



EasyWay

Supporting TMPs

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- **Framework to the sub-activity**
- **TMP definition**
- **Different approaches to TMP's**
 - Re-routing pilot
 - Multi-measure pilot
 - Urban/interurban pilot
- **First proposal to model the flow in DATEX II**
- **Next Steps**

- **DATEX2 is a horizontal European study in order to support the deployment of efficient and harmonised data exchange network in Europe.**
- **Not only:**
 - **Maintains specifications,**
 - **Offers support to stakeholder,**
 - **...**
- **But also, receive new “exchange user needs” and improve the specification accordingly.**

- **Strong requirement for DATEXII to better support cross-border, long-distance and wide areas TMP's in future.**
- **Proposal to approach ES2 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**



From Guideline for the deployment of strategic Traffic Management for Corridors and Networks

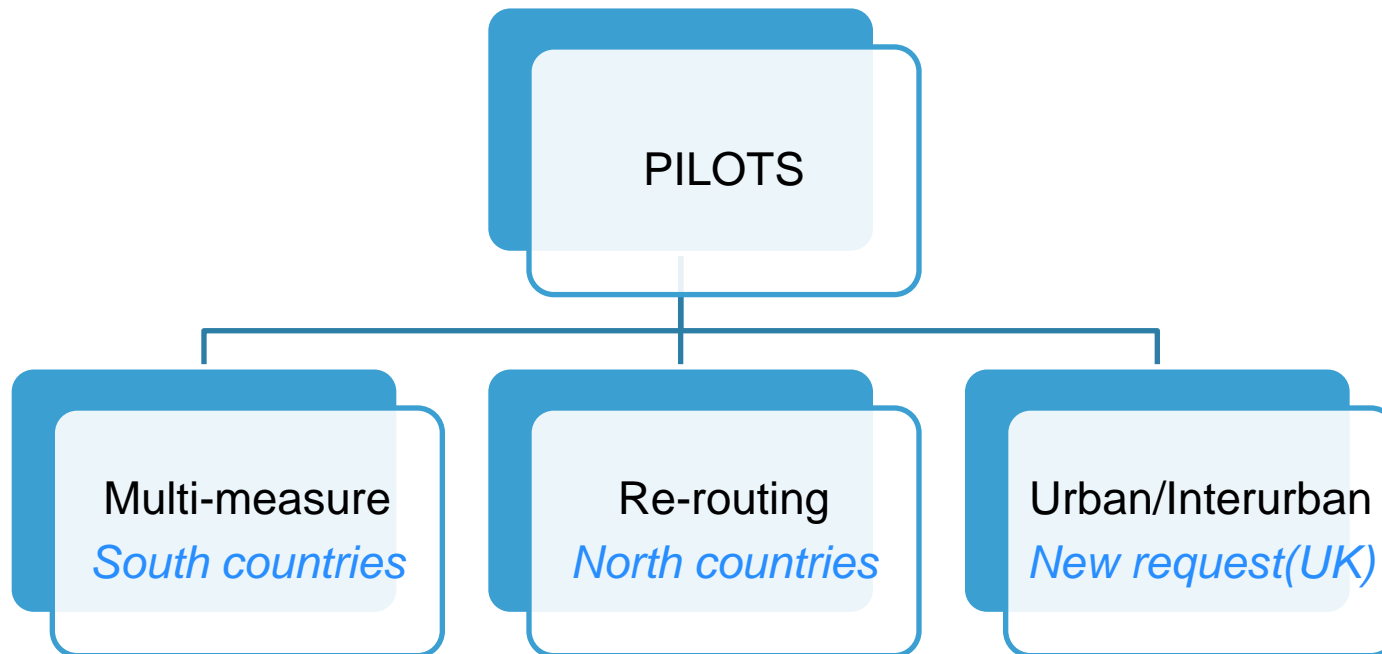
- A TMP is the pre-defined allocation of a set of measures to a specific situation in order to inform and control the real-time.
- Initial situations can be unforeseeable or plan able.
- The measures are always applied temporary (and not permanent).
- Generally at least two partners are involved
- The duration of the initial situation requires complex activities.
- It is assumed that the surrounding network is considered and not only the affected road section.



- Different approaches/requirements in Europe:
 - Approach 1. Wide areas where a TMP is a document which include all measures to be taken BUT these measures have been agreed PREVIOUSLY in detail. Not only the measures but also in which circumstances these measures have to be activated.
 - Approach 2. Specific cross border areas. More focused to rerouting measures. Also the rerouting is predefined the negotiation is flexible (language is not a problem) and include more operator interaction.
 - Approach 3. Urban/interurban traffic management plans

Three independent pilots and “from the outcome of pilots and depending of results” going to consolidated results.

2 meetings per year to share results.



TMP:

- **Focused mainly in re-routing.**
- **Small document which determines who do what.**
- **Information is exchanged via FAX, and, telephone.**
- **Previous crossborder pilots not very successfull, since**
- **Operator had different interfaces.**

Work:

- **Working with operators in order to identify which parts of Cross Border Management could be automated to improve the nowadays work.**
- **After this questionnaire they will stablish new steps.**



MULTI- MEASURE TMP definition

- TMPs is an specific procedure that define how to manage the detected traffic incidents.
- It is structured in three levels of information:
 - **Scenarios**: defines the current status of the incident.
 - **Measures**: defines the set of procedures suitable to be applied based on the information of the scenario level.
 - **Actions**: defines the activities to develop each procedure of the measures level.

ARTS Atlantic Cross Border Traffic Management



Based

1. ESCENARIOS DE ACTUACIÓN

ESCENARIOS POSIBLES

ESCENARIO	DEFINICIÓN
S1	PREVISIÓN DE NEVADAS
S2	RESTRICCIÓN A VEHÍCULOS PESADOS
S3	RESTRICCIÓN A VEHÍCULOS LIGEROS SIN CADENAS
S4	CORTE DE LA CARRETERA

1.1. Medidas a activar

ESCENARIO	MEDIDAS A ACTIVAR	
S1	E	Intercambio de información meteorológica
	E	Intercambio de información meteorológica
S2	EVP	Intercambio de información de "Restricción a vehículos pesados"
	AP	Almacenamiento de vehículos pesados
	PAP	Petición de Almacenamiento de vehículos pesados
	E	Intercambio de información meteorológica
S3	EVL	Intercambio de información de "Restricción a vehículos ligeros sin cadenas"
	DIF	Difusión de la información relativa a la restricción de circulación a vehículos ligeros sin cadenas
	E	Intercambio de información meteorológica
S4	EVP	Intercambio de información de restricción a todo tipo de vehículos
	AT	Almacenamiento de todo tipo de vehículos
	PAT	Petición de Almacenamiento de todo tipo de vehículos
	E	Intercambio de información meteorológica



All information is agreed and codified:

- Workplan id.
- Escenario id.
- Measure id,
- ...

Actions:

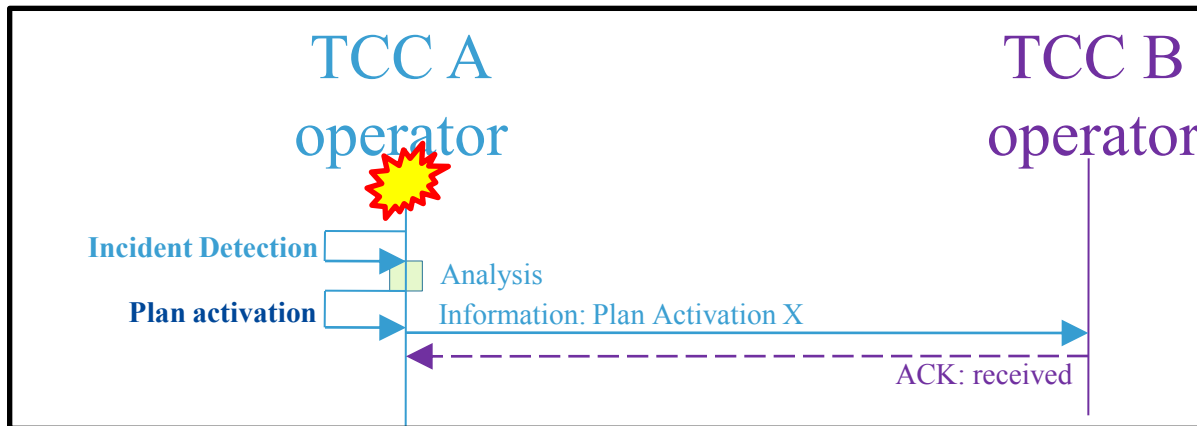
• Independent

- Those that a traffic control centre can implement without confirmation of other traffic control centres:
 - HGV restrictions, VMS information, ...

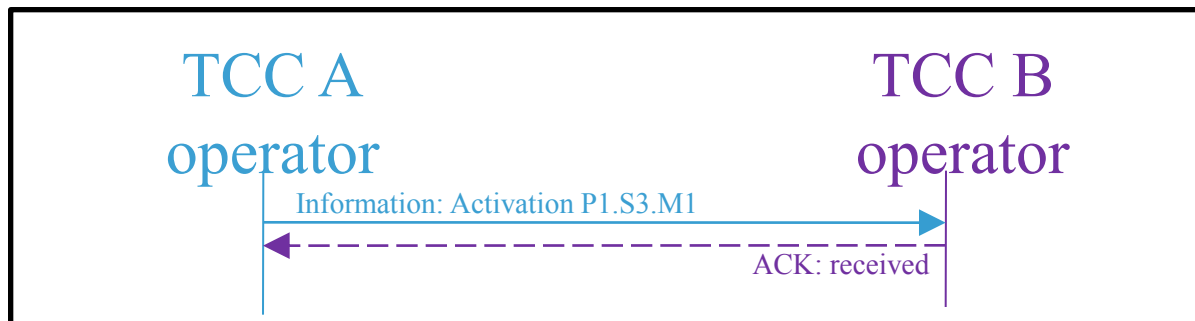
• Dependent

- Those that cant not be activated without the confirmation of other control centres involved:
 - An itinerary involving road under competences of two TCCs only can be activated when each TCC is ready.

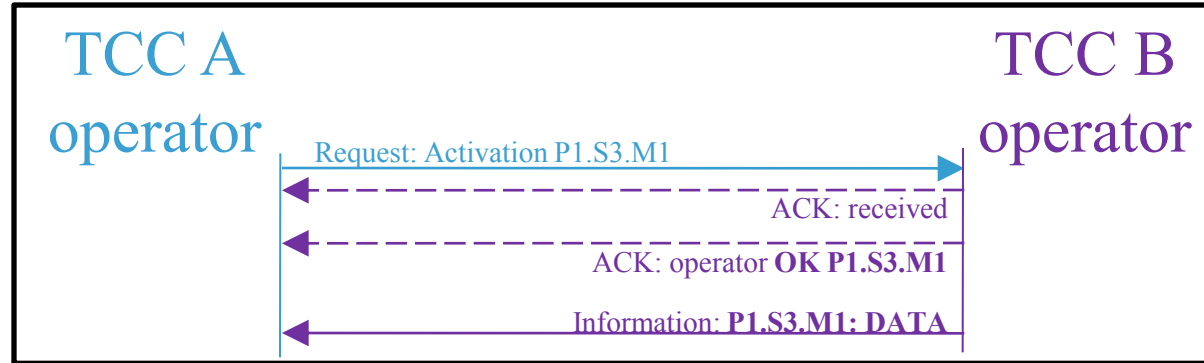
Plan Activation



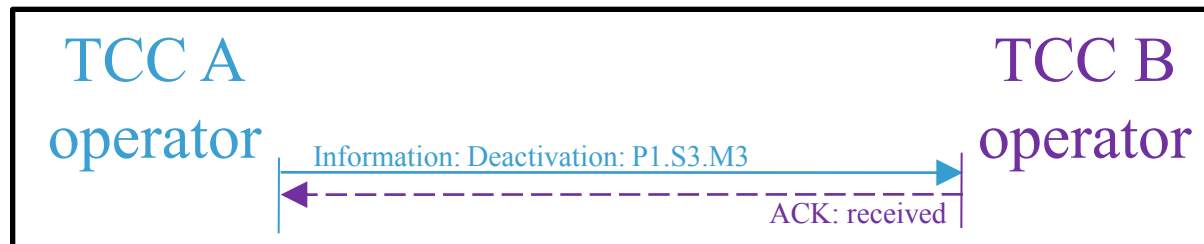
Measure Activation



Measure Activation Request

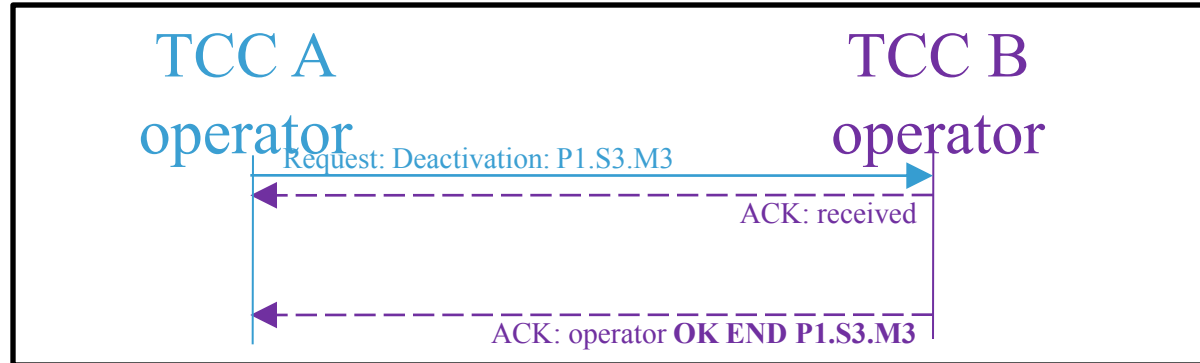


End Measure

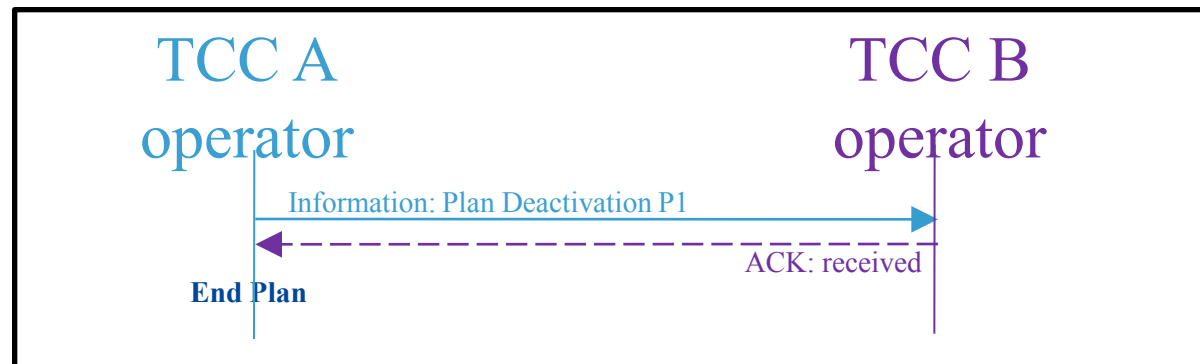


Summary

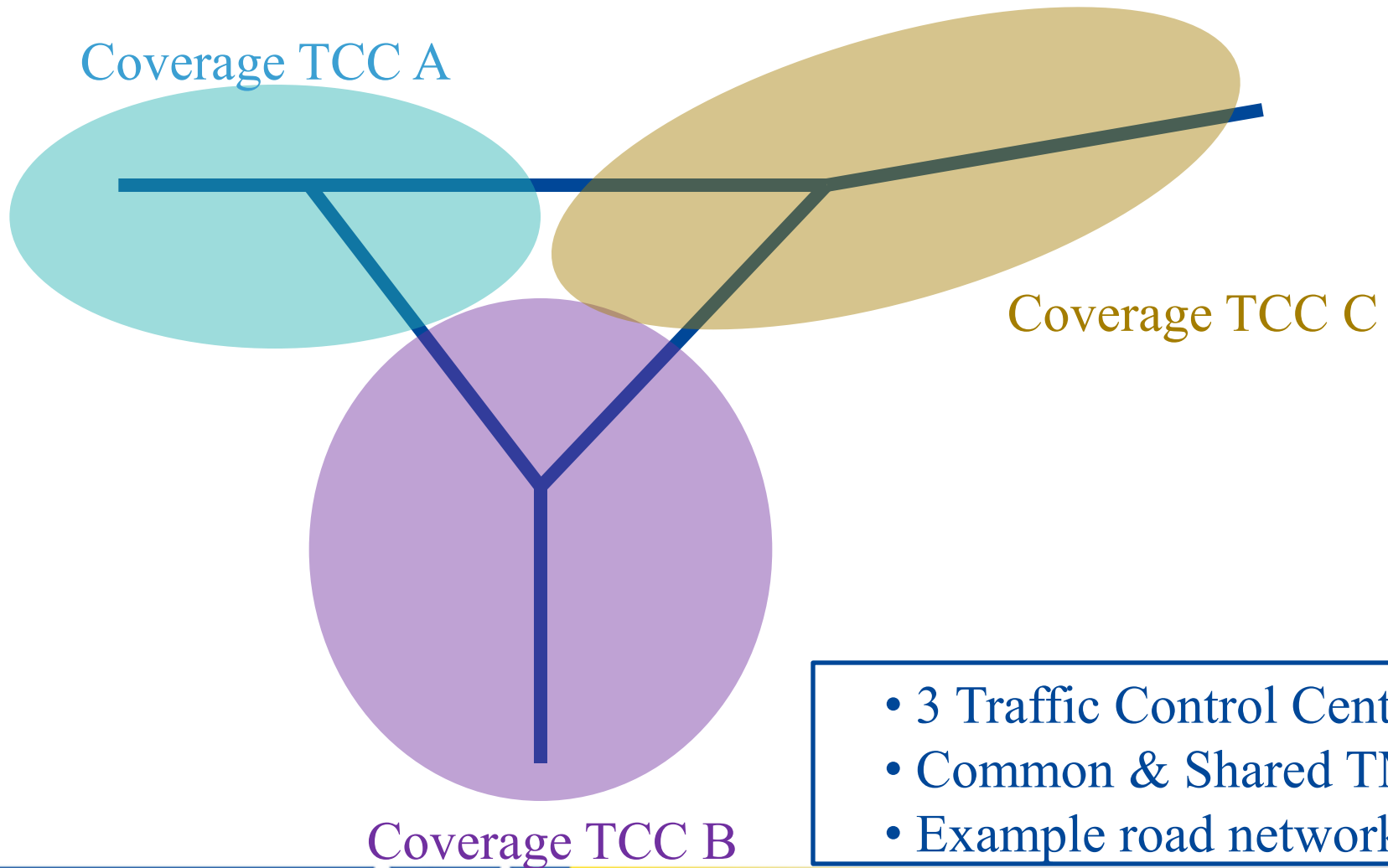
End Measure Request



End Plan



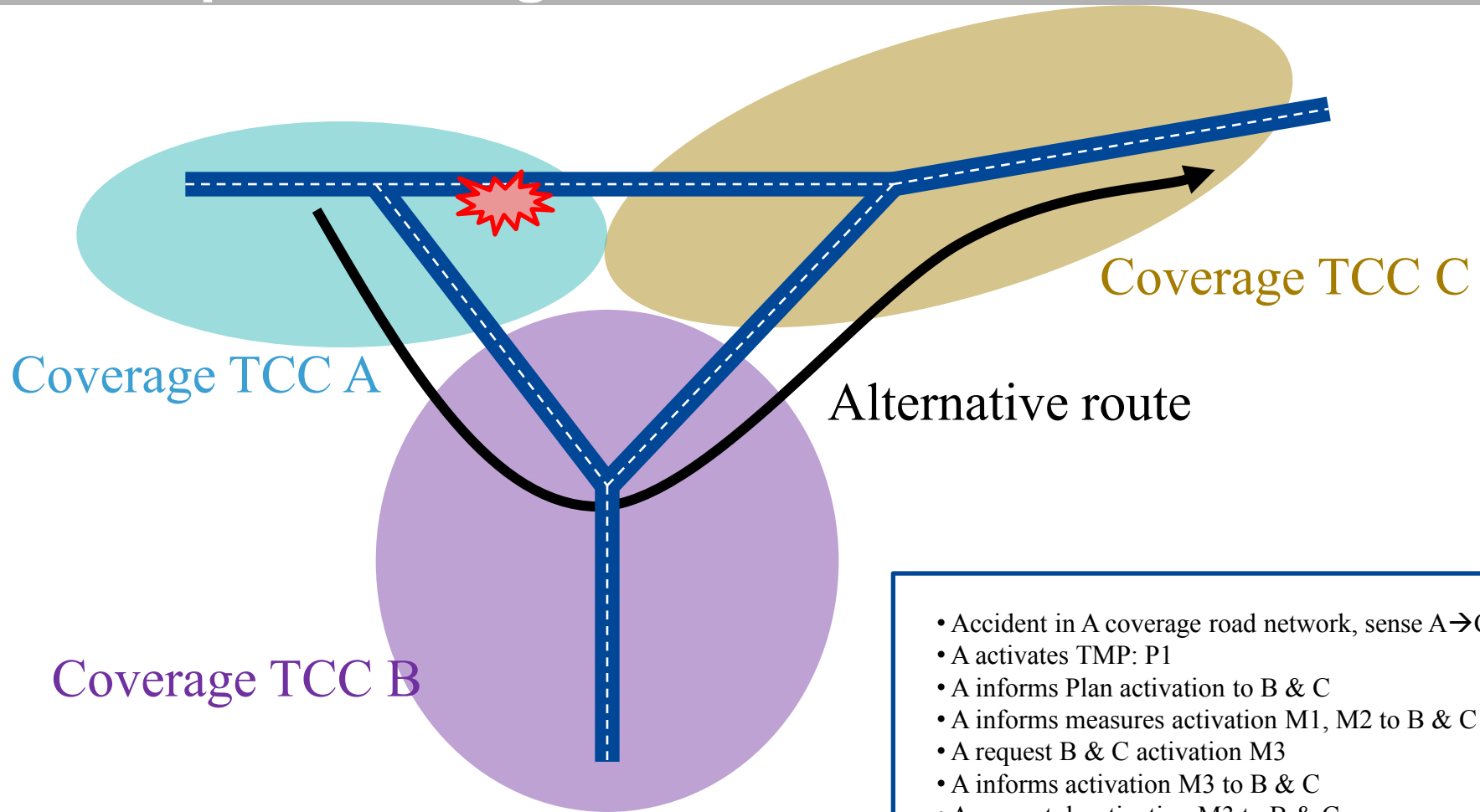
FLOW OF INFORMATION



According to the flows defined where modeled 3 main examples for real TMP's situations:

- 1. Independent measures activation**
- 2. Dependent measures activation – All Agree**
- 3. Suspend and Resume a measure**

Example 2: All agree → activate measure



- Accident in A coverage road network, sense A→C
- A activates TMP: P1
- A informs Plan activation to B & C
- A informs measures activation M1, M2 to B & C
- A request B & C activation M3
- A informs activation M3 to B & C
- A request deactivation M3 to B & C
- When all measures deactivated:
 - A informs Plan deactivation to B & C

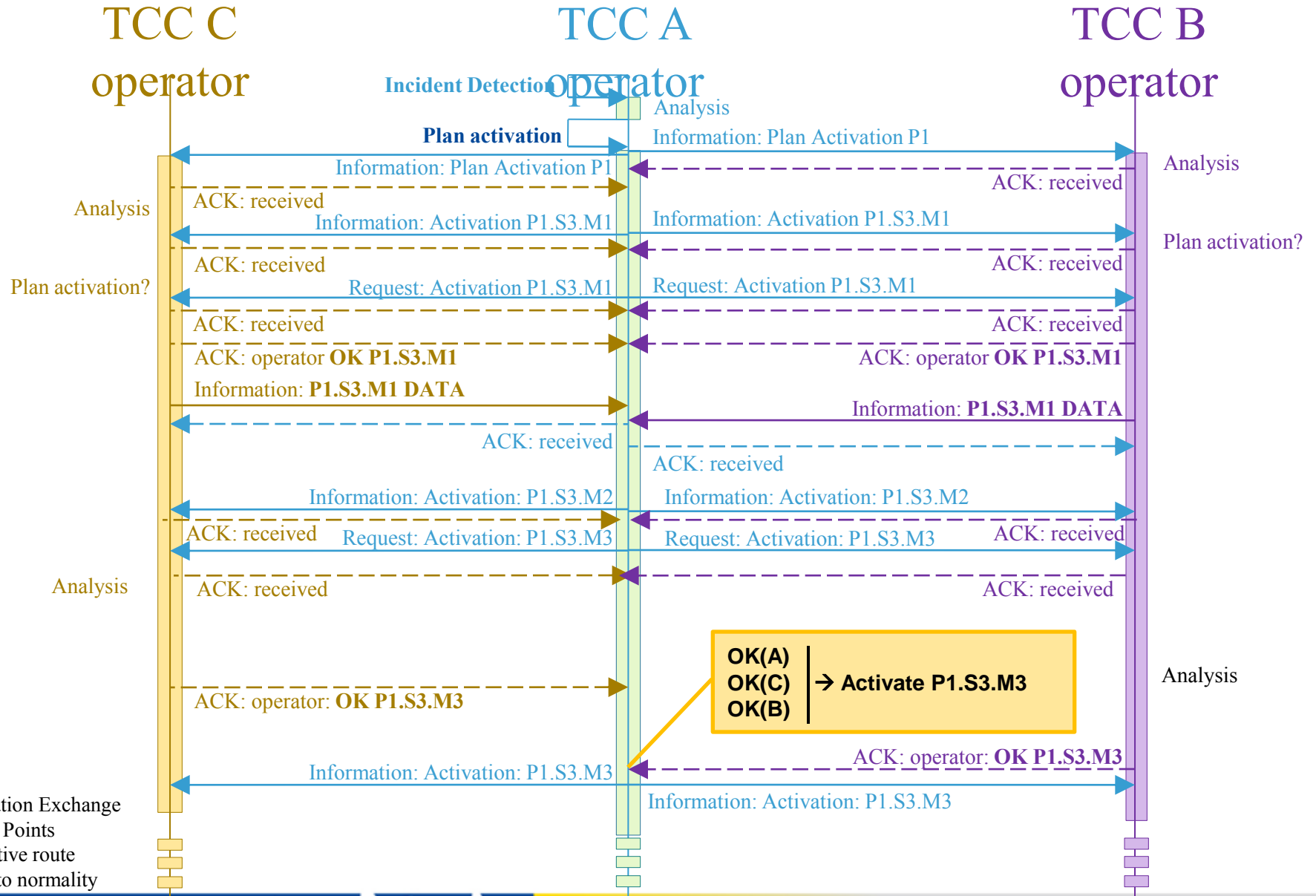
Measures:

- M1: Information Exchange
- M2: Control Points
- M3: Alternative route
- M5: Return to normality

- Common TMP
- All agree to activate rerouting



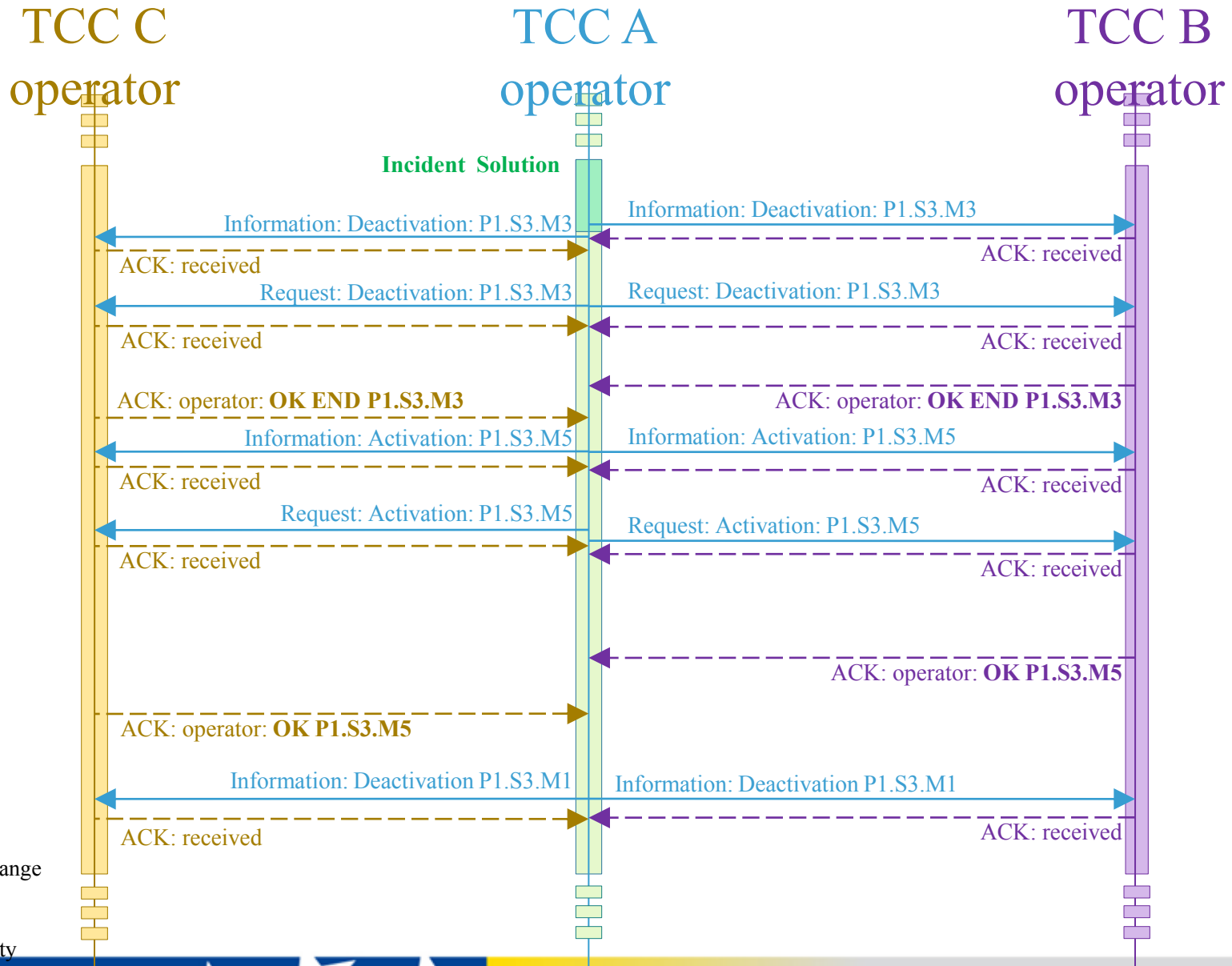
Information Flows: example 2



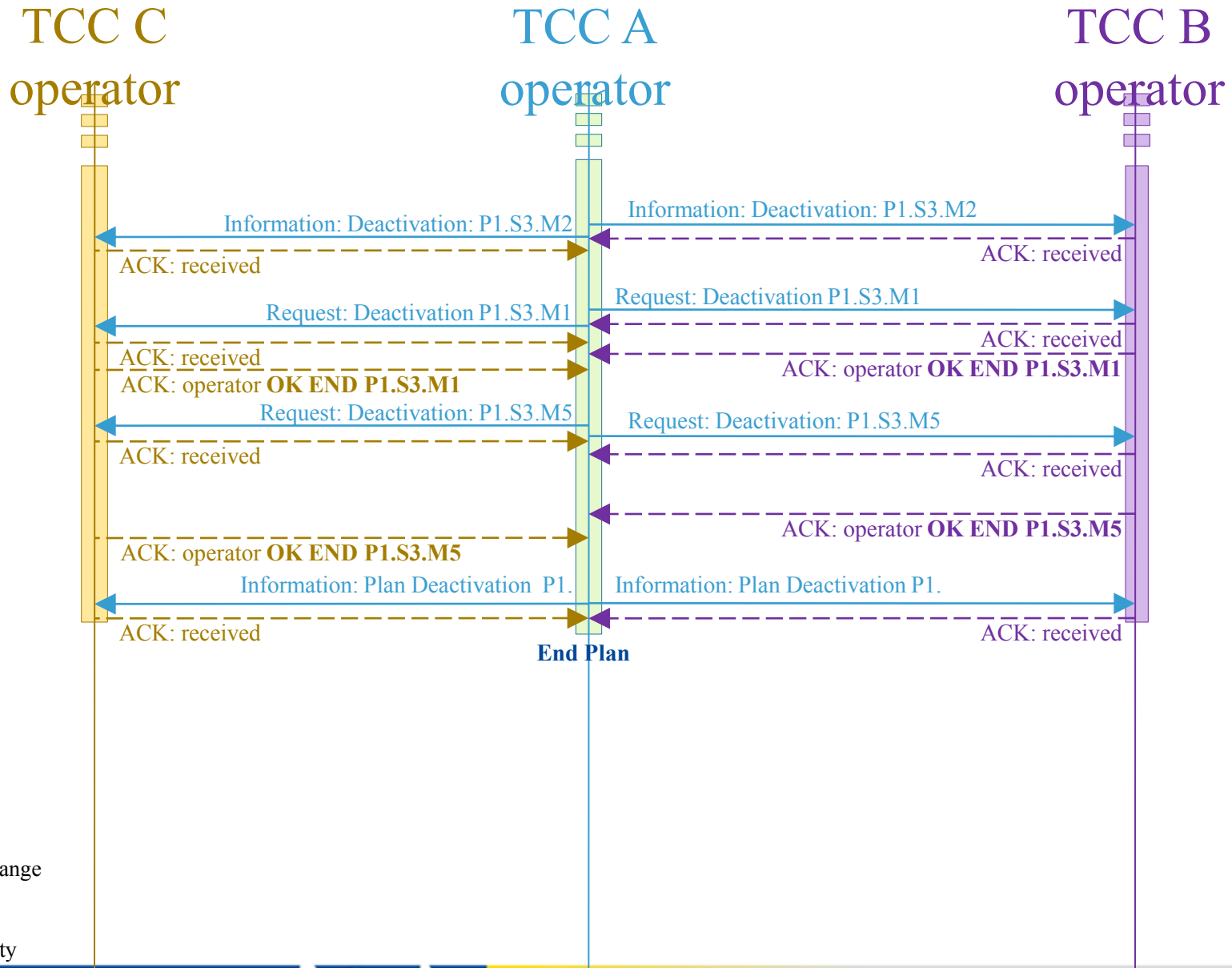
M1: Information Exchange
M2: Control Points
M3: Alternative route
M5: Return to normality



Information Flows: example 2 (II)



Information Flows: example 2 (III)



M1: Information Exchange
M2: Control Points
M3: Alternative route
M5: Return to normality

- **First approach to demonstrate whether this kind of information could be supported by DATEX2:**
 - Version 2.0 + 51.0 (to include operator plan)
 - Presented in ES5 TG.
- **TG consider:**
 - No doubt about the possibility to support the exchange of this information, but,
 - TMP introduce a different concept of service/negotiation, and recommend:
 - New model separate from situations. Treated as an extension for V2.0.
 - Work together to Exchange workitem to define the logic of the exchange.

Multi-measure site:

- Consider and work on TG recommendation
 - DEFINING A NEW SERVICE WITH TMP REQUIREMENTS.
 - MODEL AN EXTENSION TO REPRESENTE A TMP.

Re-routing site:

- Evaluation the user requirements (from traffic operators).
- Next steps to be defined.

Urban/Interurban site:

- New TMP's to consider.

QUESTIONS?

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