



Final Event INDID

11 et 12 Juin 2024 / UPHF Valenciennes

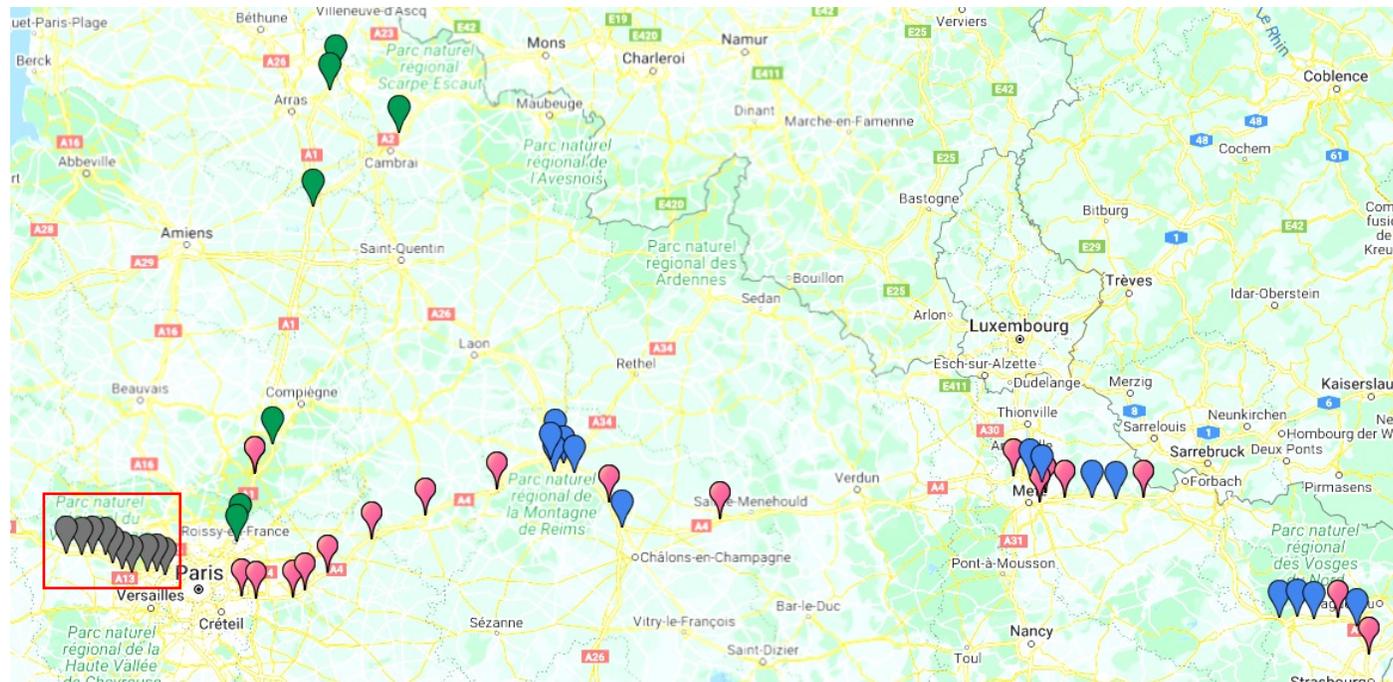
Site Nord / Partie Sanef

Malatiana RANDRIAMASY



Sanef - Localisation

- Gestionnaire d'autoroutes, exploitant 1957km de réseaux en France: Normandie, dans le Nord et l'Est de la France
- Missions: maintenir la sécurité des clients et des personnels, financer, exploiter et entretenir le réseau et les aires

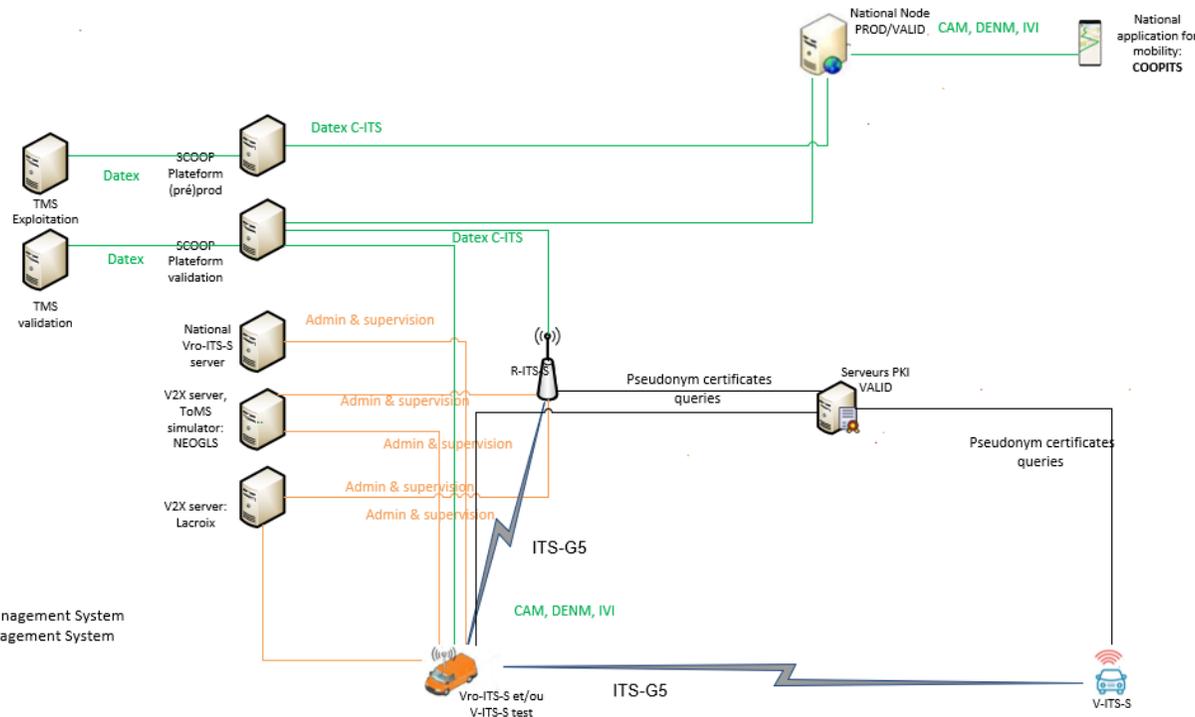


Sanef - Technologies utilisées - Architecture - fournisseurs des équipements

- ITS-G5
- Hybridation: Nœud national - COOPITS

Fournisseurs et/ou intégrateur sur Indid:

- R-ITS-S par Neogls
- Vro-ITS-S et/ou V-ITS-S test par:
 - Neogls
 - Mercura Standby avec Lacroix



Sanef - Cas d'usage

		Developed		
In-Vehicle Signage	Traffic Management / In-Vehicle Signage Traffic Signs (IVS – TS)	/		
	IVS -Embedded VMS "Free Text" (IVS-EVFT)	C3		
	In-vehicle dynamic speed limit information (IVS - DSLI)	C2		
	Toll station approaching: orientation of drivers	C4		
Hazardous Location Notification	Toll Barrier Crossing for automated vehicles	C8		
	Hazardous Location Notification Accident Zone (HLN – AZ)	D5		
	Traffic Jam Ahead (HLN – TJA)	E7		
	Stationary broken vehicle (HLN – SV)	D4b		
	Weather Condition Warning (HLN – WCW)	D6-E6		
	Temporarily slippery road (HLN – TSR)	D1		
	Animal or person on the road (HLN – APR)	D2	Prototypes Only	
	Obstacle on the road (HLN – OR)	D3		
	Emergency or Rescue/ Recovery Vehicle in Intervention (HLN – ERVI)	L2	Hybrid	
	Emergency or Prioritised Vehicle Approaching (HLN –EPVA)	D12		
	Railway Level Crossing (HLN – RLX)	K1-K3		
	Unsecured Blockage of a Road (HLN – UBR)	D8		
	Alert Emergency Brake Light (V2V)	D10		
	Alert end of queue	D11		
	Emergency vehicle approaching	D12		
	Alert Slow Vehicle (HLN - SLV)	D14		
	Alert Wrong Way Driving (HLN – AWWD)	D7		
	Public Transport Vehicle Crossing (HLN – PTVC)	/		
	Public Transport Vehicle at a Stop (HLN – PTVS)	I5		
	Alert temporary mountain pass route closure	D9a		
	Alert approaching a closed mountain pass route	D9b		
	Road Works Warning	Road Works Warning Lane Closure (RWW – LC)	B1	
		Road Closure (RWW – RC)	B1b	
		RWW -Road Operator Vehicle Approaching (RWW-ROVA)	B2a	
		RWW -Road Operator Vehicle in Intervention (RWW-ROVI)	B2b	
		Alert operator vehicle in patrol	B2c	
		Alert end of queue by a road operator vehicle	B2d	
Road Works – Mobile (RWW – RM)		B1c		
Winter Maintenance (RWW – WM)		B3		
Dangerous vehicle approaching a road works: warning to the dangerous vehicle		B4/C11		
Dangerous vehicle approaching a road works: warning to workers		B5		
Signalised Intersections	Signalised Intersections Signal Phase and Timing Information (SI – SPTI)	G1b		
	Green Light Optimal Speed Advisory (SI – GLOSA)	G1a		
	Imminent Signal Violation Warning (SI – ISVV)	G3		
	Traffic Light Prioritisation (SI – TLP)	G2		
	Emergency Vehicle Priority (SI – EVP)	G2		
	In-vehicle signage at a merge for vehicles on the entry slip road	G5		
	In-vehicle signage at a merge for vehicles on the main road	G6		
HD cartography extended services	G7			

		Developed
Automated Vehicle	Automated Vehicle Guidance SAE Level Guidance (AVG – SAELG)	/
	Platoon Support Information (AVG – PSI)	/
Probe Vehicle	Probe Vehicle Data Vehicle Data Collection (PVD – VDC)	A1
	Event Data Collection (PVD – EDC)	A2-A3
Data	Wrong way users detection	A5
	Information on parking lots location, availability and services	F1
Information Parking	Information P+R in order to modal transfer	F5
	Information on street parking spaces for person with reduced mobility and goods delivery service	F9
VRU	Facilitation and safety of specific pedestrians crossing at urban signalized intersection	G8
	Numerous Pedestrians at Signalized Intersection: warning to vehicles	I1b
	Road workers in the field	I3
	Vulnerable user at a public transport stop	I5
	Pedestrian crossing outside signalized intersection : warning to approaching vehicles	I6
Rerouting	Cyclists riding contraflow in a one way road	I7
	Rerouting	E2
Traffic Management Low Emission Zones	Permanent traffic ban to specific vehicles	H1
	Dynamic traffic ban to specific vehicles - Road closed	H2
Emission Zones	Dynamic lane management – reserved lane - lane closure	H4
	HGV overtaking ban	H6
Law	Flooded roads	H9
	Assigning a slot to a given vehicle for cross-channel traffic (New IT / Obsolete in France)	J3
Payment	Information on the site's access conditions / Identification of Loading Area (SP / Obsolete in France)	J4
	Stationary law enforcement vehicle	L2
	Payment service at a toll station	M1

Réussites et Difficultés rencontrées

Sanef

- Réussites:
 - Réalisation des engagements du Grant Agreement:
 - Déploiement de R-ITS-S (10)
 - Installation de Vro-ITS-S dans des FLU, FLR, véhicule de test (5)
 - Développement de nouveaux cas d'usage et Validation avec les partenaires du projet
 - Participation et Contribution aux différents GT du projet
 - Mise en place de la chaîne COOPITS pour les usagers de la route
- Difficultés:
 - Intégration des C-ITS dans les équipements existants
 - Manque de véhicules pour tester les cas d'usage