



XIII
INTERNATIONAL
WINTER ROAD
CONGRESS

QUÉBEC, FEBRUARY 8 TO 11, 2010



Québec 

SUSTAINABLE WINTER SERVICE FOR ROAD USERS

Methods to generate Information on
Weather- and Road Condition in Terms
of specific road sections online as well
as in the Vehicle for Driver and Traveler

Karl E. Schedler

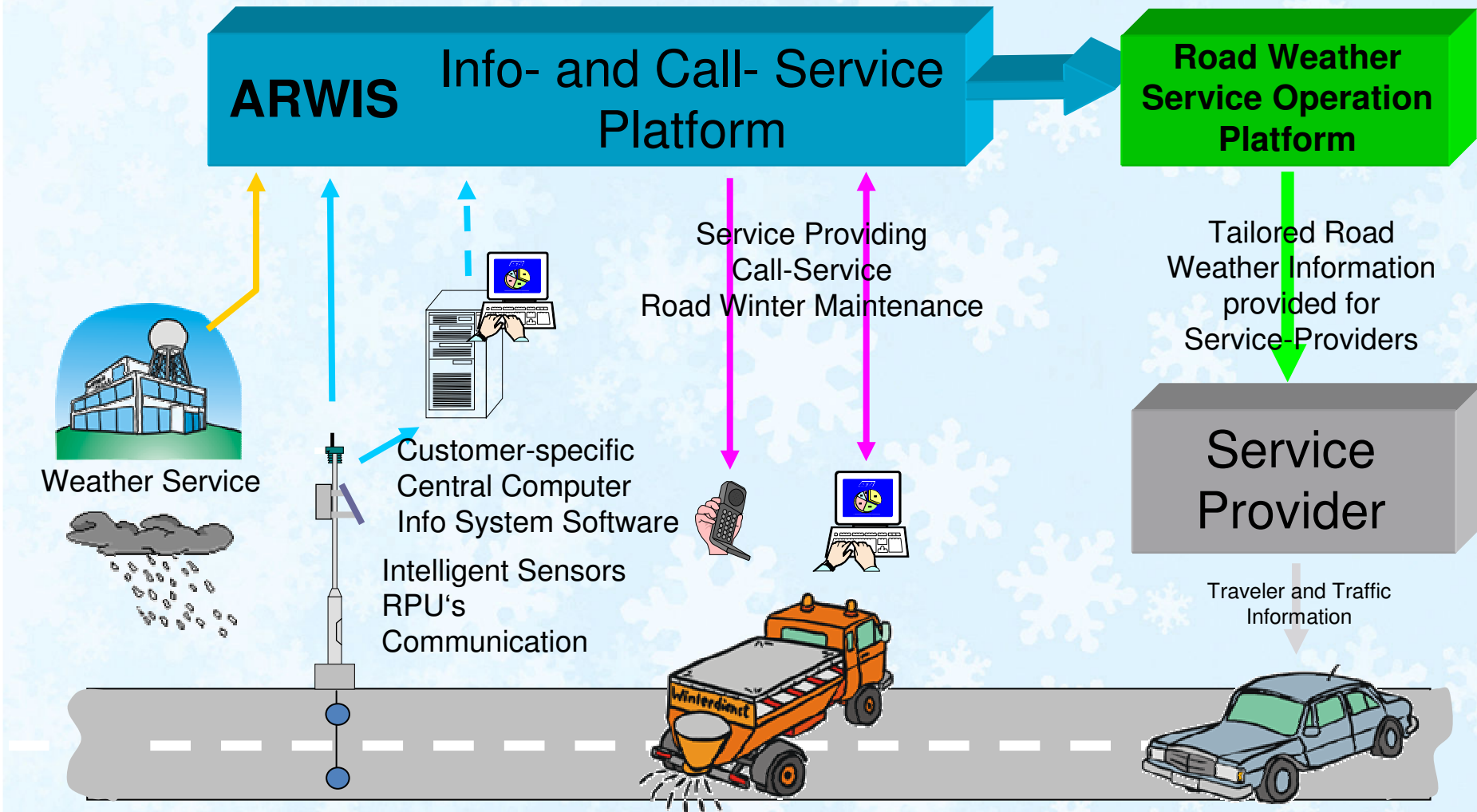
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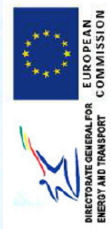


The Road Weather Information Policy



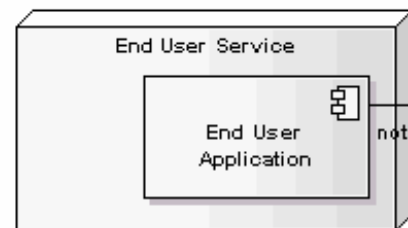
RWS-TTI Road Weather Service Operation Platform for Traveler and Traffic Information

emotion

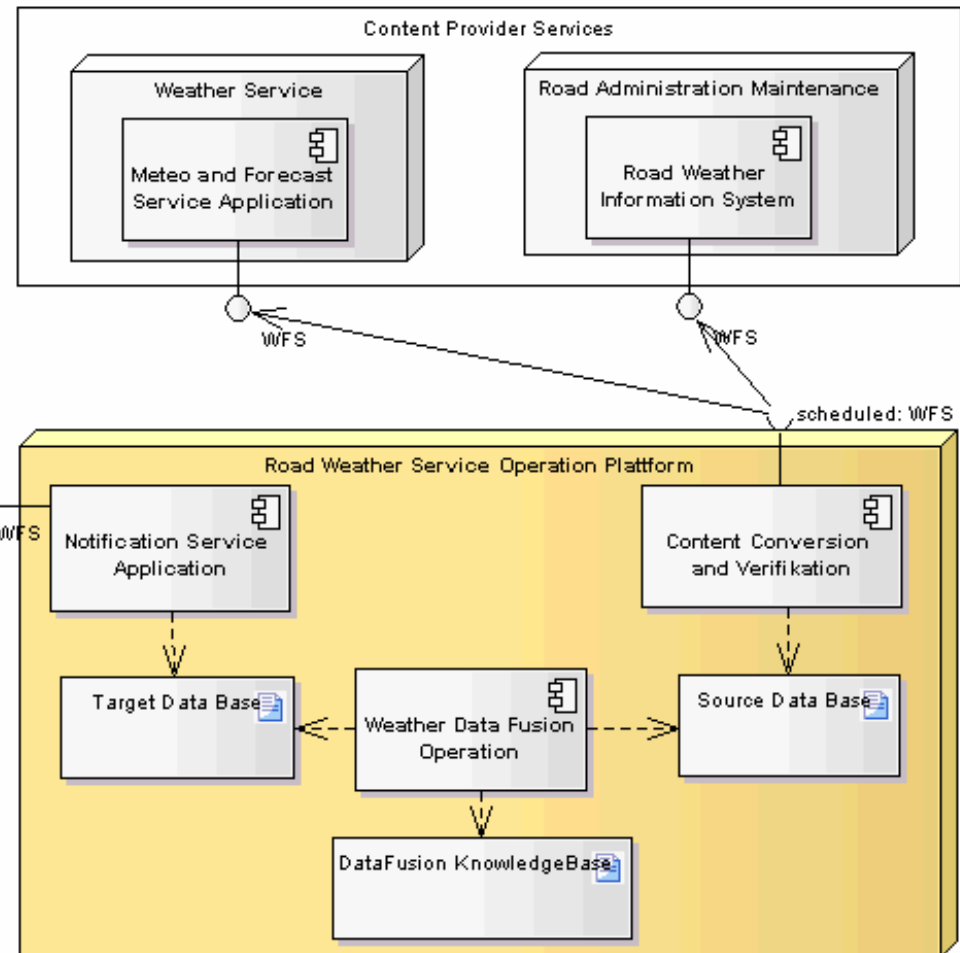


eMOTION Framework
using Open System standards:

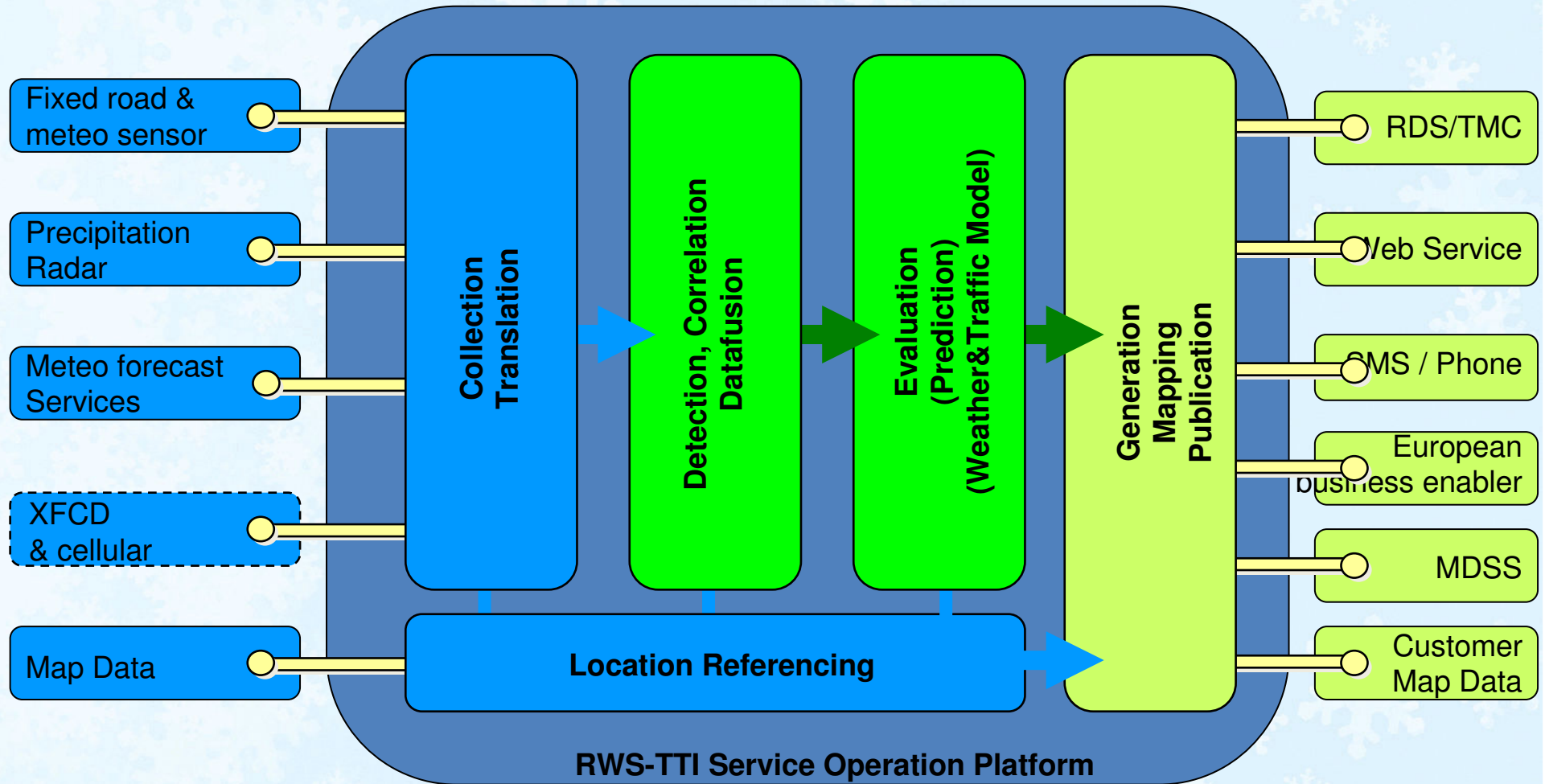
WFS = Web Feature Service
OpenGIS Consortium
□ XML, GML



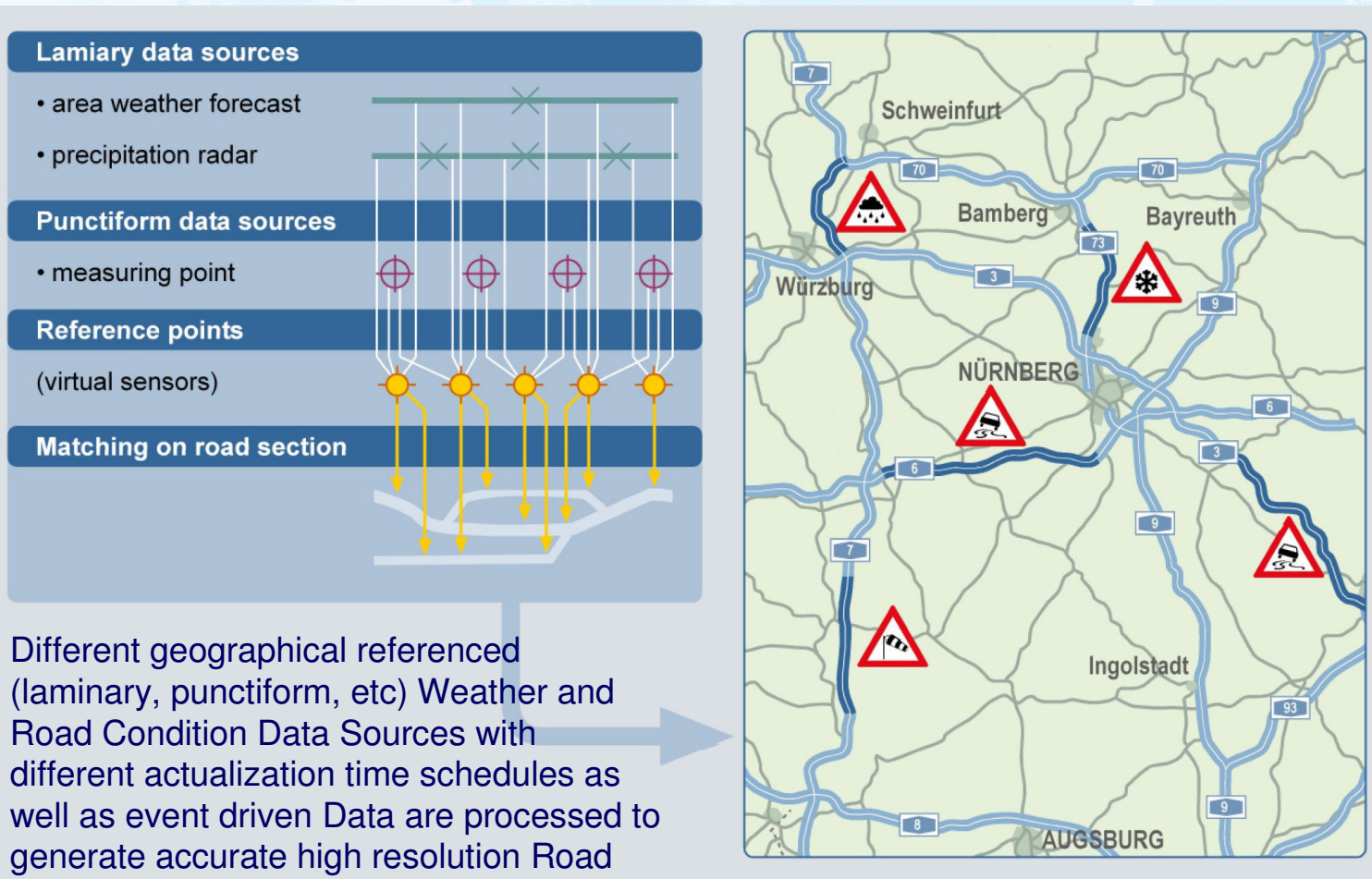
Data Modelling:
Based on ISO 191xx
Meta Data Models
Quality Data Models
DATEX II
Documentation using
UML 2.0 Standard



The Architecture of the Platform



Geographical and Meteorological Data Fusion Knowledge Base

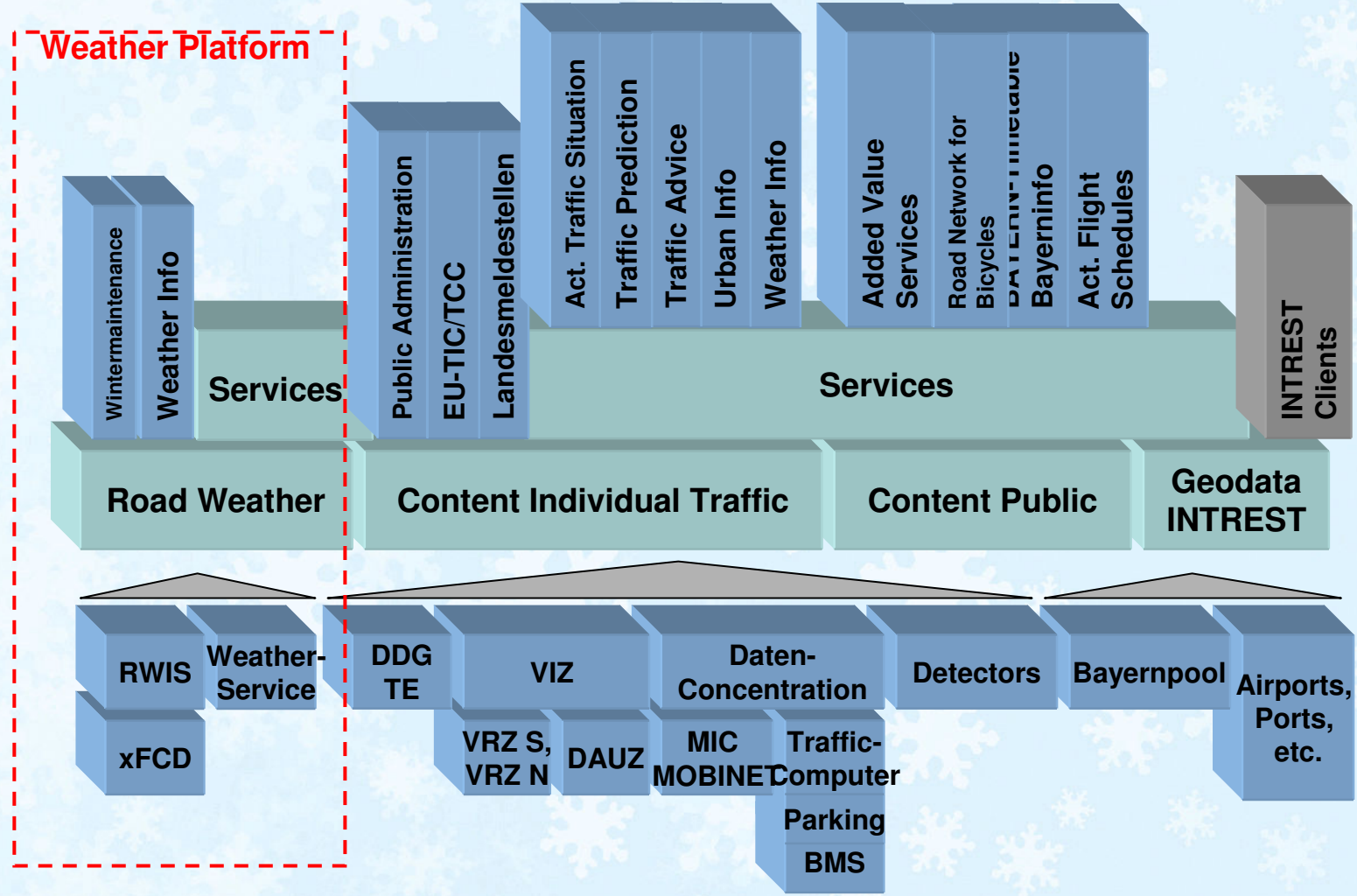


VIB The Bavarian Traffic Information Agency

The Weather Platform



VIB Traffic Information Agency



VIB www.bayernInfo.de Front End

Road link referenced TMC Weather Warnings

BayernInfo Ihr aktuelles Infoportal rund um Reise und Verkehr

Oberste Baubehörde im Bayerischen Staatsministerium des Innern

Deutsch | Englisch | Kontakt | Direktlink

Home | Reiseauskunft | **Verkehrslage** | Bayernnetz für Radler | News BayernInfo | ?

Name: Passwort: Anmelden Registrieren

Flächendeckende Verkehrslage und Prognose

Aktuell **Prognose**

Karte:

Aktualisieren

Meldungen im gewählten Bereich

Region	Meldung	Zeitpunkt
E52	Schneematsch	19:58 Uhr
A8 E45 E52	Stellenweise Gefahr von Schneematsch	bis 23.02.2009 19:58 Uhr
A995 E54	Stellenweise Gefahr von Schneematsch	bis 23.02.2009 19:58 Uhr
A8 E45 E52	Stellenweise Gefahr von Schneematsch	bis 23.02.2009 19:58 Uhr
A99 E52	Stellenweise Gefahr von Schneematsch	bis 23.02.2009 19:58 Uhr
A995 E54	Stellenweise Gefahr von Schneematsch	bis 23.02.2009 19:58 Uhr
A9	Stellenweise Gefahr von Schneematsch	bis 23.02.2009 19:58 Uhr
	Stellenweise Gefahr von	bis 23.02.2009

weitere Verkehrsinformationen

23.02.2009 19:43

München-Flughafen

München

Freising

Erding

Dachau

Unterschleißheim

Oliging

Schleissheim

Fürstenfeldbruck

Neuhausen-Nymphenburg

Forstenried-Fürsteneck

Geretsried

Rosenheim

A94/E552

A96/E54

A95/E533

A93/E45/E60

frei

dicht

stockend

gestaut

Meldung

Legende

20 km

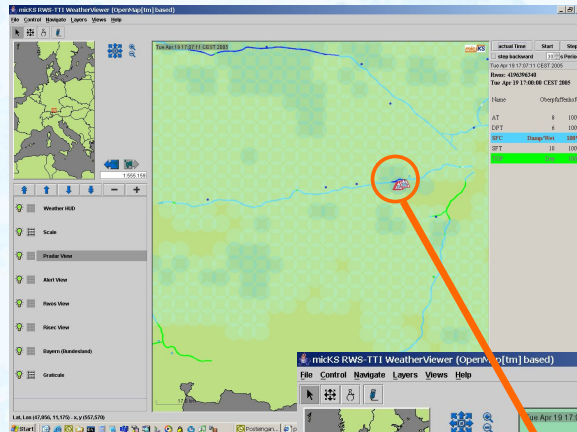
(c) PTV/NAVTEQ/AND/INTEREST

Fertig

Internet

100%

Example of an authentic situation



ALERT-C Message:

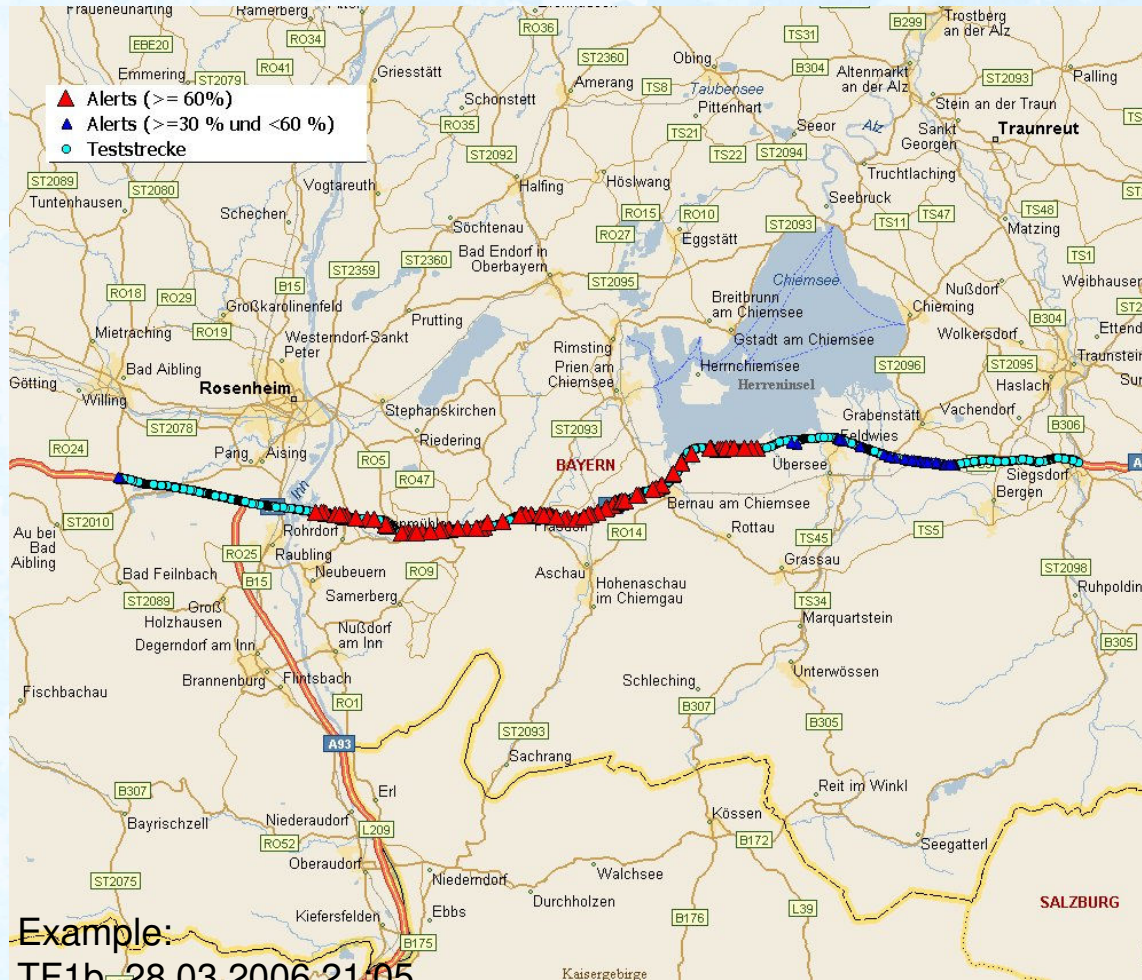


Precipitation



2005 April 19. 17:00
A96 / Oberpfaffenhofen

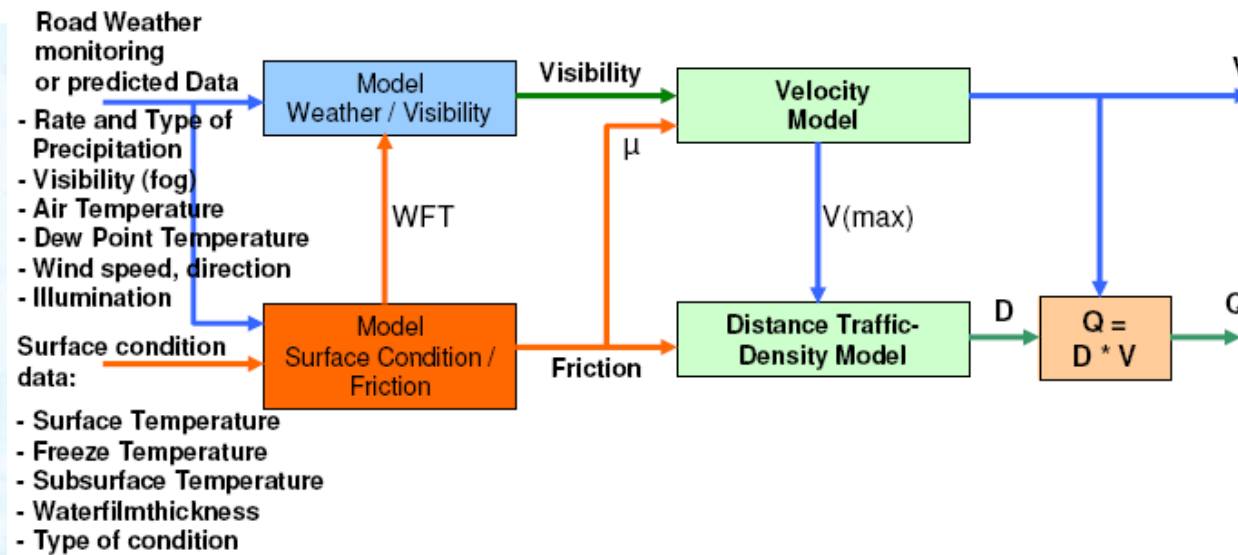
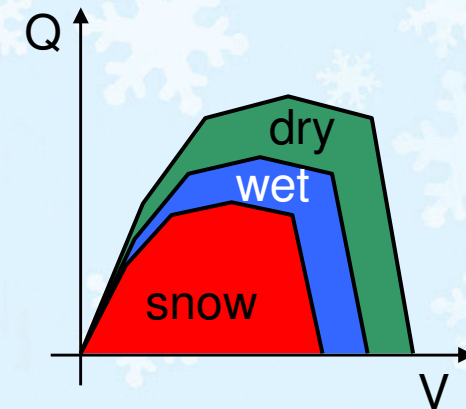
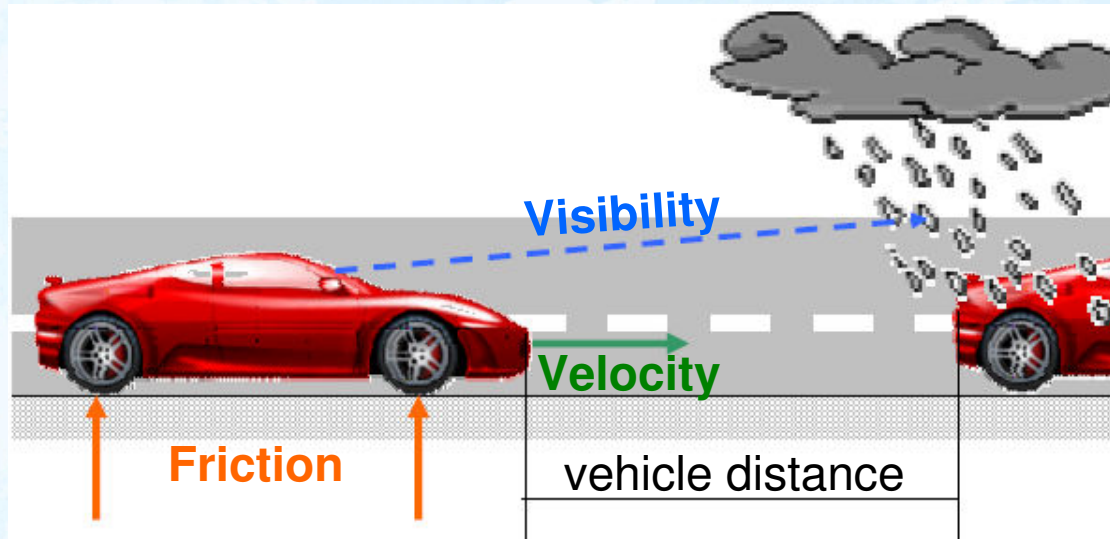
Quality management by means of XFCD observation tours





To meet the high requirements of a premium service, a constant, automatic quality measurement and evaluation takes place which is based on defined quality scores for message and service quality. For that purpose, data from surveying and probe collecting tours by XFCD vehicles from BMW are summoned.

	Q-Kennzahlen		
	Idealwert	30%	30%
		Aquaplaning	Regen
K	100%	99%	83%
KE	100%	100%	83%
KF	0%	0%	17%

Modeling Road Weather impact on Traffic Flow



Maintenance Decision Support Application congestion prevention at winter maintenance

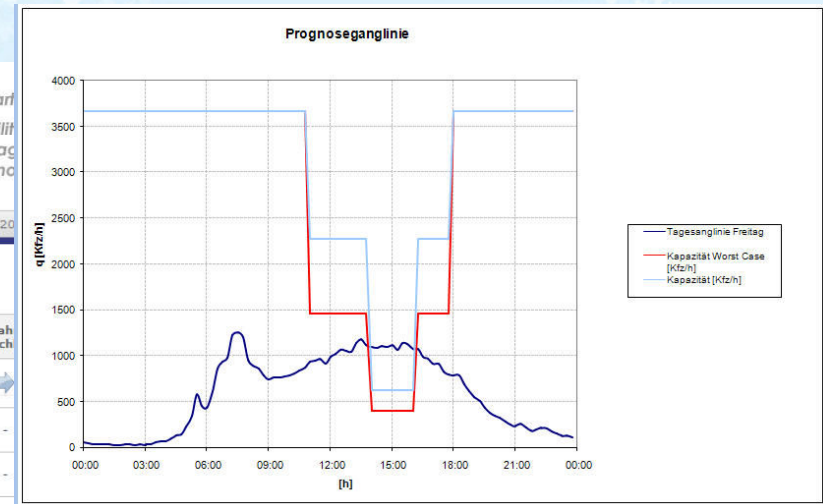



Ihr Partner
mobilität
management
technology

Start Mittelfristige Prognose GMA Liste Wetterklassen GMA Liste Erläuterung 23.01.20

Kapazitätsprognose, A46 RFB 1

AS	von km	von AS	bis AS	bis km	Länge [km]	Spuren	Wetterprognose	Kapazitätsminimum	Stau-Alarm	Datei-download	GMA	Baustelle	Maßnahvorsch
A46	53	Neheim (A 445)	Neheim-Süd	55,5	2,50	2	5-5-5-5-5-5-5	400	!	🌿	H459	🚧	➔
A46	55,5	Neheim-Süd	Hüsten	57,1	1,60	2	5-5-5-5-5-5-5	1464	🟢	🌿	H459	-	-
A46	57,1	Hüsten	Arnsberg-Altstadt	62,3	5,20	2	5-5-5-5-5-5-5	1464	🟢	🌿	H571	-	-
A46	62,3	Arnsberg-Altstadt	Arnsberg-Ost	65	2,70	2	5-5-5-5-5-5-5	1464	🟢	🌿	H571	-	-
A46	65	Arnsberg-Ost	Freienohl	71,2	6,20	2	5-5-5-5-5-5-5	716	!	🌿	H571	🚧	➔
A46	71,2	Freienohl	Wennemen	75,7	4,50	2	5-5-5-5-5-5-5	1464	🟢	🌿	H580	-	-
A46	75,7	Wennemen	Enste	79,3	3,60	2	5-5-5-5-5-5-5	1464	🟢	🌿	H580	-	-
A46	79,3	Enste	Meschede	82,4	3,10	2	5-5-5-5-5-5-5	716	🟢	🌿	H580	🚧	-
A46	82,4	Meschede	Bestwig	87,6	5,20	2	5-5-5-5-5-5-5	480	!	🌿	H580	🚧	➔





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Thank you for your attention

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