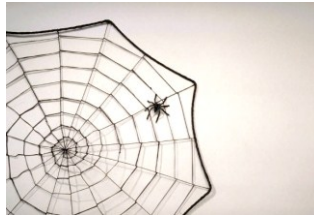

MINUTES OF THE TURIN TC/278 WG3 SG9 MEETING (NeTEx)



Location	Turin - Italy	Date	2012-01-16 & 2012-01-17
Project	NeTEx		
Subject	SG9		
Participants	Rafael Fabrizio Michael Kasia Christophe Stefan Matthias Jean Christophe Klaas Gustav Bart Danilo	Aguilar (5T) Arneodo (5T) Beck (InitPlan) Bourée (KBIC) Duquesne (Aurige) Jugelt (ERA) Kopp (Tapeze) Montigny (Rail Solutions-SNCF) Steffens (Bison/Arriva) Thiesing (Blic) Van Der Worp (Humiq) Botta (5T)	
Writer	Christophe DUQUESNE		
Main conclusions and important issues			
<ul style="list-style-type: none">• NeTEx Part 3 example from Berlin, Nuremberg and Turin were presented.• NeTEx Part 3 first Use Cases are listed and written, but still need some extension about sales conditions.• A UIC-ERA data model was presented as input for Part 3.• Work on Part 3 conceptual model is on-going.• The NeTEx document writing has improved: a writing effort is still needed in order to get a completed document for March.• There is no so much remaining work on part 1&2 and most of the meeting was dedicated to part 3.			
Next meetings: 20 th & 21 st of March 2011 in Paris Part 3 continuation and Part 1&2 document (followed by 22 nd & 23 rd SIRI meeting)			

The presentations are too big to be attached to the minutes' mail. They are temporarily available on the following URL <http://dl.free.fr/hXPLC2J5n> with the Password "sg9" and no user name (pick them up within 30 days). If they are not available any more, just ask for them by mail to christophe.duquesne@aurigetechnology.com .

Action plan

What	Who	When
Write minutes of the meeting	Christophe Duquesne	ASAP
Check if organisational task to get EU funding could be carried out by Netherland.	Bart van der Worp	ASAP
Come back to Emilio CASTRILLEJO to say that the group is interested in EU funding and to have a detailed list of actions and needed delays.	Christophe Duquesne	ASAP
Check on the Netherland side if Bart will be allocated enough time for remaining writing.	Bart van der Worp	ASAP
Recirculate the reviewer list	Christophe Duquesne	ASAP
Provide Control Centre properties	Matthias Kopp	ASAP
Take into account the added Service Connection package in the documentation	Christophe Duquesne	ASAP
Check with Nick if interchange rule's Priority has to remain a separated object or could become a simple interchange rule's attribute.	Christophe Duquesne Kasia Bourée	ASAP
Check with Nick if items said to be outside NeTEx's scope (mainly Duty related information, Monitored, Observed and Estimated times and objects) are here for potential future extensions and can be hidden (or removed) from current NeTEx's models.	Christophe Duquesne Kasia Bourée	ASAP
Parking Tariff should be moved to Part 3 (in order to be able to rework on it if needed during part 3 work). But a simple model, as it is now, should be kept.	Nick Knowles	ASAP
Update use cases according to meeting's decision and add a "Sales information" chapter (with use cases related to sales packages, medias, delay to buy before departure, delay to change or reimburse before departure, etc.).	Bart van der Worp	Turin meeting
Circulate Part 3 dictionary update (according to the Berlin meeting decisions, ERA comments and IFM inputs)	Christophe Duquesne	ASAP
Presentation of Netherland fare system	Bart van der Worp	Paris meeting
Check and validate the UML schemas extracted from TAP TSI annexes B1/2/3.	UIC (once all the schemas will be available from ERA)	Paris meeting
Propose a model enhancement for the FARE POINT issue.	Kasia Bourée	Paris meeting
Check if COURSE OF JOURNEY (BLOCK inside a single LINE) is really useful, are can be removed from NeTEx.	ALL	ASAP
Provision of the outputs of UIC study on price request messages for all tickets.	Chris Queere	15 th of March in Paris
Use UML instance diagrams for Part 2 mapping	Kasia Bourée	Paris meeting

example.	Christophe Duquesne	
Find a solution for the figure size issue occurring on some computers (resizing and cropping not taken into account).	Christophe Duquesne	ASAP
Provision of Routing Constraint XML examples	Christophe Duquesne	ASAP
Check that TAP_TSI PRM requirements (chapter 4.26), have corresponding attributes in NeTEx.	Nick Knowles	ASAP
Provide examples of SNCF data corresponding to TAP-TSI Annexe B3	Dominique Blain	
Update the use case using CEN format (last update was done in a separate document)	MDV	ASAP
Provide document contributions as soon as possible, and mail Christophe Duquesne immediately if it appears that some contribution won't be possible.	All contributors	ASAP
Add a use case for location referencing on a schematic map (Building or network)	Christophe Duquesne Werner Kohl	ASAP

Minutes

TOPIC	COMMENTS
Funding issues	<p><i>Christophe Duquesne</i></p> <p><i>See slides: NeTEx-Turin-CD-Slides.ppt</i></p> <p>Christophe had additional contact with Maarten Peelen (secretary of CEN TC278) and Emilio CASTRILLEJO (contact for INTELLIGENT TRANSPORT in "2010-2013 ICT Standardisation Work Programme for industrial innovation").</p> <p>Getting some EU funding seems to be affordable (according to their answers), but it also seems to be quite a heavy organisational work. Christophe Duquesne won't be able to spend too much of his own funding on such a task.</p> <p>It is decided that Bart van der Worp will check if organisational could be carried out by Netherland. Christophe Duquesne will come back to Emilio CASTRILLEJO to say that the group is interested and to have a detailed list of actions and needed delays.</p> <p>It is reminded that this will lead to a call for tender, and that we can't make sure of the selected experts.</p>

TOPIC	COMMENTS
NeTEx Document	<p><i>Christophe Duquesne</i></p> <p><i>See slides: NeTEx-Turin-CD-Slides.ppt</i></p> <p><u>Document status</u></p> <p>Current version of Part 1 is v22, and Part 2 is v6. The XSD was brought back close to Physical model, in order to ease reading and consistency check.</p> <p>Attributes' tables have been added.</p> <p>The model's figures have been updated.</p> <p>Remaining work, with associated writers has been circulated. Bart van der Worp pointed out that it may be difficult for him to find enough time to do all his remaining writing. He will very soon check this on the Netherland side.</p> <p>As a lot of information are directly extracted from Enterprise Architect (and XML Spy for XSD), the remaining writing work is now nearly only on the conceptual model description, and Transmodel provides very good bases for this conceptual writing.</p> <p>Good progresses are on their way on the writing (with an ongoing heavy work from Nick on P1-Chapter 8, and availability of attributes' tables). We should soon be able to start internal reviews. Christophe Duquesne will soon recirculate the reviewer list, in order to check if all reviewers are Ok.</p> <p>The document size is still an issue :</p> <ul style="list-style-type: none"> • When the doc will be completed, an extract containing only the

	<p>conceptual model could be done in order to a smaller useful extract.</p> <ul style="list-style-type: none"> • Separating in several subparts could also be a solution. <p>As the real implemented standard will be the XSD, we could put all the other information as informative.</p> <p>Members of the SG9 group can already show the last part 2 PDF, as a very first draft, to their mirror groups (or possible users), to get first input and remarks on the document structure, and first feedback on how usable it is.</p> <p>Even with this good progress, the document remains late, and a writing effort has to be maintained.</p>
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TOPIC	COMMENTS
<p>NeTeX XSD/XML</p>	<p><i>Matthias Kopp Christophe Duquesne (with Nick Knowles inputs)</i></p> <p><i>Input Document : MK question + NK open points.docx</i></p> <p>Following exchanges between Matthias Kopp and Nick Knowles, there is a small list of remaining issues to discuss. Here are the discussion points and answer (details in attached document).</p> <p><i>Is there real need for a Control Center object ? if so what are its properties?</i> Yes, Control Centre is needed, especially to manage Interchange Rules where several Control Centres are involved. Trapeze will send proposed attributes.</p> <p><i>The request to add a PrivateCode to ServicePattern should not be linked to drivers !</i> That's right, there is no real link between the PrivateCode and the Driver (but the PrivateCode can be used by the driver). Adding this code to XSD is Ok.</p> <p><i>The CompassBearing should be on VEHICLE STOPPING POSITION not on ScheduledStopPoint !</i> It's true that adding compass bearing as a ScheduledStopPoint's attribute would "break" the model (the ScheduledStopPoint is not a physical stop). Compass bearing has to be carried at Quay (or Stopping Position) level. But this will lead Trapeze to add Quay information only for the bearing information. If such a solution is not accepted, they will use the Key-Value extension mechanism. Bearing units are degrees from north.</p> <p><i>Isn't the required ServiceLinkInServicePattern exactly the same thing as a ServiceLinkInJourneyPattern ?</i> It is true that there are no differences between ServiceLinkInJourneyPattern and a possible ServiceLinkInServicePattern. But in order to keep a consistent naming hierarchy it is asked to use the XSD substitution group mechanism in order to be able to use such an xml tag.</p> <p>After meeting thought : this may not be such a good idea since it will open the door to use ServiceLinkInServicePattern in a DeadRun (anyway it can't prevent it)....</p>

	<p><i>Use of includes in instance documents should be possible !</i></p> <p>This is OK, use of includes in instance documents is just a way of using NeTeX : it has to be possible but not required. However, first Trapeze attempt to do it didn't succeed. Trapeze will provide additional feedbacks on this attempt.</p>
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TOPIC	COMMENTS
Model consistency check	<p><i>Kasia Bourée</i> <i>Christophe Duquesne</i></p> <p>See document : <i>Dictionary Comparison-nk03-kb.xls</i></p> <p>An extract of all conceptual and physical objects has been done. Each conceptual object has been faced to its corresponding physical object, with both definitions (in the presented excel file). This allows :</p> <ul style="list-style-type: none"> • to check that all the needed physical objects have been defined (and there were missing ones, added in last circulated schema) • to check that the physical schema didn't add new concepts not yet added to the conceptual model (and there were some, synchronised in last circulated schema) • to check definitions consistency (lots of corrections were done) • to identify purely physical objects.

TOPIC	COMMENTS
Model update	<p><i>Kasia Bourée</i></p> <p>See model : <i>NeTeX2012-KB-31-nk01.EAP</i> See model : <i>NeTeX Part 1 & 2TorinoKB.pptx</i></p> <p>An import consistency check has been done, and is presented by Kasia. The main remaining points are the role names and the cardinality (align conceptual and physical).</p> <p>Some remaining issues were discussed during the meeting.</p> <p>The physical model introduces a EntityInVersionInVersionFrame, which is not at conceptual level. We don't need such an object at conceptual level (it is a kind of purely physical join table), but a many to many relation between VERSION FRAME and ENTITY IN VERSION is required.</p> <p>The physical model introduces a DefaultTransfer (inheriting from Transfer, being "<i>default times to be used at a area or national level</i>"). But it seems to be more an attribute of STOP AREA or of STOP PLACE (for a all inside area default transfer).</p> <p>It is asked how to model, for example, default transfers between SNCF and Eurostar at Gare du Nord : it is not between any 2 places but between 2 service category (or 2 companies, or from anything to the Eurostar zone) with specific timings due to specific check constraints (security issues). INTERCHANGE</p>

	<p>RULEs seems to be OK for such a situation.</p> <p>It has to be checked with Nick if interchange rule's Priority has to remain a separated object or could become a simple interchange rule's attribute.</p> <p>A link from from Transfert to Navigation Path should be done through an assignment. Kasia Bourée will work on this. SiteConnection has the same definition as CONNECTION ; it has to be updated.</p> <p>A few items said to be outside NeTEx's scope are still the Model and XSD (mainly Duty related information, Monitored, Observed and Estimated times and objects) : check with Nick if this is for potential future extensions and can be hidden (or removed) from current NeTEx's models.</p> <p>Parking Tariff should be moved to Part 3 (in order to be able to rework on it if needed during part 3 work). But a simple model, as it is now, should be kept.</p> <p>The physical AccessRightSupport Package should be renamed ServiceRestriction or FareRelatedServiceRestriction.</p>
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TOPIC	COMMENTS
Early developer support	<p><i>Christophe Duquesne</i></p> <p><i>See slides: NeTEx-Turin-CD-Slides.ppt</i></p> <p>Several projects start (or plan to start soon) using NeTEx, knowing that the current NeTEx version is not the final one (therefore accepting potential future changes). Among all, there is a french profile (local agreement) for Stop Place description (CAMERA), a big RATP project named I2V (aggregation of all scheduled and realtime RATP's information) and the 5T central regional system (related to electronic ticketing). These projects will provide valuable inputs to NeTEx, but also do need some support from our group.</p> <p>We have to think about a NeTEx website (possibly by Kizoom (http://www.kizoom.com/standards/netex/ already available), Bison or Aurige) : this has to be decided in next Paris meeting.</p> <p>It has to be reminded that standardisation group like GDF didn't circulate anything before having a first stable version in order to avoid criticisms on draft, unfinished work, that could be used against the project.</p> <p>It is decided to open a Dopox site with materials we are Ok to disseminate (stable XSD, EA or HTM model...). Any access to this area will have to be required to Christophe Duquesne in order to keep track of all potential users. It will not be freely opened to anybody.</p>

TOPIC	COMMENTS
Fare examples	<p><i>Gustav Thiesing</i> <i>Fabrizio Arneodo</i></p> <p><i>Input documents: VBB_Fare_structure_V4.pdf</i></p>

5T_Fare-products_vs_Transmodel.ppt

Gustav Thiesing has presented Berlin's VBB and Nuremberg's fare structure, products and sales conditions.
Frabizio Arneodo also did so for Turin's fares.

These two detailed presentations are going to be very useful as input for NeTeX Part 3, in order to check that NeTeX will manage to hold such complex and various fare structures.

See presentations for more details.

TOPIC	COMMENTS
NeTeX Part 3 Use Cases	<p><i>Bart van der Worp</i></p> <p><i>Input documents: NeTeX_Part3_UseCases_v02c.doc</i></p> <p>The use case document has been updated according to Berlin's meeting decisions, splitting the main big use case in several smaller ones. A walk through all these "small" use case in order to check them and the document structure. One validated, a more detailed description of these use case will be provided.</p> <p>Concerning the document structure, it is decided to add a "Sales information" chapter (with use cases related to sales packages, medias, delay to buy before departure, delay to change or reimburse before departure, etc.).</p> <p>There must be a definition for Tariff, Cost and Price to clearly differentiate them (and use the proper word in proper use case).</p> <p>There should be somewhere a description of the sequence of operation for a journey planner :</p> <ol style="list-style-type: none">1. Calculate trip2. Identify available fare products on this trip3. Get price parameter : provide price if it is scheduled/fixed, if not call a "remote" price calculator if available4. Provide links/informations on sales channels <p>It is probably better to talk about Market Price than Yield Managed fares. Yield Managed fares usually refer to the fact that N seats are at price P, N' at price P', N'' at P'', etc. these values being possibly dynamically changed, and some prices being only available on some specific channels (usually the lowers only on the operator's channel).</p> <p>The detailed decisions on use cases are below (refer to the document for use case explanation, comments were also included online in the document):</p> <ul style="list-style-type: none">• UC 001-005 : extend Mode to Line, PTO, etc.• UC 001-009 : add day type to the time band dependency• UC 001-010 : differentiate deposit and initial (or boarding) charge (and add examples)• UC 001-008 and 009 : additional writing needed to make a clear

	<p>difference between fare structure and fare product (including yield, or market dependant, related fare structure). These UC can be seen at Structure and Product level at the same time (due to national law on concessions for example).</p> <ul style="list-style-type: none"> • UC 002-007 : Should also cover combination of PT Products • UC 003-001 : Use "sales channel" wording (not stores)
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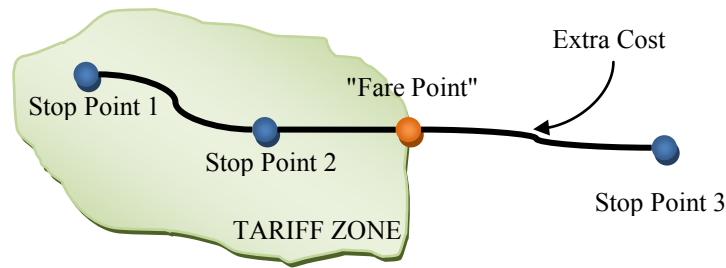
TOPIC	COMMENTS
UIC Price Message	<p><i>Jean Christophe Montigny</i></p> <p><i>Input documents: 120117 TAP and UIC tariff spec evolution for NeTEx.pptx</i></p> <p>Jean Christophe Montigny has presented slides from Chris Queree.</p> <p>UIC points out that due to the increase of competition the rail tariffs are evolving. This lead to the fact that UIC leaflet 108-1/2/3 (corresponding to TAP-TSI annexes B1/2/3) are less and less used (108-3 even being totally unused).</p> <p>As it is not used anywhere, it is asked if NeTEx really has to take 108-3 (B3) in account. ERA answer is that B3 is not really wrong but has a too small coverage. ERA also remembers as it is at law level, it has to be taken into account. Therefore it has to be taken into account with a wider coverage. UIC point of view is that it is a wrong model and it should not be taken into account.</p> <p>UIC is working on a new price message, and this work will have some first output in May 2012. It will provide a gap analysis for future requirement enrichment.</p> <p>This work is focused on price message and it will not carry any information as pre-sale or post-sale conditions, and is also not describing the fare structure and fare product (ERA reminds that, according to TAP TSI, there must be an exchange at this level, and that price information must be exchanged offline). It is an enhancement of 918-1 leaflet.</p> <p>The only thing that can be decided at NeTEx group level is to take into account these requirements as two separate ones :</p> <ol style="list-style-type: none"> 1. Take into account ERA requirements, and therefore annex B3 (but a model check needs to be done in order to avoid any possibly wrong part, if there are some). 2. Take into account UIC requirement, and therefore inputs from the new price message. <p>A small group half day meeting is planned with UIC on the 15th of march afternoon in order to get the first inputs from the new price message work.</p>

TOPIC	COMMENTS
ERA model	<p><i>Stefan Jugelt</i></p> <p><i>Input documents: ERA_NeTEx_TAPTSLI.pdf</i></p>

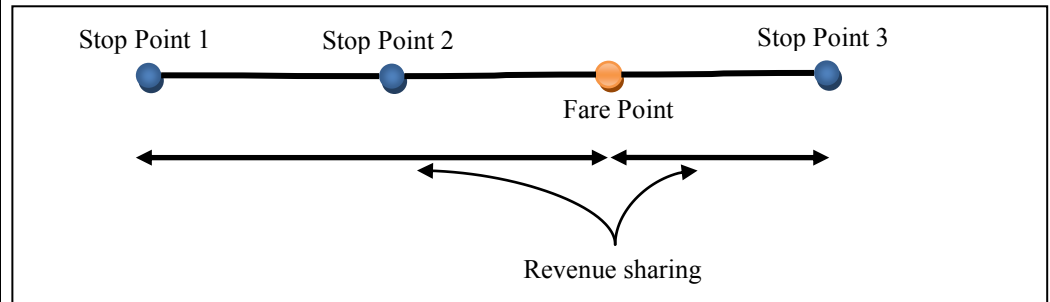
	<p style="text-align: center;"><i>ERA_NeTex_models_2012_.pdf</i></p> <p>Stefan Jugelt presents the state of TAP-TSI (see <i>ERA_NeTex_TAPTSI.pdf</i> slides). TAP TSI phase 1 has outputs awaited by Mau 2012, but nothing is explicitly expected from NeTEEx at that time (ERA will provide a report on NeTEEx work, showing that it will take open points into account).</p> <p>Stefan Jugelt also presents data model (physical structure and conceptual UML) extracted from annexes B1 and B2 and B3 (not yet UML for B3). These are not operational schema, but have been provided as inputs for NeTEEx and TAP TSI phase 1. There is some remaining work to clean the model, but it is already a very valuable input for NeTEEx. ERA will soon get an Entreprise Architect licence and will then provide the UML schemas as EA files. UML will soon be provided for B3. It is ask to UIC to check and validate this schema.</p>
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TOPIC	COMMENTS
NeTEEx Part 3 Glossary	<p><i>Christophe Duquesne</i> <i>Kasia Bourée</i></p> <p>See document: <i>TAP TSI - IFM - IOPTA - TM Glossary-Merged-V2.xls fare policy v3kb.doc</i></p> <p>Work on glossary is on-going. There were some contributions from ERA. There is also a work with IFM in order to harmonize wording and concepts (first results in <i>fare policy v3kb.doc</i>). NeTEEx glossary has to be in line with this IFM harmonisation (done with Gilles de Chanterac). So the work has been a little bit delayed in order to achieve this goal.</p> <p>The updated document was presented, introducing an additional (new) "porposed term" and some new proposed definitions. It also now points out TERMS that should also be available as Objects in the model.</p>

TOPIC	COMMENTS
Part 3 Conceptual Model	<p><i>Bart van der Worp</i> <i>Kasia Bourée</i></p> <p>Input documents: <i>TM - NeTEEx 2012-01-10 basev05.pdf</i></p> <p>Bart has sent a set of model comments/change requests (see the <i>TM - NeTEEx 2012-01-10 basev05.pdf</i> file).</p> <p>There is a need for a kind of "FarePoint" for several situations :</p>



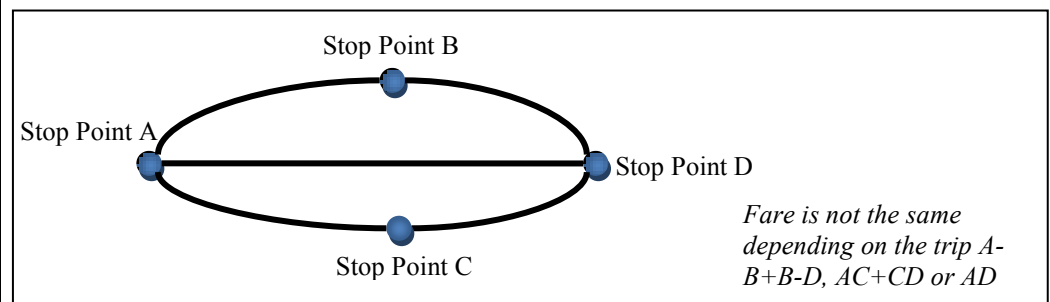
In the above example, there is a need of a kind of fare point to charge the "out of TARIFF ZONE" part of the journey (from "Fare Point" to "Stop Point 3"). It can be, for example, a distance based fare. This is quite similar to rail's Border Points.



In the above example, the fare point is used for revenue sharing.

One solution would be to inherit a FARE POINT from POINT IN JOURNEY PATTERN and change the relation SCHEDULED STOP POINT -> DISTANCE MATRIX ELEMENT to POINT IN JOURNEY PATTERN -> DISTANCE MATRIX ELEMENT. Introducing a FARE SECTION between 2 POINTs IN JOURNEY PATTERN is also a possible way of managing this issue. Kasia Bourée will propose a model enhancement for this.

JC Montigny also raises the following issue:



TM can already solve this having DISTANCE MATRIX ELEMENT for AB, BD, AC, CD, AB and VALIDABLE ELEMENTs (keep in mind that VALIDABLE ELEMENTs are SEQUENCE of FARE STRUCTURE ELEMENT...) for AB+BD and AC+CD.

DISTANCE MATRIX can (must) provide several types of tariffs :

- Direct tariff
- Unit based tariff, based on the "fare distance" (possibly not being any physical distance....)
- Entry in a tariff mapping table

It is required to add VALIDITY CONDITION to FARE PRICE.

A skype meeting will be hold with Bart to solve the potentially remaining issues.

Note : due to internal Netherland constraints, Bart van der Worp will have to provide soon a first Fare Exchange XSD model for Netherland. This model will be as much as possible NeTEEx compliant (with Part 3 early draft), and will probably evoleved to the official NeTEEx part 3 later on (when released).