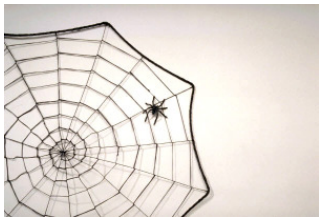
MINUTES OF THE MUNICH TC/278 WG3 SG9 MEETING (NeTEx)



Location	**Munich** (MDV)		Date 2013-02-20 & 2013-02-21
Project	NeTEx		
Subject	***SG9***		
	Fabrizio	**Arneodo** (5T)	
	Ulf	**Bjersing** (Hogia)	
	Kasia	**Bourée** (KBIC)	
	Winfried	**Bruns** (VDV)	
	Christophe	**Duquesne** (Aurige)	
	Gerald	**Dury** (Trapeze)	
	Linda	**Gerlach** (UIC-OSI/DB)	
	Nick	**Knowles** (Tapeze)	
	Werner	**Kohl** (MDV)	
	Patrik	**Lorenc** (UVT)	
	Oliver	**Späth** (DB)	
	Gustav	**Thiesing** (Blic)	
	Andrej	**Tibaut** (University of Maribor)	
	Bart	**Van Der Worp** (Humiq)	
Writer	Christophe DUQUESNE (Aurige)		

Main conclusions and important issues

- **The NeTEx Part 1&2 document has been submitted to CEN. A few additional editorial changes are required by CEN (but all are not accepted by the group).**
- **NeTEx Part 3 work is going on: a good work has been done with UIC member who have attended the meeting, to have a good NeTEx/OSI articulation.**
- **Main topics of the meeting were:**
  - **UIC OSI presentation (day 1)**
  - **Part 1&2 Document**
  - **General issues**
  - **Part 3 Model**
  - **ERA B1 mapping**
  - **UIC-OSI discussion (day 2)**

Next meetings:

9th & 10th of April 2012 in Paris	Part 3 – Fare information exchange
18th & 19st of June 2012 in Maribor	Part 3 – Fare information exchange

The presentations are too big to be attached to the minutes' mail. They are temporarily available on the following URL https://www.dropbox.com/sh/yfwn1hul4irye26/C4iUh3kJja . If they are not available any more, just ask for them by mail to christophe.duquesne@aurigetech.com .

Action plan

What	Who	When
Write minutes of the meeting	Christophe Duquesne	ASAP
Provide Bison mapping	Bart van der Worp	ASAP
Take into account the agreed additional TC278 comments in Part 1 &2 document	Christophe Duquesne	January 2013
Confirm the visio conferences possibility based in the University of Maribor infrastructure.	Andrej Tibaut	ASAP
Write the first version of a paper explaining why CEN editorial rules have a lot of counterproductive issue when used on IT standard (UML based data model, XML/XSD exchange protocols, etc.) and how to enhance them, and circulate it for additional contributions from the group.	Nick Knowles	ASAP
Update the NeTEx web site.	Nick Knowles	ASAP
Provide details why Visual studio, seems not to be "NeTEx friendly".	Bart van der Worp	ASAP
Generate an HTML version of the XSD to put on the Web Site.	Christophe Duquesne Knowles	ASAP
Propose a way to finalise Part 3 use cases	Bart van der Worp and Andrej Tibaut	Paris meeting
Come back to Christophe Duquesne, to tell if a new work item on Duties can be of interest for all involved countries.	ALL	ASAP
Povide more detailed information on possible CHARGING METHOD	by Gustav Thiesing and Andrej Tibaut	Paris meeting
Extract the interesting definitions NeTEx need to align with from the ENV1545 document.	Winfried Bruns	Paris meeting
Small group video conference will be organised to work on some additional instance diagram before next meeting.	ALL	Paris meeting
Integrate the Railteam glossary in the term and definition harmonization work.	Christophe Duquesne	Paris meeting
Homework all: how to model: • « except line xx » • « no round trip » • « additional ticket needed for n sections on line x»: Is this a new Fare Product?	ALL	*Partially done « additional ticket needed for n sections on line x» remains* Munich meeting
Experiment free or inexpensive XSD tools to be able to tell which are ok for NeTEx	ALL	Beginning of 2013
A process description to better understand sales transaction, payment, fulfilment, etc. *(Enterprise Architect BPML description may be used).*	Kasia Bourée, with help from Andrej Tibaut,	Paris meeting
Enhance/rewrite *Part3RevisedKB20130113.docx*	Gustav Thiesing	February meeting

part on charging and payment moments.	*(with Kasia support)*	
Provide Oyster capping rules	Nick Knowles	February meeting
Provide T-Purse and Oyster card instance examples	Nick Knowles Bart van der Worp Kasia Bourée Christophe Duquesne	February meeting
Provided Berlin fare example (instance extract)	Gustav Thiesing	February meeting
Provided Czech fare example (instance extract)	Andrej Tibaut	February meeting
Put the explanations from the document back into the EA model.	Christophe Duquesne	At the end of the project

Minutes

TOPIC	COMMENTS
UIC OSI	*Linda Gerlach* *See slides: OSI - Presentation - Version NeTEx.ppt* Linda Gerlach, leader of the UIC-OSI working groups had a presentation on the OSI on-going work. Consistency between OIS and NeTEx work is expected by both groups, but the work articulation is not fully stated yet. One important point is that NeTEx member attend to OSI meeting and OSI member attend to NeTEx group in order to insure a good communication. A common work on terms and definition consistency has already been identified and started with inputs from Kasia and Christophe. OSI state is still in a scope definition phase, so the real technical work, hopefully integrating NeTEx, will really start a bit later on.

TOPIC	COMMENTS
NeTEx Part 1&2 Document	*Christophe Duquesne* *See slides: NeTEx-Munich-20-02-2012-CD-Slides.ppt* **Document status** The document has been officially submitted to CEN TC278 secretary, through WG3, for official submission. A few additional comments et editing requirements has been transmitted by CEN. These change requests have been discussed with the group, but a lot of them can't be accepted since they are arming the document quality or consistency with other standards (Transmodel and IFOPT). Christophe Duquesne will take care of the agreed change requests. See slides for more details. CEN editorial rules have a lot of counterproductive issue when used on IT standard (UML based data model, XML/XSD exchange protocols, etc.). It is decided to start a small paper on this topic to be circulated to WG3, other SG and CEN, and to local standardisation bodies, in order to try to help an increase of the CEN IT standards description. Nick Knowles will write the first version of this paper and circulate it for additional contributions. The SG9 group has decided not to go through the optional "TC inquiry" stage and directly go to the "validation" stage (See slides for details on CEN standard building stages).

TOPIC	COMMENTS
	All

General issues	*See Document:* **Homework** Finding ways to work in small groups between 2 meetings is an important issue for a good work progress. But this often leads to funding issues due to traveling costs. Using video conferences is probably a good solution. Such video conferences solution could be provided by the University of Maribor (to be confirmed by Andrej Tibaut) **Web Site** Nick Knowles now has access to the NeTEx web site, and will soon do the necessary updates. **XSD Editor** XMLSpy and oXygen have proved to be "NeTEx friendly". This is also the case for Eclipse, but Eclipse doesn't provide a real graphical XML editor (unless you go to commercial solutions like oXygen…). MS Visual Studio seems not to be "NeTEx friendly": Bart will send more detailed information on this issue. Nick and Christophe will generate an HTML version of the XSD to put on the Web Site. **NeTEx usage** Trapeze has finalised its NeTEx project but doesn't have operational project using it yet. France is developing an NeTEx import/export feature in it's CHOUETTE open source tool (www.chouette.mobi) A call for tender enforcing NeTEx usage has been done in Riyadh. MDV has used NeTEx for its Journey Planner during the Olympics in London. NeTEx usage will be sent to Nick in order to put them on NeTEx web site. **Duties** Germany (Winfried Bruns, Gerald Dury) would like duties to be added to NeTEx (to be able to send timetable + duties). This could be an additional part for NeTEx. Note : Duties are already in VDV 455. Interested countries will be back to Christophe Duquesne, to see if a new work iten can be started on this topic.

TOPIC	COMMENTS
Part 3 Use Case	*Bart van der Worp* Bart van der Worp and Andrej Tibaut will propose a way to finalise Part 3 use cases (to be done for next Paris meeting).

TOPIC	COMMENTS
	Kasia Bourée *Christophe Duquesne*

NeTEx Part 3 Model	*Input slides:* *NeTEx-Munich-20-02-2013CDKB.pptx* *Input documents:* *NeTExExamples_v01.doc* *NeTExPart 3 MODEL & Instance Diagrams.doc* *Part3RevisedKB 20130113.doc* Kasia has circulated a set of document as a meeting preparation. Comments and feedback are expected on these documents. Recent model updates and question raised when working with ERA (annex B1) are presented by Kasia and Christophe (see slides). A set of instance diagrams (theoretical simple example and real life example) are also detailed to explain the model. **Additional discussions** CHARGING METHOD, attached to FARE PRODUCT is still a bit confusing. More detailed information on possible CHARGING METHOD will be provided by Gustav Thiesing and Andrej Tibaut for next meeting. CHARGING METHOD may be renamed CHARGING MOMENT to avoid confusion. Solution as "Pay as you go" as to be clearly positioned as regard to CHARGING METHODs. Calculation of the ticket price, and charging time have to be considered separately. It is reminded that (PREASSIGNED) FARE PRODUCTs are mainly advertised access rights (advertised access rights advertised to the public). SALES DISCOUNT RIGHT should probably be renames CREDENTIAL USAGE DISCOUNT RIGHT should probably be renames ENTITLEMENT Winfried Bruns reminds that the ENV1545 (defining the codification of data elements used for public transport, such as the date, time, validation event, transport contract, etc., on smart cards) has recently been updated. It may contain interesting definitions we need to align with. Winfried will extract these definitions from the ENV1545 document. There may be a need for a PRICE RULE object to describe the price calculation, when it is possible, including rounding and capping rules. The expected EU funding will also be used to provide very detailed examples (with maps, etc.) of real fare example described with NeTEx.

	We have to keep in mind that NeTEx mainly have to fulfil use case like "I have a journey, what are the available fare product for it ?" and "provide sufficient parameter to a price calculator to calculate de pice", and **not** "calculate the price" or "what can I do with this fare product" (but this one could be seen as a consequence of the first one). Small group video conference will be organised to work on some additional instance diagram before next meeting.

TOPIC	COMMENTS
ERA **B1 mapping**	*Nick Knowles* *Input slides: ERA-INTEROP-NP-10_NeTExWG9-Presentation_201302.20-v1.12.ppt* Nick Knowles has presented an on-going work required by ERA to ensure that TAP-TSI Annexes B1/2/3 will be taken into account within NeTEx. The presentation was mainly on the B1 mapping. The Series are an important concept to be mapped (see slides for more details). Series are mainly sets of possible routings between 2 points, but don't really have an official definition (only description with attaches attributes). This mapping doesn't have to be limited to the current B1 features: UIC members remind that B1/2 are less and less used because they are missing some new important feature. These feature will always be integrated in NeTEx when possible, in order to provide a fully usable standard. So B1/2 requirements will be enhanced with additional requirements from rails stakeholders (and keeping the B1/2 mapping possible). One example is the need for ROLE instead of simple DATA SOURCE. RU (Railway Undertakings) may share Series identifier or have different ones: NeTEx will have to support both situations. *Note: as not really used by rails stakeholders, B3 seems to have a slightly different status (it will nevertheless be mapped with NeTEx).* The mapping led to the addition (ore refinement) of new concepts: • FARE SCHEDULED STOP POINT (specialization of SCHEDULED STOP POINT) • BORDER POINT (specialization of ROUTE POINT) • SERIES PATTERN (set of possible routings between 2 points). It is a limiting parameter to a DISTANCE MATRIX ELEMENT B1 introduces "Product" (kind of basic structure) and "Product Offers" which is a kind of extensions to the product (for "group price", "under 25 years old price", etc.). This could be mapped through a SUPPLEMENTARY PRODUCT (or SUPPLEMENTARY PREASSIGNED FARE PRODUCT), the

	PREASSIGNED FARE PRODUCT being the basic template corresponding to the B1 "Product". Price calculation for combination of Series is outside the scope of NeTEx (it relies on some undisclosed bilateral agreement between RU, and will be addressed by external systems). FARE PRODUCT needs ALTERNATIVE NAMES fir the B1 mapping. PRICE GROUP and ASSIGNMENT will be used to map B1 "fare tables". Most of the model optimizations presented on the 20th are useful for this B1 mapping. Some very first XML examples of this mapping were also presented. A quick overview of B2 mapping (on-going work) has been presented. Glossary harmonisation is still an issue (between NeTEx-Transmodel and the RU world, but also between RUs), and the started work needs to be carried on. The Rail Team glossary can also be used as one input for this work.

TOPIC	COMMENTS
UIC-OSI discussion	*Discussion between SG9 and Oliver Späth (DB)* UIC member already have 2 date model that can be used for OSI (one from DB, the other one from Trenitalia, but they can't be circulated for now, fow some legal en intellectual property issues). One of the important objective of OS is (but not for all member) to have a better an easier work with ticket vendors. It is mainly the knowledge of the NeTEx group, more than NeTEx itself which is of interest for OSI, since OSI is dedicated to online exchange where NeTEw focuses on scheduled information (therefore a little bit more "off-line" even if NeTEx can also be accessed through web services). The focused NeTEx' knowledges are: PT modelling, UML modelling, XSD modelling. But OSI also needs "master data" (or reference data) as described by FSM. NeTEx seems to be a good bas for these master data. NeTEx will also be of help when information on combined Rail+Urban transport fare information is required. OSI will try to limit all structural description of information in its interface, preferring plain text when it is sufficient. On such situation, NeTEx structure will not be very useful. The typical expected information in an OSI request are : • Origin & destination

	• Date & time • Vias • User profile • Entitlements, reduction cards, etc. The first attributes could be the output of a Journey Planer (note that the Journey Planer can be fed by NeTEx). It is recognised that Journey Planers from each RU may not be neutral (may favour their own train, or favour long distance vs regional trains, etc.). NeTEx contribution to OSI will probably be mainly needed after the April commercial group meeting.