

EasyWay

Annual Forum 2010



Shortcut to the future.

Lisbon • November 16th-18th



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TMPs and DATEX: How to model the TMP concept within DATEX II

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Summary

- **Framework to the activity**
- **Work carried out in ESG2&ESG5 group**
- **Next steps**



Description

- **DATEX (DATa EXchange)** is a horizontal European study (ESG5) in order to support the deployment of efficient and harmonised data exchange network in Europe.
- **TMP (Traffic Management Plan)** is an specific procedure that define how to manage the detected traffic incidents.



Framework

- **Strong requirement for DATEX II to better support cross-border, long-distance and wide areas TMP's in future.**
- **Proposal to approach ESG2 (TMPs) to focus this subject where:**
 - **TMPs exist or are under development for cross-border**
 - **Users have DATEX II capable systems at their disposal**
 - **Traffic managers are open minded for a pilot**



Framework

- Workitem 5.2 (New developments) within ESG5 workplan:

- **Support for TMPs**

The purpose of this activity is to analyze best options to include into DATEX II all data and mechanisms to support TMPs

- Task 5 (Pilots) within EGS2 workplan:

- **DATEX II to support TMPs**

The purpose of this pilot is to test the possibilities of DATEX II to support the information exchange related to the activation of cross border TMPs.



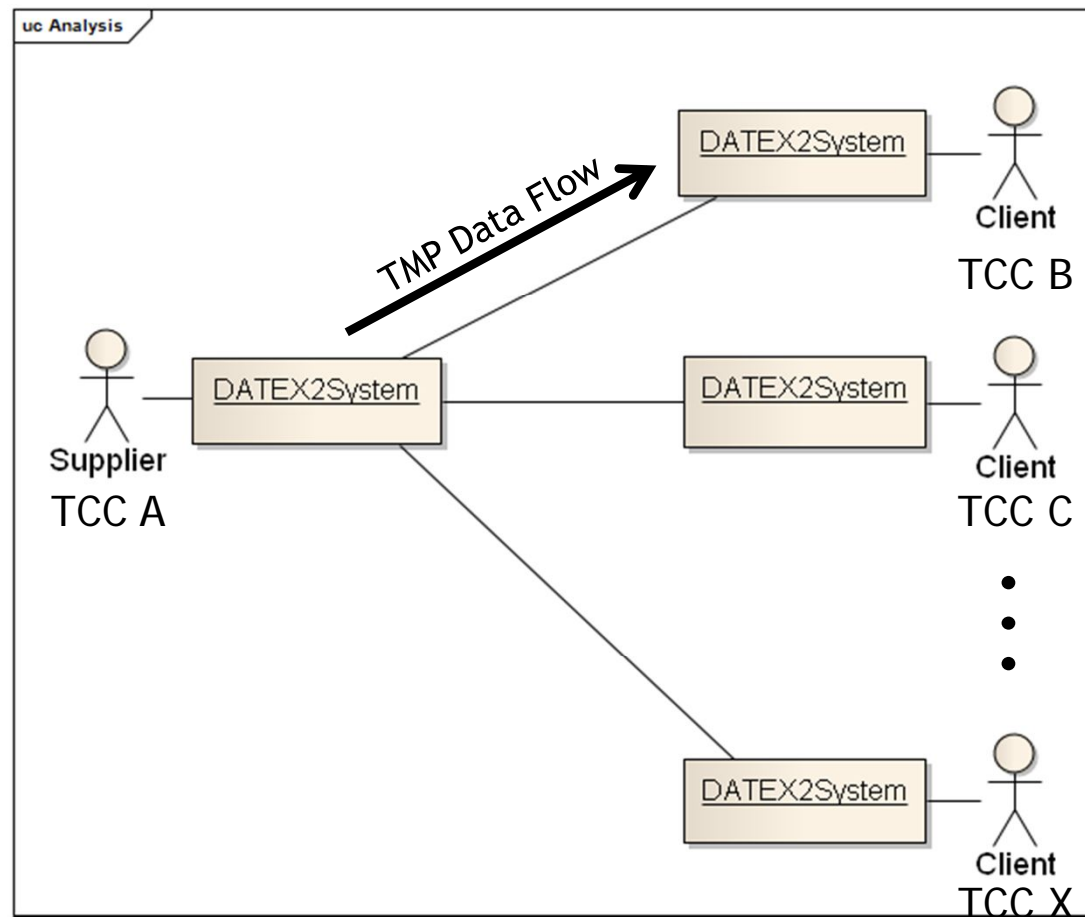
Work carried out by ESG2/ESG5 in 2010

- **ESG2/ESG5**
 - Last 23 March it was held in Oporto a meeting.
 - It was agreed two possibilities to be analyzed by ESG5 TG
 - Improve situations to include TMP support
 - To create a new extension
- **ESG5**
 - It was evaluated deeply the possibility to include the support of DATEX II to TMPs
 - It was reviewed all objects and its attributes
 - It was included within data model those attributes needed
 - It was 'reused' those objects which could support TMPs although there are not initially used for this purpose.
 - It was created a specific 'exchange mechanism'
 - Last 19-20 Oct it was held in Rome a workshop related to exchange mechanism focusing also into TMP needs.



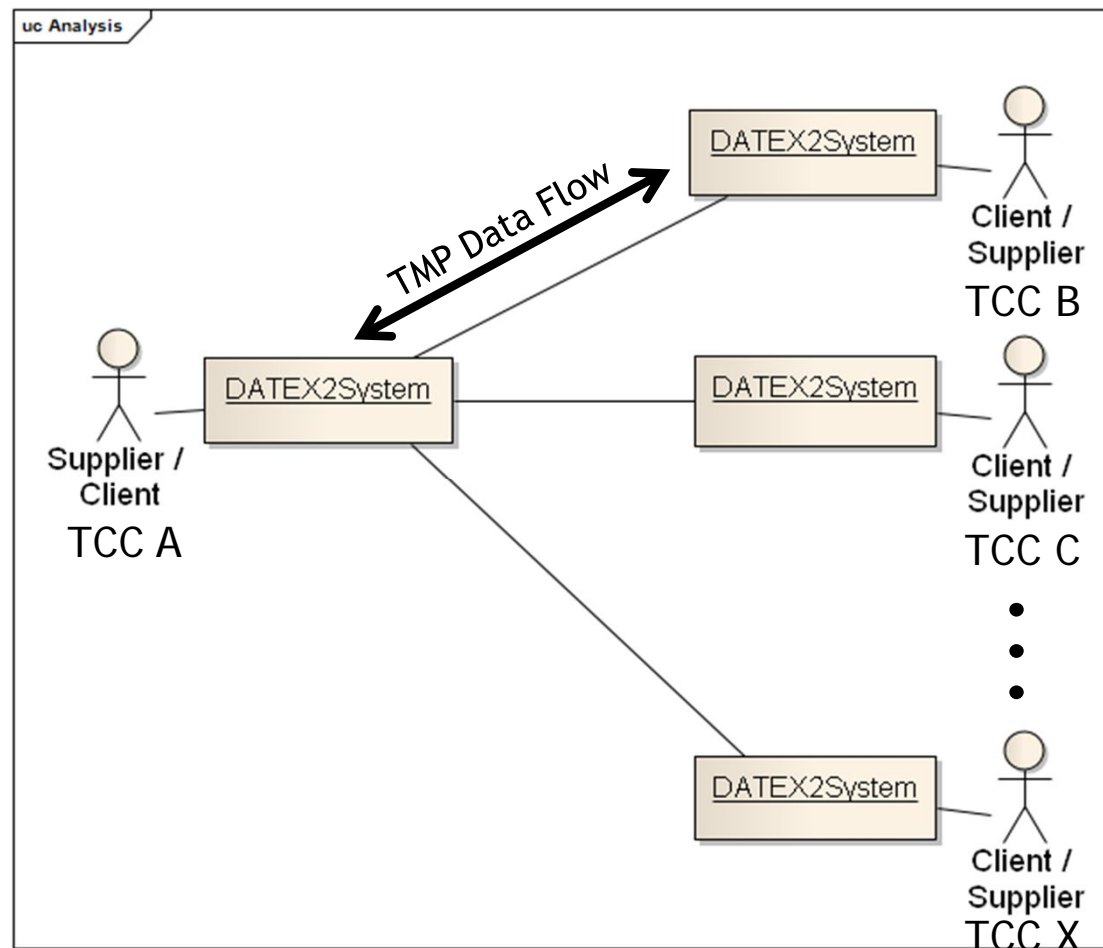
ESG5 Evaluation

DATEX II data flow

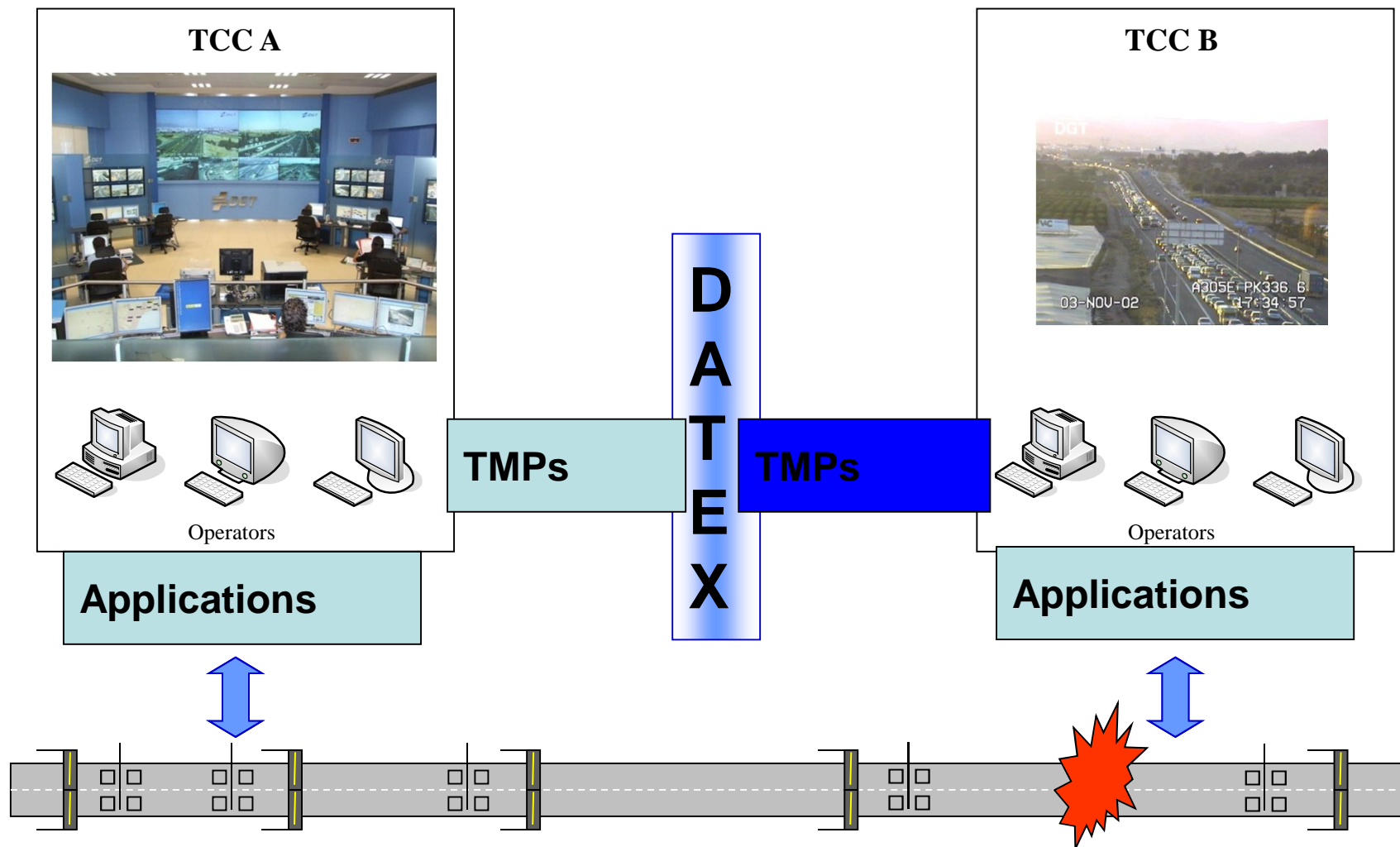


ESG5 Evaluation

DATEX II data flow



ESG5 Evaluation





ESG5 Evaluation

- Mode 0 - Subscription Management Mechanism
 - Specialized mode to handle subscriptions.
- Mode 1 - Publisher Push on occurrence
 - Data delivery initiated by the publisher when data is changed.
- Mode 2 - Publisher Push periodic
 - Data delivery initiated by the publisher on a cyclic time basis.
- Mode 3 - Client Pull
 - Data delivery initiated by the Client. Data is returned as a response.
- Mode 4 - TMP Mechanism
 - TCC activates a TMP and initiates data delivery.



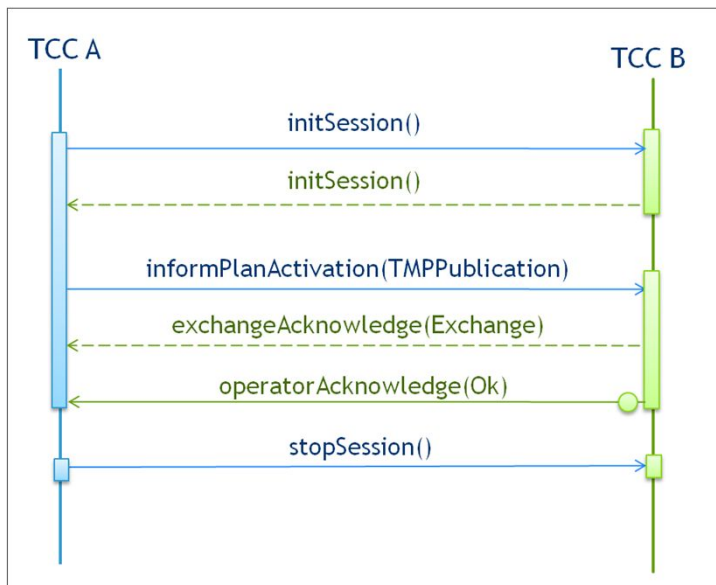
ESG5 Evaluation

TMP Mechanism: Basic interactions

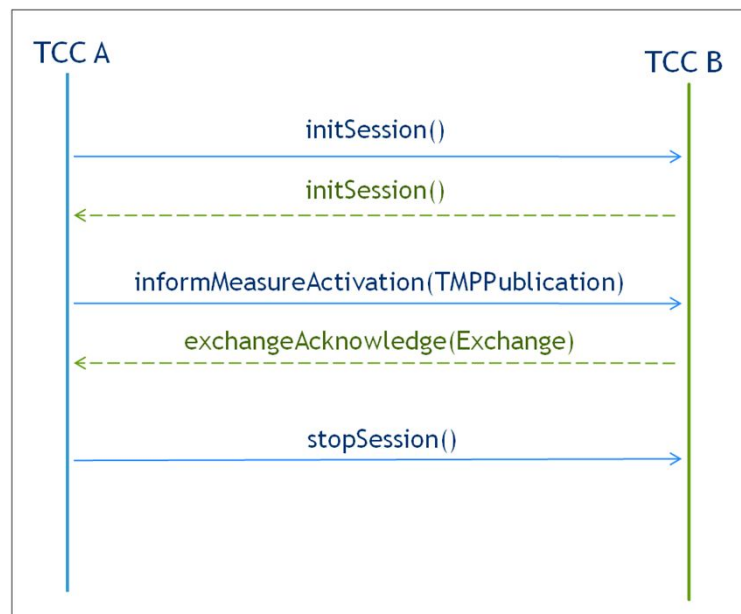
- Plan Activation (Inform)
- Measure Activation (Inform)
- Measure Activation (Request)
- End Measure (Inform)
- End Measure (Request)
- End Plan (Inform)

Work to be carried out by 'Exchange Mechanisms' ESG5 subgroup

ESG5 Evaluation

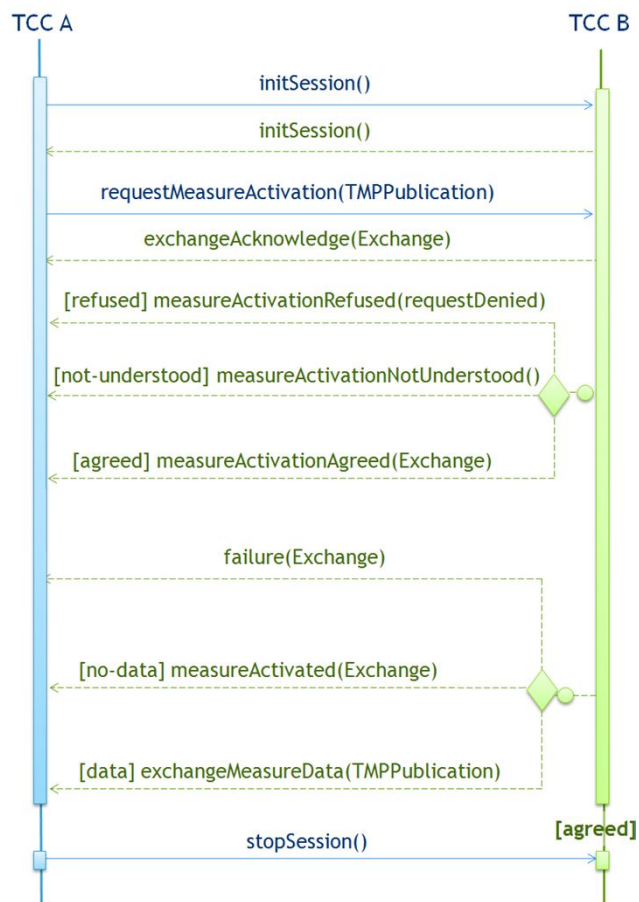


Plan Activation (Inform)

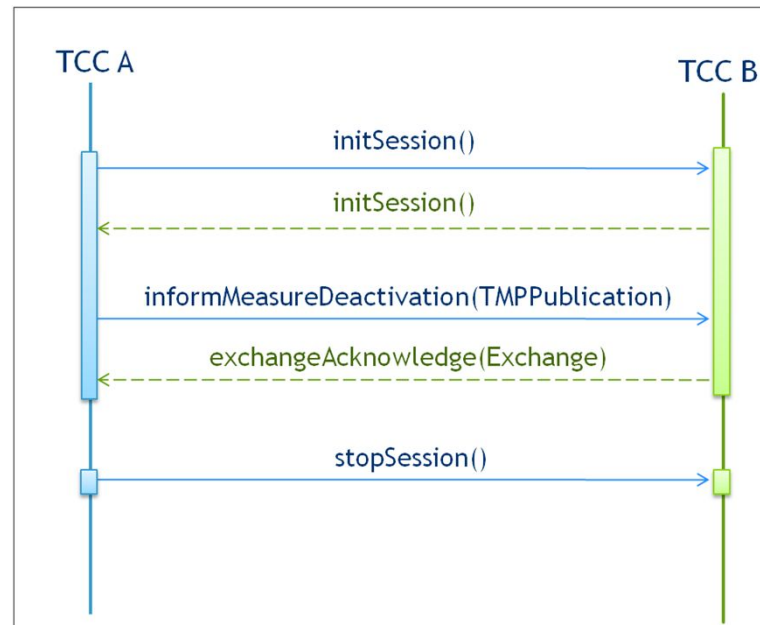


Measure Activation (Inform)

ESG5 Evaluation

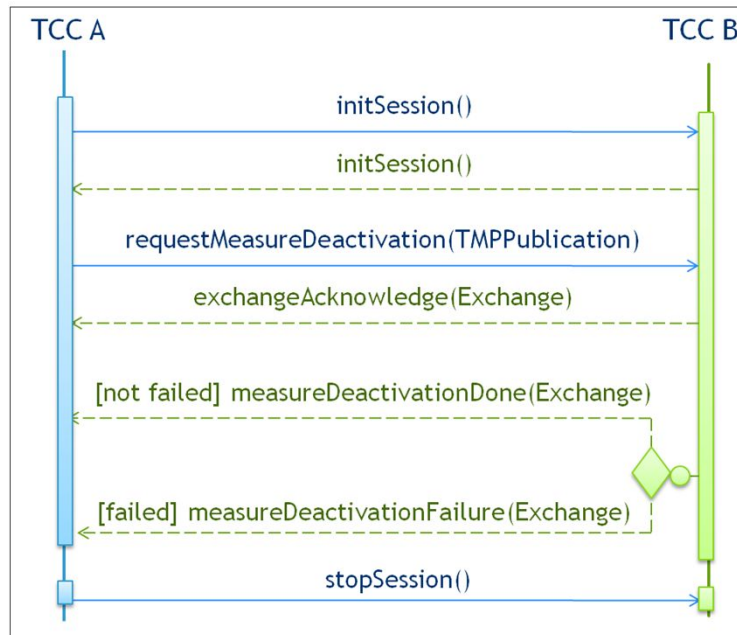


Measure Activation (Request)

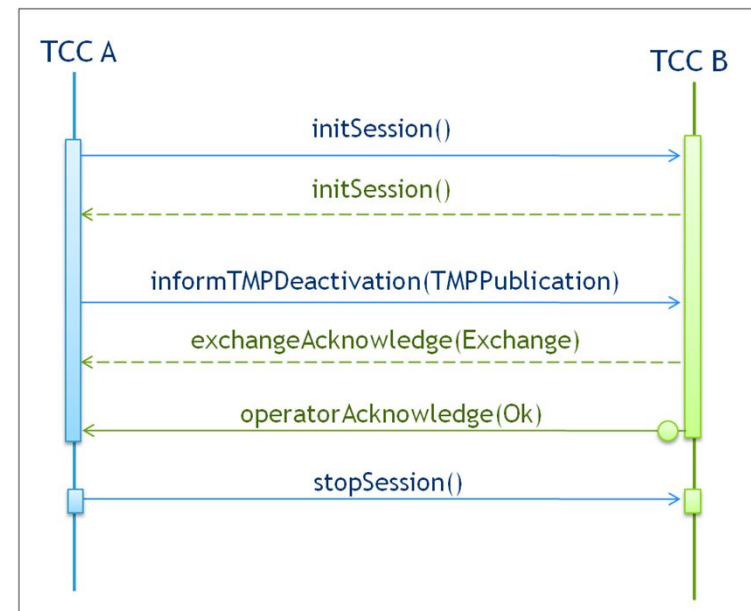


End Measure (Inform)

ESG5 Evaluation



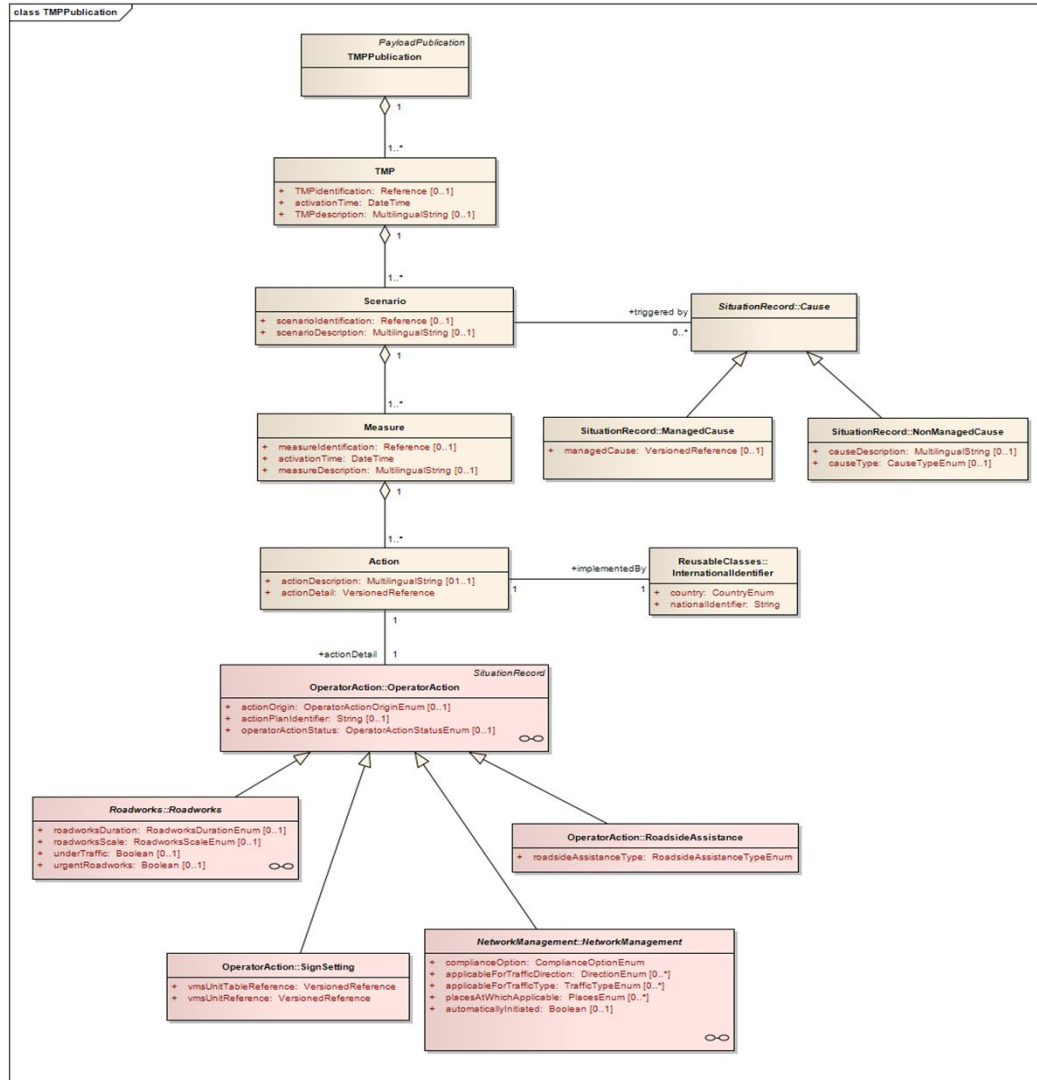
- End Measure (Request)



- End Plan (Inform)



TMP Extension Data model



➤ Extension proposed to support TMPs within DATEX II data model

➤ Under study by ESG5

Conclusions from ESG5

- It was concluded that DATEX II could support all data needed to TMPs.
- It was decided that the approach must be an EXTENSION since:
 - TMP concept is totally different to SITUATION concept
 - TMP is a 'transaction' where as SITUATION is a 'publication'
 - TMP need a special Objects instead of 'reusing' the existing for different purpose which have been created.
 - The exchange mechanism is very concrete. A new 'ack' to request to develop actions and its confirmation in a TMP is mandatory.



Next Steps

- ESG5 workplan:
 - *To refine the Data model proposed as an EXTENSION*
 - *To work on the Exchange mechanism to include those features which support the ACKs needed and Security.*
- EGS2 workplan:
 - *Pilot to evaluate whether the measure data and elaborated data are quality enough to support TMPs (Rerouting pilot)*
 - *Pilot to implement DATEX II TMP extension data model and exchange mechanism (Multimeasure group)*



Thank you for your attention

Speaker

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