Interactive User Feedback Session at 1st DATEX II User Forum Berlin, March 2010

A User Forum is a beautiful way to gather the user community of a system or standard and provide all the latest new and background information in one place that users usually find so difficult to obtain. And even more, they can sit together, exchange experience and best practice, and they can directly access the experts that are behind the documents and specifications, and turn their attention directly to their needs.

But what do these from attendees feel about the forum? What are their questions and priorities, and what are their preferences for the future? This is the question of collecting feedback, which is often much more challenging than the organisation of the forum itself. Sometimes you find questionnaires in the information packages that are provided during registration, but often only few of them find their way back to the organisers.

We thought hard about a better, more direct way to obtain user feedback from the 1st DATEX II User Forum in Berlin, and – with the help of a trained moderator, kindly provided by our Dutch Colleagues from Rijkswaterstaat – we came up with the idea of what we called an "interactive session", where forum attendees could float across an open space and discuss those questions they were most interested in. We set up seven flipcharts – each with a different question concerning the future development of DATEX II – and we put a moderator beside each flipchart to collect opinions and statements. The following sections of this document summarise the results of these discussions, but first find here is the list of seven questions:

- 1. Should DATEX II include urban traffic management content and should urban actors be invited to participate in the DATEX II organisation?
- 2. Should DATEX II strictly prescribe one location referencing system or should the decision be left with the users?
- 3. Should DATEX II be restricted to data exchange or should it be extended to cover transactions, booking und other types of services?
- 4. Which organisation do you think should be in charge of DATEX II maintenance and evolution and how should the necessary funds be provided?
- 5. Which new types of content and services should be covered by DATEX II in the future?
- 6. Do you think that DATEX II has a strong link to C2X-developement, especially to I2I, and if yes, in which respect?
- 7. What is more important, swift evolution and flexibility on datex2.eu or stability via CEN standardisation?

Question 1 – "Should DATEX II include urban traffic management content and should urban actors be invited to participate in the DATEX II organisation?"

The general feeling was that it is not a question if this should be done, but how. EU Policy is aiming at it and from the end-user perspective it is too obvious not to do this. From organisational point of view it would make sense to use the European urban cooperations like OTS. It was even mentioned that the EU initiative for this, might help cleaning up national and regional mess.

Opening up to urban road operators, goes with opening up to other modalities and mainly public transport, as stimulating modality changes is a very mature way of managing urban traffic problems.

Points of attention are: start with the willing and do not try to manage it all at once. Learn from existing urban standardisation initiatives, both public and industry, because the use case in the urban domain is really different. And be aware that the role of data brokers might need additional attention, because they might have specific requirements as well.

Last but not least: take care of easy accessible supporting documentation, so called DATEX II 4 Dummies, because DATEX II is now overwhelming and not easy to explore and that is a risk: the current documentation scares off interested people.

Question 2 – "Should DATEX II strictly prescribe one location referencing system or should the decision be left with the users?"

The collective response to the question - Should DATEX II strictly prescribe one location referencing system – was a clear no. The stated rationale was that information suppliers wish to support a range of formats to meet different customer needs and information provision via different dissemination channels. This places a burden upon the receiving client, in principle, to support the ability to handle all included location referencing approaches to be fully compliant to DATEX II.

To the question, is there a need to have a consistent common element that is present in all cases. The response was less unanimous but the majority viewpoint was yes. The facilitator offered the term "minimum mandatory common part".

Then the participants considered the question what should this common part be?

As mentioned in the earlier Q&A part of the presentation sessions one suggestion was this should be a simple co-ordinate pair to indicate a single "reference point" (probably WGS84). However others suggested that this may not be sufficient: how for example could one describe an area location in this case? Surely given that most DATEX II situations are describing linear events – would two points not be better? An alternative viewpoint suggested that this common minimum mandatory common part could be typed to support point, linear and area locations.

This alternative approach could also have challenges. If the information supplier wishes to describe an Alert-C Area location there is perhaps an implication that some additional data and processing is required as Alert-C does not demand that Area locations are given reference co-ordinates in the TMC location table. In all the cases discussed above there is the implicit assumption that this minimum mandatory common part is additional to the current requirements. An further alternative approach was suggested which is that whichever location referencing approaches are being used in a Situation Element, and in principle there could be more than one, that in all cases one of these location referencing methods should always be included. The Linear Referencing approach was the suggested preference. The rationale for this preference was that the LR approach is free (i.e. royalty and licence free) and does not require preparation of pre-code tables (i.e. supports on the fly location references). The facilitator suggested that although the approach is royalty and licence free the underlying digital maps against which to reference may well not be.

It is clear that the specific user requirements for the common minimum mandatory part are not well defined. For example, giving the ability to always place an icon on a map was one quoted use case. Further work on use cases should be undertaken.

Question 3 – "Should DATEX II be restricted to data exchange or should it be extended to cover transactions, booking und other types of services?"

- Such services are not in the DATEX mission
- DATEX should restrict itself to the core business
- The i-travel project has shown that services are difficult to realize
- Reservations, bookings and multimodality must be taken into account, yet interfaces may cause problems and DATEX should be a common platform for all transportation systems
- Do not start solving problems until they are clearly defined and based on real, stated needs
- Define less but do it well (hence the success of TCP/IP)
- Stabilize first the model and the dictionary
- Such services are mainly end-user oriented and DATEX does not need to cover these aspects
- For traffic management, procedures are important (requesting, starting, stopping strategies). Are they content or services?

Question 4 – "Which organisation do you think should be in charge of DATEX II maintenance and evolution and how should the necessary funds be provided?"

The first answer from the audience was striking and unexpected: make EasyWay a permanent organisational framework and then the question wouldn't arise! Some more discussion of this yielded that this basically was just another way of phrasing that a permanent support of the EC should be ensured for DATEX II. Others added that it would be easier if such a European structure would be supported by national "mirrors" that would relieve participating stakeholders from additional travel efforts.

Some stated fear that the DATEX II specifications could be orphaned like FRAME, if no good answer to this question could be found.

Others felt this question should actually be dealt with by the ESOs: ETSI, CEN and CENELEC.

Finally, ERTICO/TISA were mentioned as a possible and proven framework, which already hosts Alert C and TPEG. Another contributor proposed to set up a liaison group with TISA to pursue this path further.

In summary, the question seemed to be perceived as important for the future of DATEX, but only few tangible proposals seem to be around at this moment. It was generally seen as EasyWay ES5's task to elaborate a sound proposal for the future.

Question 5 – "Which new types of content and services should be covered by DATEX II in the future?"

From the discussions the news types of content could be split into three different areas;

a) Areas that could be managed through the steering group without external approval or support;

- A video publication The requestor of this service did also ask about CCTV but as this is being built at the moment they did not feel the need to add it to the list. In terms of video the request was based around the need to exchange video streams between control centres and they were looking for a way to manage this requirement using DATEX II.
- Speed limit publications
- Speed and flow profiles
- Points of interest

b) Areas which potentially fall outside of the current DATEX II work but could done with external support and would need consideration before initiating;

- Command and Control functionality
- Infrastructure Information

c) Areas which probably fall outside the current remit of the DATEX II work but could be considered with outside approval and external support;

- Multi-modal applications Built into the level A model
- Co-operative vehicle data exchange (at level A) A lot was discussed around this area and it was felt that we may not be able to support the delivery of vehicle to vehicle or vehicle to roadside comms as this would potentially be delivered by the private sector or other bodies (for example the European Telecommunications Standards Institute are currently discussing the standards around vehicle to vehicle and vehicle to infrastructure communications). However a lot was discussed about the infrastructure side as it was felt that Government bodies will need to be able to communicate with mobile or other infrastructure devises so could this be done using DATEX II

In closing this question a number of those visiting the board also recommended that the model should not be grown too much and any new works must be included within existing areas.

Overall there was a belief that the model should be extended to take on greater operational functionality and look to develop to future needs, so be aligned with other initiatives outside the current requirement for DATEX II.

Question 6 – "Do you think that DATEX II has a strong link to C2Xdevelopement, especially to I2I, and if yes, in which respect?"

Only a few people discussed question 6. Most of them had a critical opinion:

- The range of the DATEX II usage would become too wide; the borders do not become clear anymore.
- DATEX cannot do everything; it's better to investigate the complete information chain there are a lot of different standards; the task should be to name these standards exactly and to delineate them.
- In the C2X-scope, DATEX might suffer on bandwidth-problems.
- The C2X-developement is rather fast; but DATEX on the other side should become a stable standard (according to ISO/CEN).

Nevertheless there also have been some arguments to use DATEX for C2X:

- The traffic models and events usable for C2X do already exist in DATEX.
- DATEX should be also used in other applications.

There also was a statement in general as follows: Unfortunately, the question, whether to use DATEX or TPEG, is a political one; the standards should be better selected according to the technical requirements.

Question 7 – "What is more important, swift evolution and flexibility on datex2.eu or stability via CEN standardisation?"

- Both are important, standards for promoting DATEX outside Europe as well as evolution is needed for new demands
- New features need swift evolution in a number of iterations
- Old well known features needs standardisation and stability
- The standard should last for at least 3 years
- The stability of the information model is essential. Should be stable for at least 5 years (PIM). Technique does not need to have the same period of stability.
- A stable framework is important and standards are crucial for acceptance in industry.
- Compatibility is important. New version which can be submitted more often than every 5 year must be backwards compatible.

We thank again all who participated in the discussion. The results will now be taken up by DATEX ESG in its workplan and its vision. They will be discussed again at the next DATEX Forum.