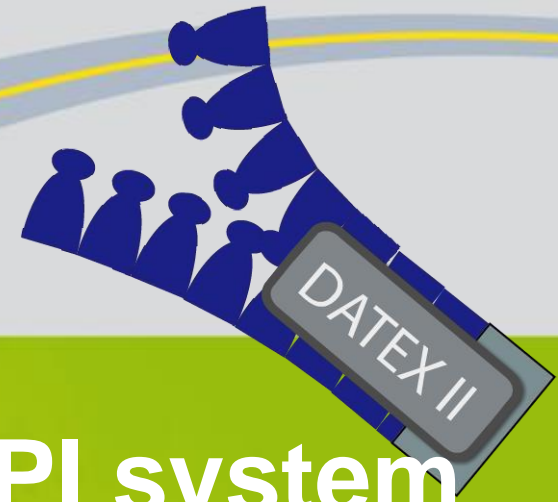




EasyWay



# Presentation of TIPI system regarding DATEX Exchange

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**DATEX II Forum Berlin**

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**Context in France**

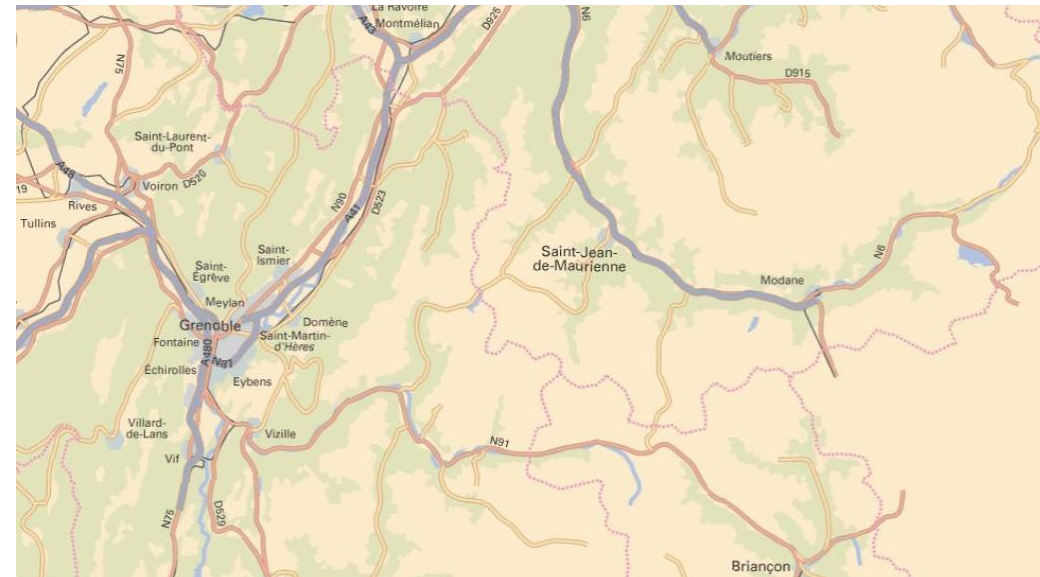
**Main features of Tipi**



**Lessons learned**

## A lot of partners involved in DATEX exchange...

- Traffic Information Centres :
  - 1 national and 7 regional
- Road operators :
  - 11 Interdepartmental Directorates for the national road network
  - 9 Toll-motorways companies
  - 15 urban area traffic control centres
  - Roads managed by counties (departement)
- Other countries...
- Other traffic service providers...



## **An efficient road information service implies :**

- To elaborate a global view all over the whole network
- To deliver an accurate, useful information
  - a same event is not regarded in the same way by every actors

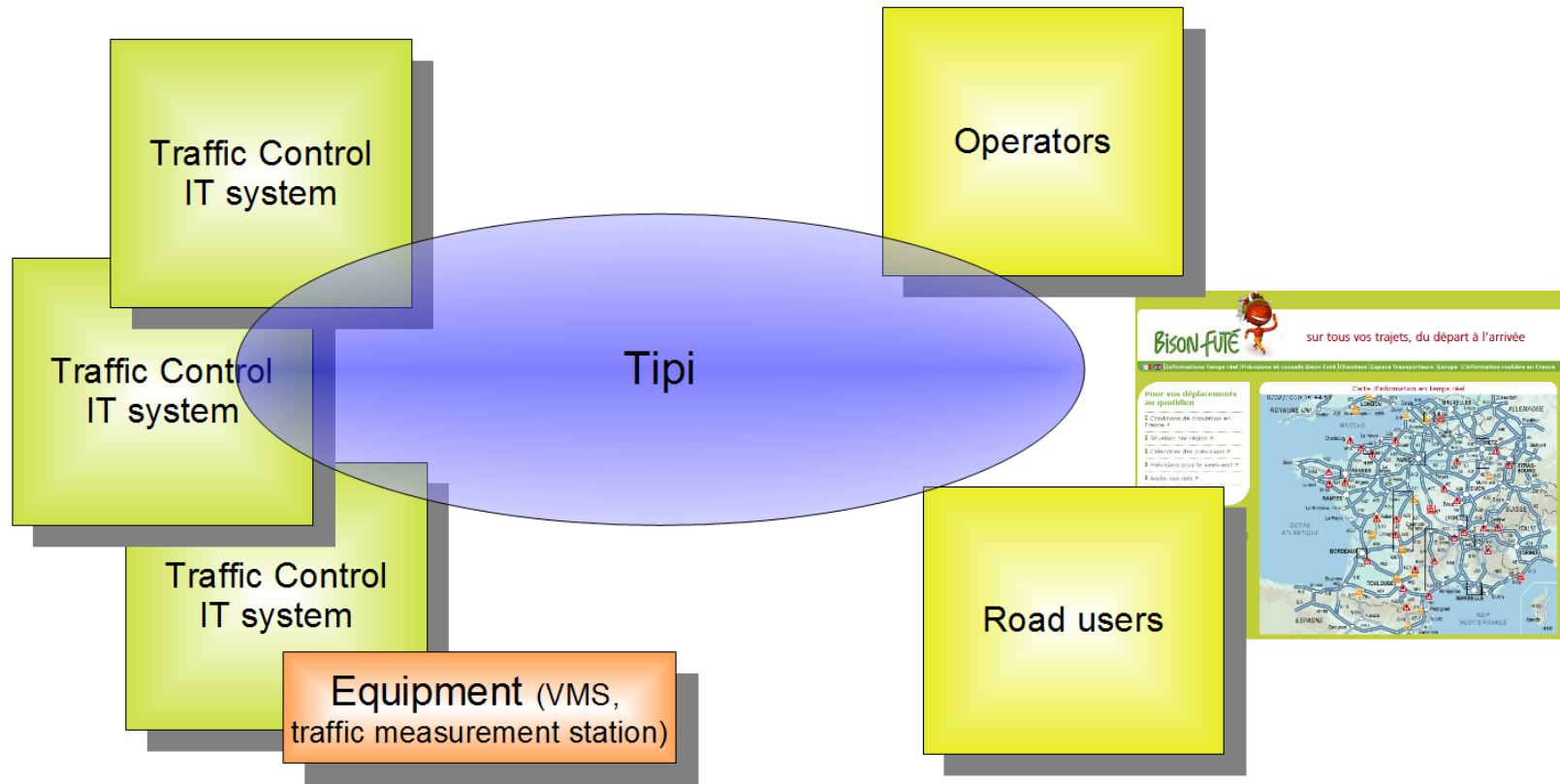
## **Hence the scope of Tipi :**

- To collect information from all available sources
- To check information and if needed to correct it (and not only to forward it)
- To provide information to authorities, traffic operators, media and users according to their profile

# Main features of Tipi (1/2)

## A central position...

- Data Exchange is an important part of Tipi
- High reliability requirements
  - Real-time operating system, H24 and 7 days a week



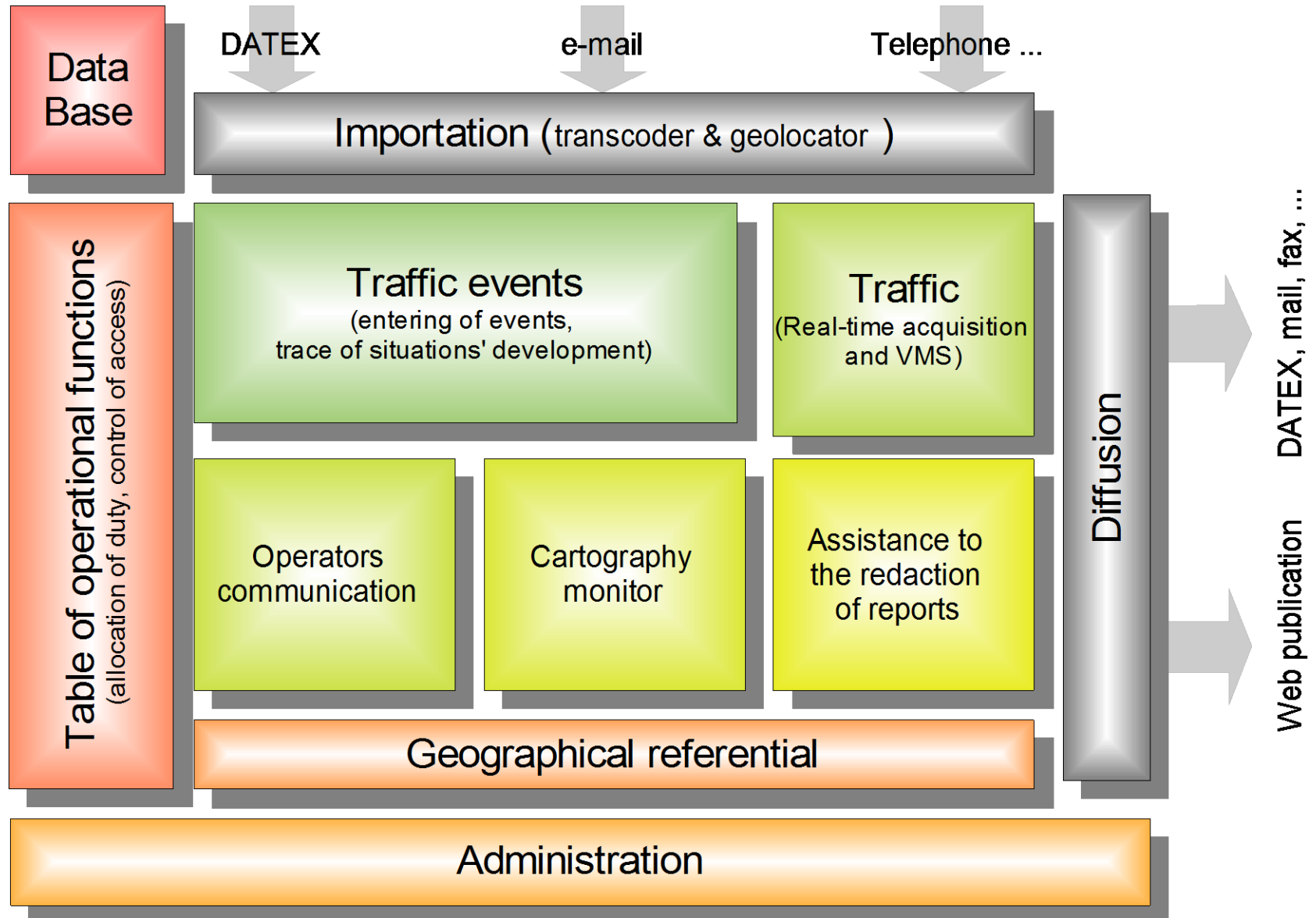
## An architecture that eases further development and deployment

- A web application
- A single data-base
  - Enabling a common view shared by all stakeholders...
  - ... but to be elaborated with different sources

## Planned extensions

- Integration of traffic data and VMS publications
- New design of the “Bison Futé” website allowing for reaching wider audience
- Grant access to all information available

# Main functions



# Operators' dashboard



**Notifications**

Boîtes de notifications affichées <<

PJ	Boîte	État	Imp	Réa	Nature	Objet	Localisation	Horodate	Expéditeur	Notification
	CRICR LYON		●		<b>Info Alerte</b>	<b>Gestion de regroupement par administrateur</b>	<b>73, A41, OE,Y,+1, PR88+000, LA MOTTE-SERVOLEX</b>	04 15:16	EVENEMENTIEL	
	CRICR LYON		●		Info Alerte	Gestion de regroupement par administrateur	38, A43, OE,Y,+1, PR38+000, RUY	03 15:00	EVENEMENTIEL	
	CRICR LYON		●		Info Alerte	Gestion de regroupement par administrateur	38, A43, OE,Y,+1, PR35+000, BOURGOIN-JALLIEU	03 14:53	EVENEMENTIEL	
	CRICR LYON		○		Action	Regroupement suspect	63, A71, SN,W,2, PR354+414, Voie de droite, VENSAT	22/01/10 15:28	EVENEMENTIEL	
	CRICR LYON		○		Action	Regroupement suspect	63, A71 *, SN,W,2, PR374+165..., Accotement, RIOM, sur accot	22/01/10 15:03	EVENEMENTIEL	
	CRICR LYON		○		Action	Regroupement suspect	63, A71 *, SN,W,2, PR374+165..., Accotement, RIOM, sur accot	22/01/10 15:03	EVENEMENTIEL	
	CRICR LYON		○		<b>Action</b>	<b>Regroupement suspect</b>	<b>63, A71 *, SN,W,2, PR374+263..., Accotement, RIOM, sur ac</b>	22/01/10 15:02	<b>EVENEMENTIEL</b>	
	CRICR LYON		○		<b>Action</b>	<b>Regroupement suspect</b>	<b>63, A71, SN,W,2, PR354+414, Voie de droite, VEISAT</b>	22/01/10 15:02	<b>EVENEMENTIEL</b>	
	CRICR LYON		○		Action	Regroupement suspect	26, A7, NS,Y,1, PR99+049..., SAULCE-SUR-RHONE (sur 1.1 km	22/01/10 14:13	EVENEMENTIEL	
	CRICR LYON		●		Info Alerte	Extension de droits.		21/01/10 17:25	ORGANISATION	
	CRICR LYON		●		Info Alerte	Extension de droits.		21/01/10 17:25	ORGANISATION	
	CRICR LYON		●		Info Alerte	Extension de droits.		10/12/09 10:40	ORGANISATION	

**Nature de messages**

Pour action  
 Information et alertes  
 Externes

**Critères**

Non lus seul  
 Réservées seul

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Pour la sélection Choisissez une action... Actions Choisissez une action...

**Regroupements**

**Nature**

Trafic  
 Etat des routes  
 Chantiers

**Critères**

Avec les valides  
 Avec les suspects

Réels seuls  
 Temps réel seuls  
 Suivi dépassé seul  
 Réseau principal seul

ZD Sud-Est

Val	Réa	Imp	Dép	Axe	Sens	Localisation	Constat	Fin / (Suivi)	Évènements	Cartographie
		○	12			AVEYRON (12)	<<<	<<<	Rugb	
		○	12			AVEYRON (12)	<<<	<<<	OpAu	
		●	12			AVEYRON (12)	<<<	<<<	PIVg	
S	●	●	26	A7	NS,Y,1	PR45+012..., SAINT-BARTHELEMY-DE-VALS (sur 0.0 km)	<<<	<<<	RNBV	
S	○	○	26	A7	NS,Y,1	PR99+049..., SAULCE-SUR-RHONE (sur 1.1 km)	<<<	<<<	RNBV	
		○	26	A7	NS,Y,1	PR99+049..., SAULCE-SUR-RHONE (sur 1.1 km)	<<<	<<<	RNBV	
		●	38	A43	OE,Y,+1	PR35+000, BOURGOIN-JALLIEU	<<<	<<<	Acc 50 Km Chan	
		●	38	A43	OE,Y,+1	PR38+000, RUY	<<<	<<<	Acc 50 Km	
		●	42	N88	OE,W,-2	PR48+654, FIRMINY	<<<	<<<	Acc 3 Km MSoc OVol DNou DO	
		○	63	A71 *	SN,W,2	PR374+165..., Accotement, RIOM, sur accotement (sur 0.2 km)	<<<	<<<	Acc	
S	○	○	63	A71	SN,W,2	PR354+414, Voie de droite, VENSAT	<<<	<<<	Acc	
		●	73	A41	OE,Y,+1	PR68+000, LA MOTTE-SERVOLEX	<<<	<<<	1 Km	

longueur bouchons: 104 km

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Consulter Main courante Actualiser Modifier Corriger Finir

Pour la sélection Choisissez une action...

200 km Lon.: 0.0000000° / Lat.: 0.

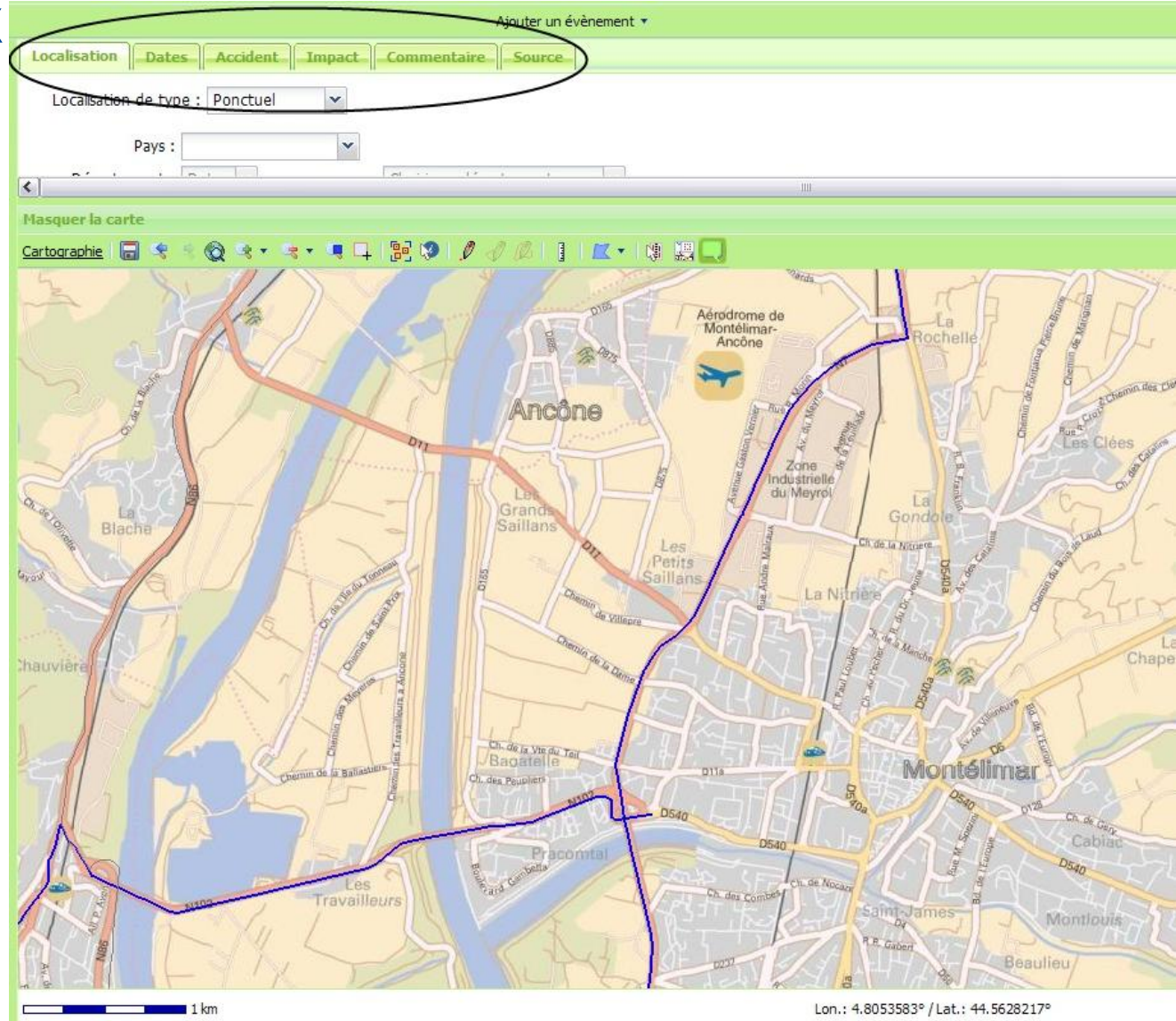


# Entering of events



## Compliant with DATEX

## Graphical interface



# Reporting of a situation



Main courante du regroupement 090525-015398 - TIPI												
	Val	Réa	Imp	Dép	Axe	Sens	Lieu	Version	(enreg)	Constat	Fin	Évènements
■			●	26	A7	NS,Y,+1	PR123+500, MALATAVERNE	1.0.0	1044	23 10:20		☆ Acc
								1.0.0	1044	23 10:20	>>>	☆ Accident mortel, 2 tués, 3 blessés, voie de gauche coupée, [bsdhkqcbds,hvgxbnvgkfnjkbvgsdfn], , impact : voies réduites, (Source : brigade, par caméra)
■			●	26	A7	NS,Y,+1	PR123+500, MALATAVERNE	2.0.0	1233	23 10:20		☆ Acc <b>B</b> 10 Km <b>B</b> 5 Km
								2.0.0	1233	23 10:20	>>>	☆ Accident mortel, 2 tués, 3 blessés, voie de gauche coupée, [bsdhkqcbds,hvgxbnvgkfnjkbvgsdfn], , impact : voies réduites, (Source : brigade, par caméra)
							PR123+500..., MALATAVERNE (sur 10,001 km)	2.0.0	1233	23 10:20	>>>	<b>B</b> bouchon 10 km/1 v., (Source : brigade, par caméra)
						SN,W,-2	PR123+500..., MALATAVERNE (sur 5 km)	2.0.0	1233	23 10:20	>>>	<b>B</b> bouchon 5 km/2 v., (Source : brigade, par caméra)
■			●	26	A7	NS,Y,+1	PR123+500, MALATAVERNE	3.0.0	1238	12:38		☆ Acc <b>B</b> 10 Km <b>B</b> 5 Km
								3.0.0	1238	12:38	FIN	☆ Accident mortel, 2 tués, 3 blessés, voie de gauche coupée, [bedhkqcbds,hvgxbnvgkfnjkbvgsdfn], , impact : voies réduites, (Source : brigade, par caméra)
							PR123+500..., MALATAVERNE (sur 10,001 km)	3.0.0	1238	23 10:20	>>>	<b>B</b> bouchon 10 km/1 v., (Source : brigade, par caméra)
						SN,W,-2	PR123+500..., MALATAVERNE (sur 5 km)	3.0.0	1238	23 10:20	>>>	<b>B</b> bouchon 5 km/2 v., (Source : brigade, par caméra)



## Exchanges need first to meet an agreement upon what to transmit :

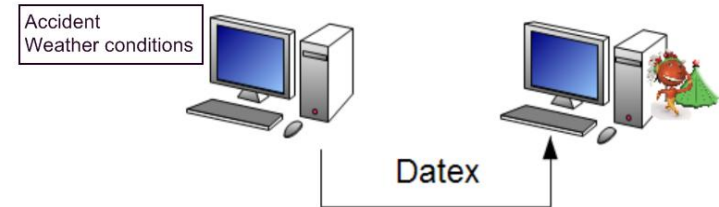
- The scope of the events which have to be reported and are useful...
  - The lack of data is sometimes due to a lack of means to collect this information (neither device nor rule of procedure)
- The way of reporting an event...
  - To ensure a short time of processing and a full understanding of facts
- ... With a view to avoid having as many interfaces as providers
  - DATEX provides a wide range to describe events

## Harmonization within France through a Working Group

- Gathering representatives of all the actors involved
- Production of guidelines
  - *Details about digital road information (data available from the Ministry, specifications, conditions for access, etc.) are given at : <http://diffusion-numerique.info-routiere.gouv.fr>*
- An interest in sharing at European level

## Points of vigilance

- To be able to locate an event with accuracy
  - To check there is no discrepancy
  - To deal with complex locations
- To manage the event lifecycle correctly
  - especially for those created in order to transmit all the relevant information available by the provider



## Technical issues to address...

- To provide a way to retrieve information in case of service disrupting : storing all the publications dispatched and enabling a link from a file to the next one.
- To acknowledge in “push” mode
- Enhancement of data processing
  - XML needs space and time



# Thank you for your attention

For further information, please contact :  
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Énergie et climat  
Prévention des risques  
Développement durable  
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pour  
l'avenir