



# FINAL EVENT INDID

June 11 and 12, 2024/ UPHF Valenciennes



Co-financed by the Connecting Europe  
Facility of the European Union

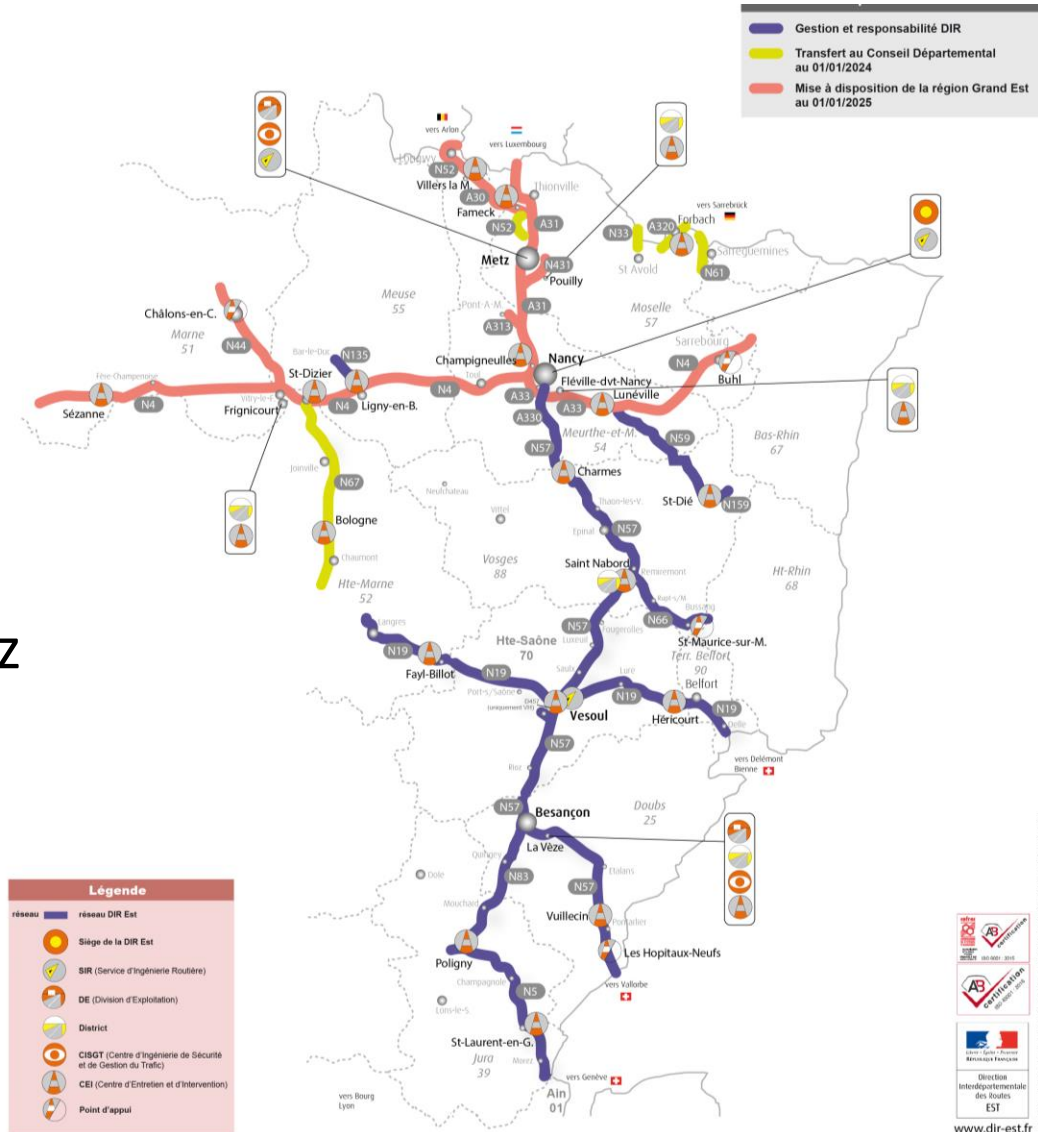
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# DIR Est / North site

Andy FLORIMOND

# La DIR Est

- 1211km of road network
  - 678km **state** service
  - 533km **district** service
- + de 110 000\* veh/h north of Metz
- + de 20 000\* évènements / year
- 7\* accidents / day
- \* 2023 data



# Use cases

Use Cases	Road
	DIRE
<b>A – Probe Vehicle Data (PVD)</b>	
A1 – Traffic data collection	X
A2 – PVD on detected events	X
A3 – PVD on declared events	X
<b>B – Road Works Warning (RWW)</b>	
B1a - Alert neutralization of part of a lane, whole lane or several lanes	X
B1b – Alert planned closure of a road or a carriageway (RWWenhanced)	X
B1c – Alert planned road works – mobile	X
B2a - RO's intervention - Alert operator vehicle approaching	X
B2b - RO's intervention - Alert operator vehicle in intervention	X
B2c - RO's intervention - Alert operator vehicle in patrol	X
B2d - RO's intervention - Alert end of queue by a road operator vehicle	X
B3a&b&c – Winter maintenance	X
<b>C – Signage Applications</b>	
C2 – In-vehicle dynamic speed limit information (IVI)	
C3 – In-vehicle signage (Embedded VMS - PMV <u>embarqué</u> )	X

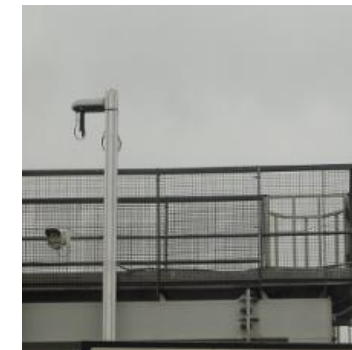
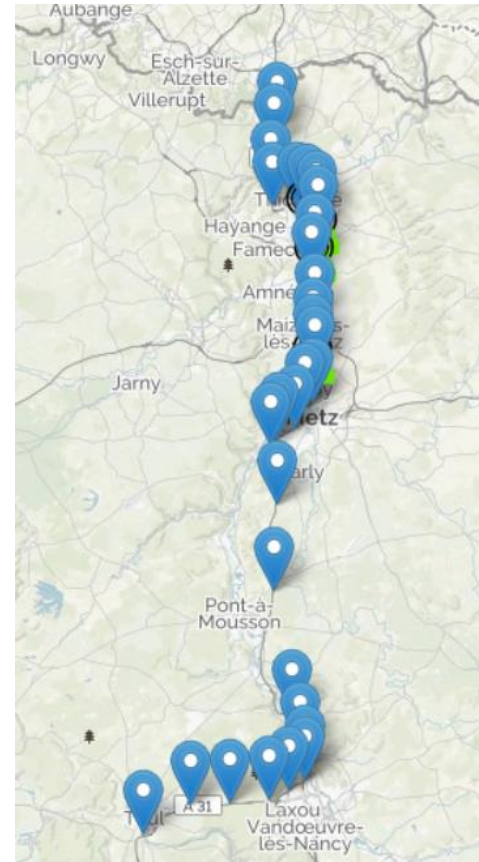
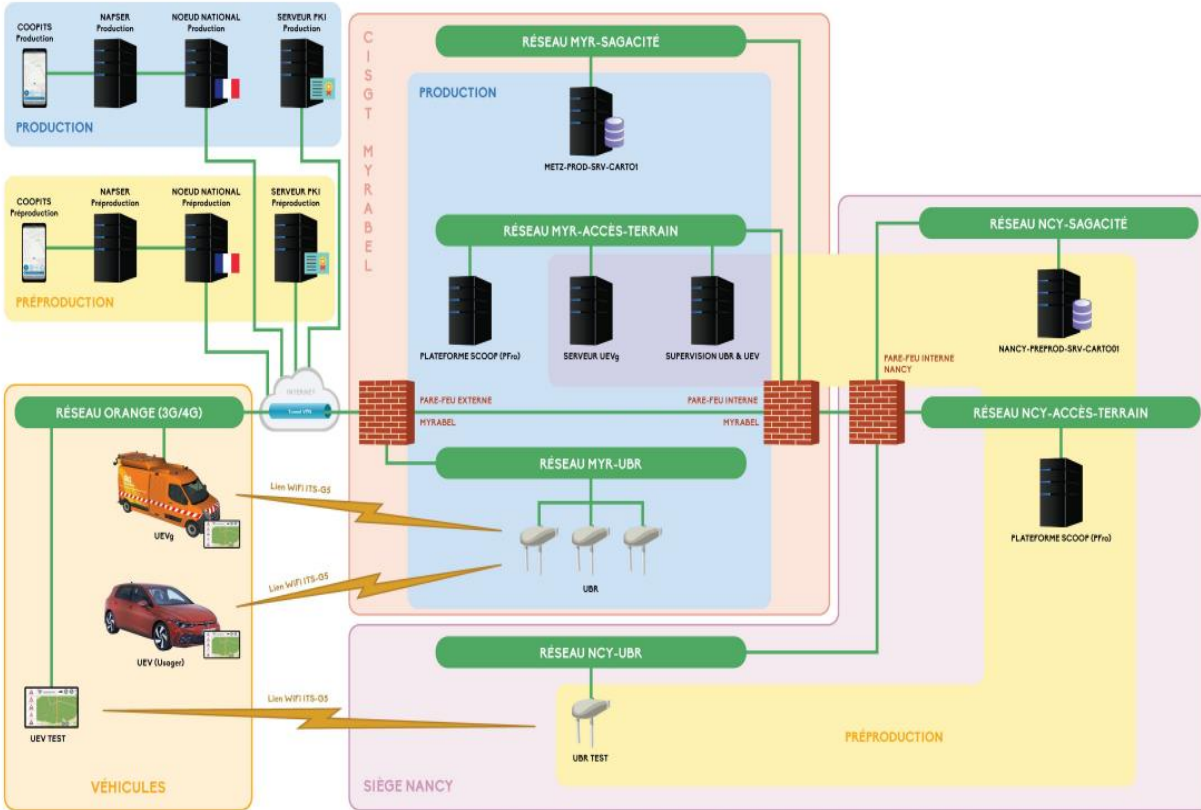
Use Cases	Road
	DIRE
<b>D – <u>Hazardous</u> Location Notifications (HLN)</b>	
D1 – <u>Temporary slippery road</u>	X
D2a&b – Animal or people on the road	X
D3 – Obstacle on the road	X
D4 – Alert stationary vehicle / breakdown	X
D5 – <u>Alert accident area</u>	X
D6 – <u>Alert reduced visibility</u>	X
D7 – Alert wrong way driving (WWD - Contre-sens)	X
D8 – Unmanaged blockage of a road	X
D10 – <u>Alert emergency brake</u>	X
D11 – Alert end of queue - V2V – I2V	X
E6 – Alert extreme weather conditions	X
<b>F – Parking, Park and Ride, Multimodality</b>	
F1 – Information on parking lots location, availability and services	
<b>G – Intersection (SI)</b>	
G1 – GLOSA (Green Light Optimal Speed Advisory)	
<b>H – Traffic management</b>	
H4 – Dynamic lane management – reserved lane (I2V)	X

# Architecture and hardware



MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE  
**DIR-EST : ARCHITECTURE C-ITS CIBLE**

36 R-ITS-S



Auteur : Kévin LAPOINTE | DIRE - SeSyR - PASR | Date : 15/06/2022





# Tests and production service

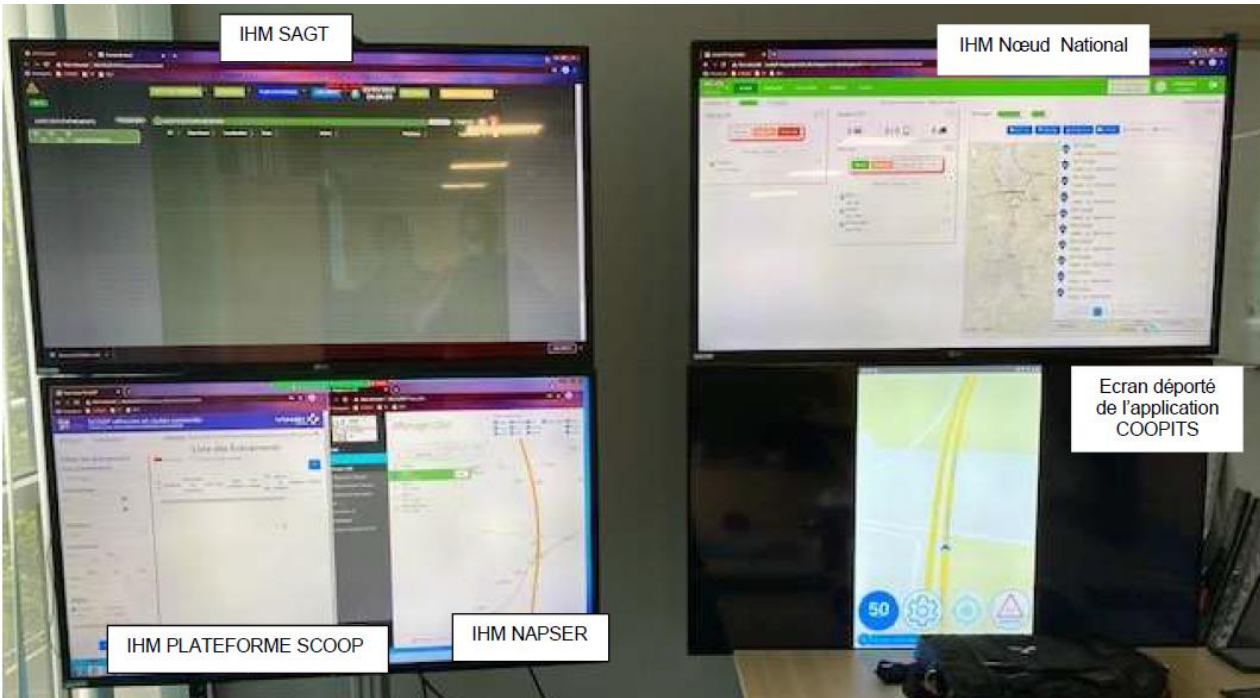


Demonstration test site

Active service



- since 01/19/2023
- roadworks, animals ou person on the road, obstacle, congestion



# Achievements and encounter difficulties



## Achievements

- Compliance with the Grant Agreement (A31 connected, use cases)
- Deployment of a test site and demonstration
- Events broadcast on COOPITS

## Difficulties

- COOPITS cannot be used across the entire DIR Est network
- Reliability and secure data flows
- Few users with connected vehicles

# In the future

- 36 UBR active service (2nde part of 2024)
- Reliability computer flows
- More use cases to diffuse
- C-ITS culture in DIR Est