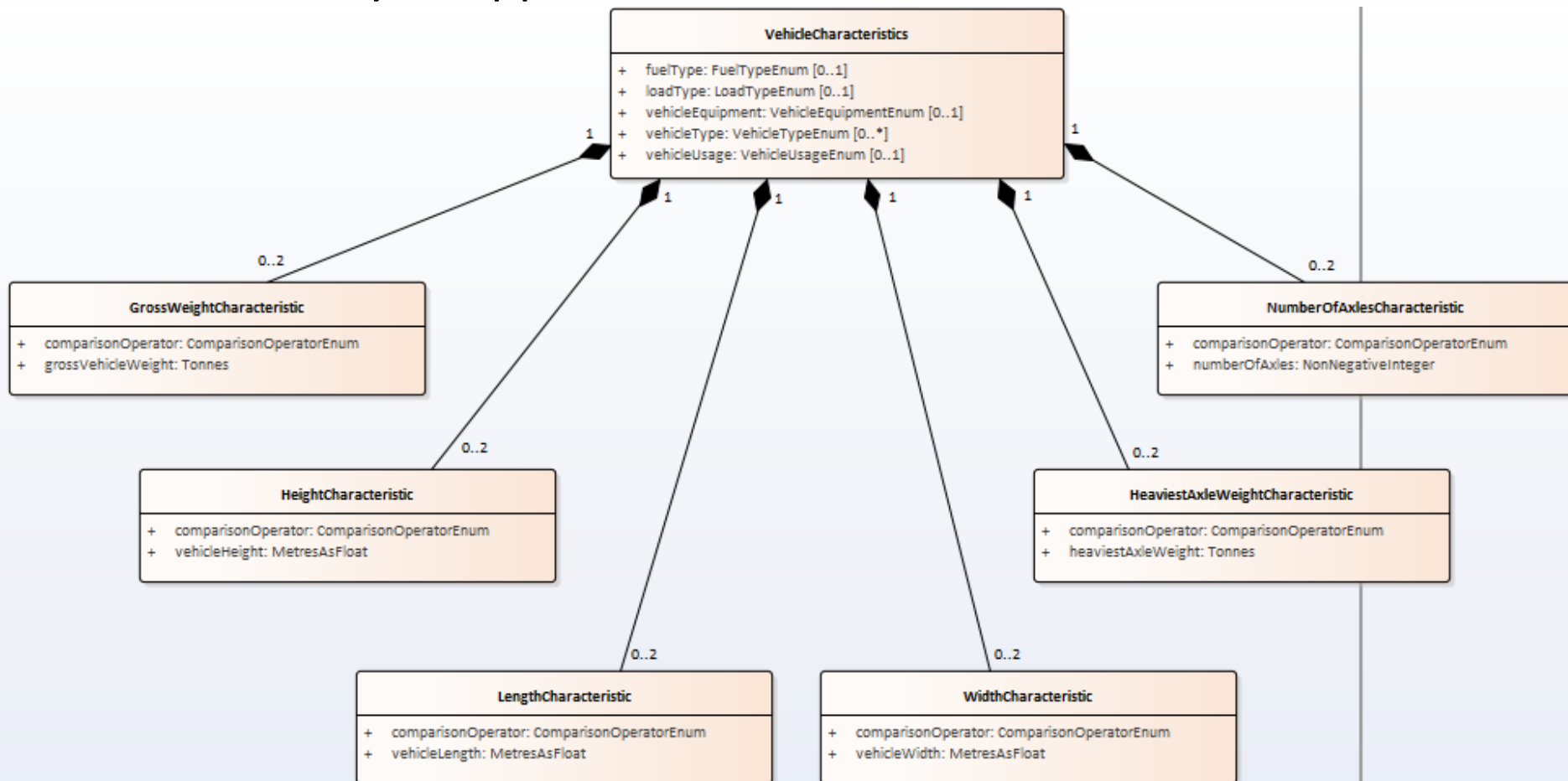
A way of description of the real world

- https://en.wikipedia.org/wiki/Unified_Modeling_Language



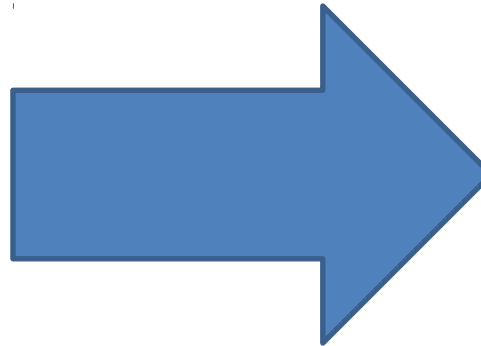
Composition

- 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

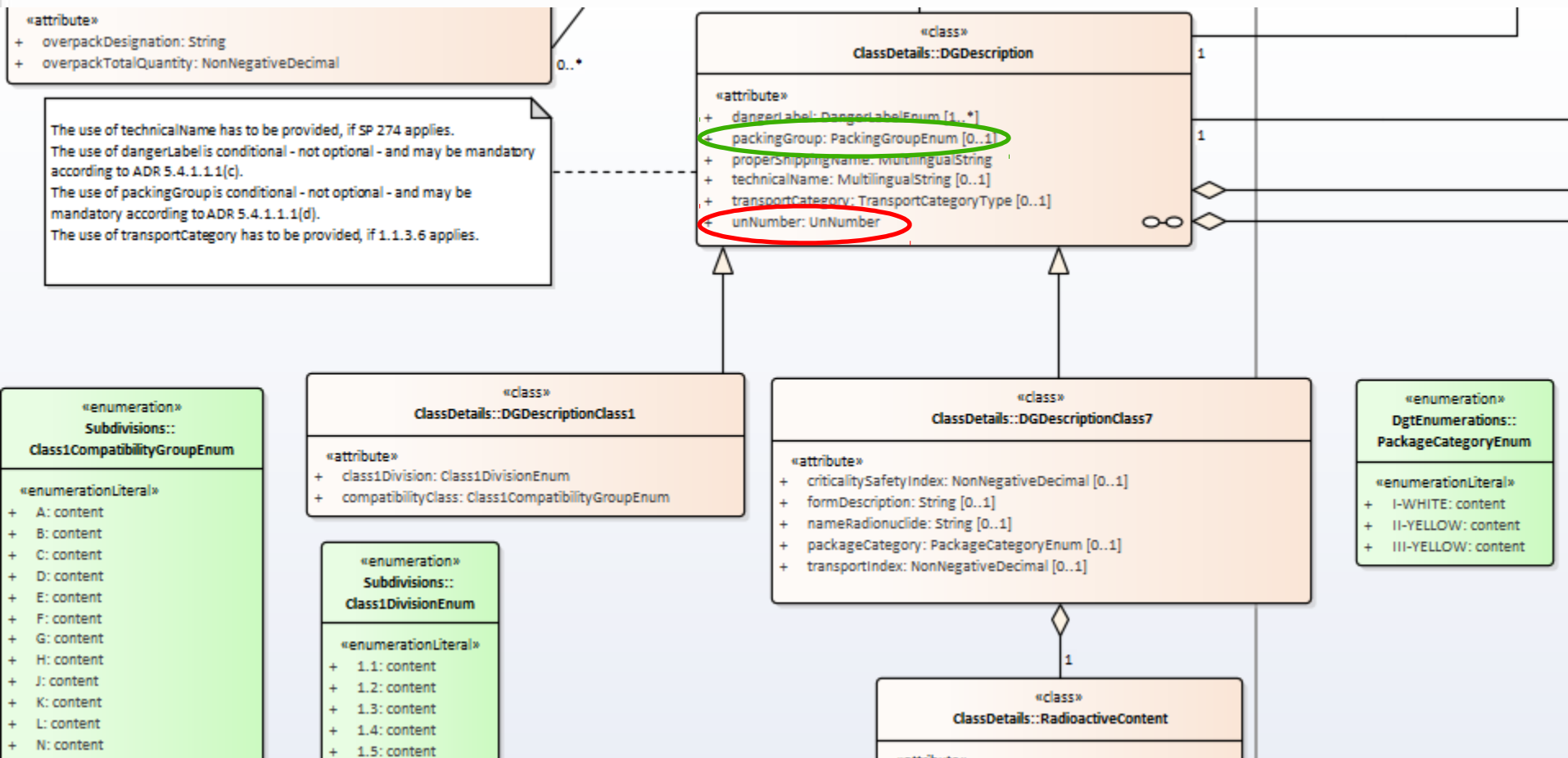


```
<?xml version="1.0"?>
<quiz>
  <qanda seq="1">
    <question>
      Who was the forty-second
      president of the U.S.A.?
    </question>
    <answer>
      William Jefferson Clinton
    </answer>
  </qanda>
  <!-- Note: We need to add
  more questions later.-->
</quiz>
```

XML

- Datex II cooperation gave us the tools to extract XML Schema (XSD files) from the UML

UML DG Description



XML Schema DG Description

```
xs:complexType name="DGDescr  
<xs:annotation>  
  <xs:documentation>???  
</xs:documentation>  
</xs:annotation>  
<xs:sequence>  
  <xs:element name="unNumber
```

XML File example for Class 7

```
<ns1:dgDescription xsi:type="ns1:DGDescriptionClass7">  
  <ns1:unNumber>3333</ns1:unNumber>  
  <ns1:properShippingName>  
    <ns1:values>  
      <ns1:value lang="fr">MATI&#xC8;RES RADIOACTIVES EN COLI  
      <ns1:value lang="en">RADIOACTIVE MATERIAL, TYPE A PACKA  
    </ns1:values>  
  </ns1:properShippingName>  
  <ns1:dangerLabel>1</ns1:dangerLabel>  
  <ns1:transportIndex>1</ns1:transportIndex>  
  <ns1:radioactiveContent/>  
</ns1:dgDescription>
```

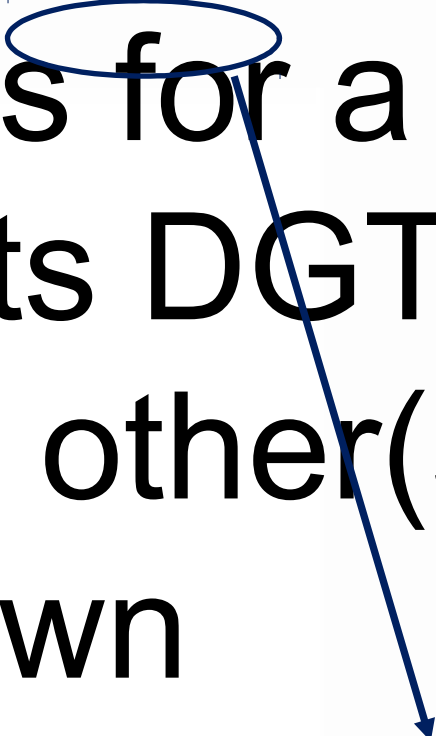
WSDL methods for request

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

WSDL methods for request

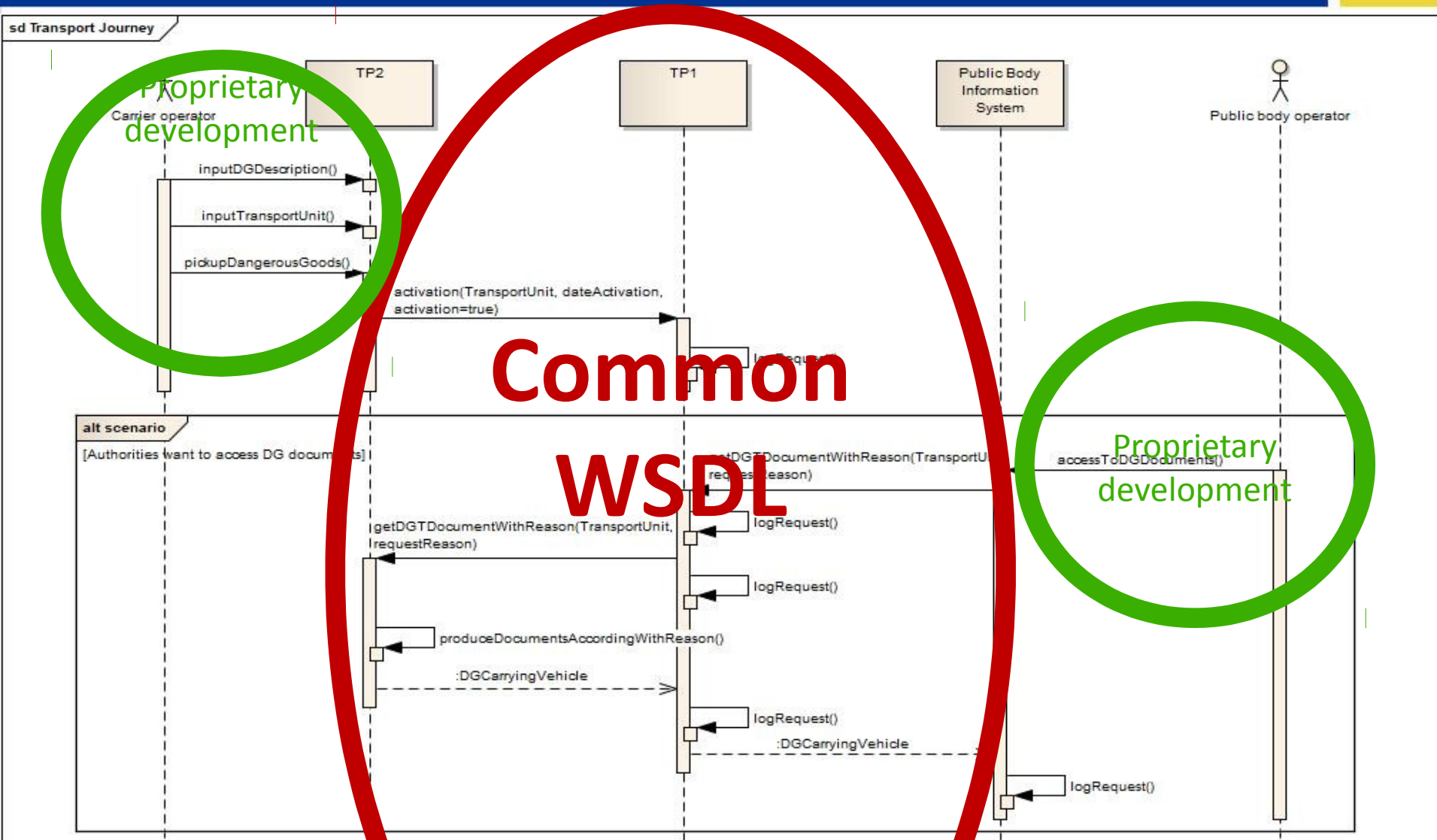
getDGTDocument

This method is for a TP1 which requests DGT documents to other(s) TP1 for a known transport unit. It must



The format is given by XSD Schema

Sequence diagrams



- 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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