

DATA MANAGEMENT

SNCF RESEAU

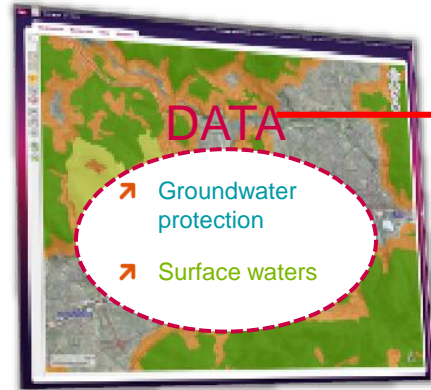


2ND INTERNATIONAL WORKSHOP ON VEGETATION MANAGEMENT

What future for herbicide?



THEORETICAL MANAGEMENT OF VEGETATION CONTROL DATA



Regulations

3G



SIGMA
VEGETATION CONTROL GIS



Spatial data analysis and
integrate into GIS

Upload mapping regulatory data onto on-board vehicle systems



DATA

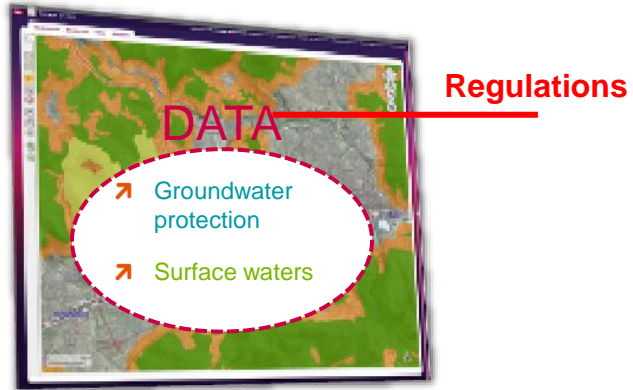
- X,Y
- Date
- Time
- Product
- Quantity of product
- Speed
- Operator



Record detailed information of different treatments undertaken
Interruption to treatments according to the regulations in force

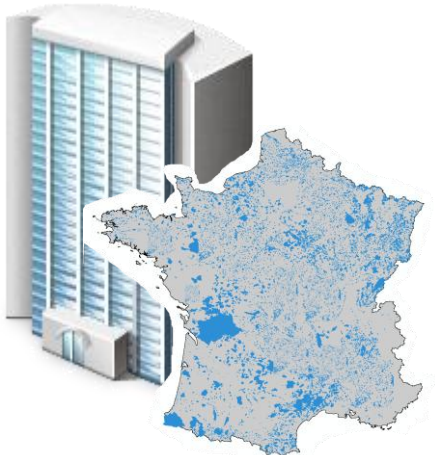
- Coordination of the actions
- Communication to third parties

ACTUAL MANAGEMENT OF VEGETATION CONTROL DATA - REGULATIONS

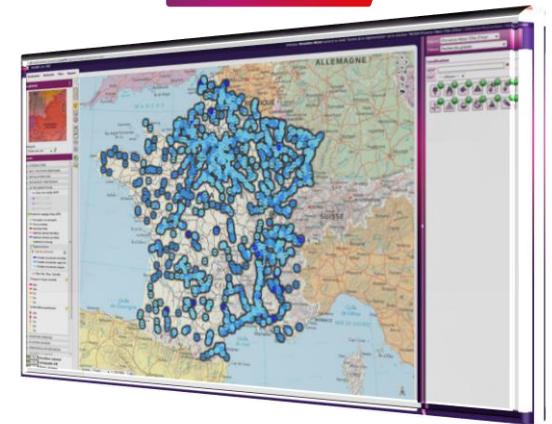
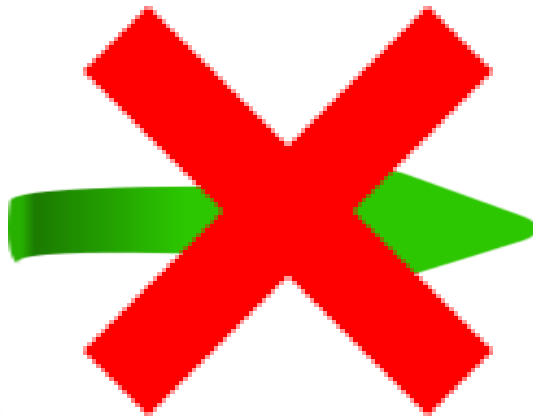


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NATIONAL GROUPING?



Ministry of Health



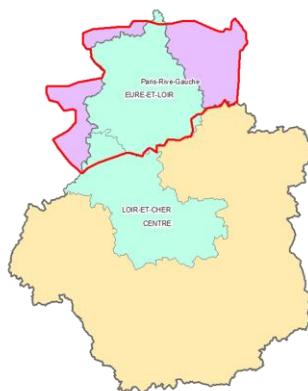
FINDING DATA ON CATCHMENT AREAS IS VERY SIMPLE!

1. Find competent authority

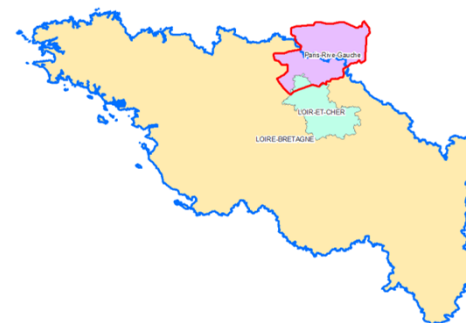


Does not exist

2. Data originating with various ADMINISTRATIVE AUTHORITIES and REGIONS



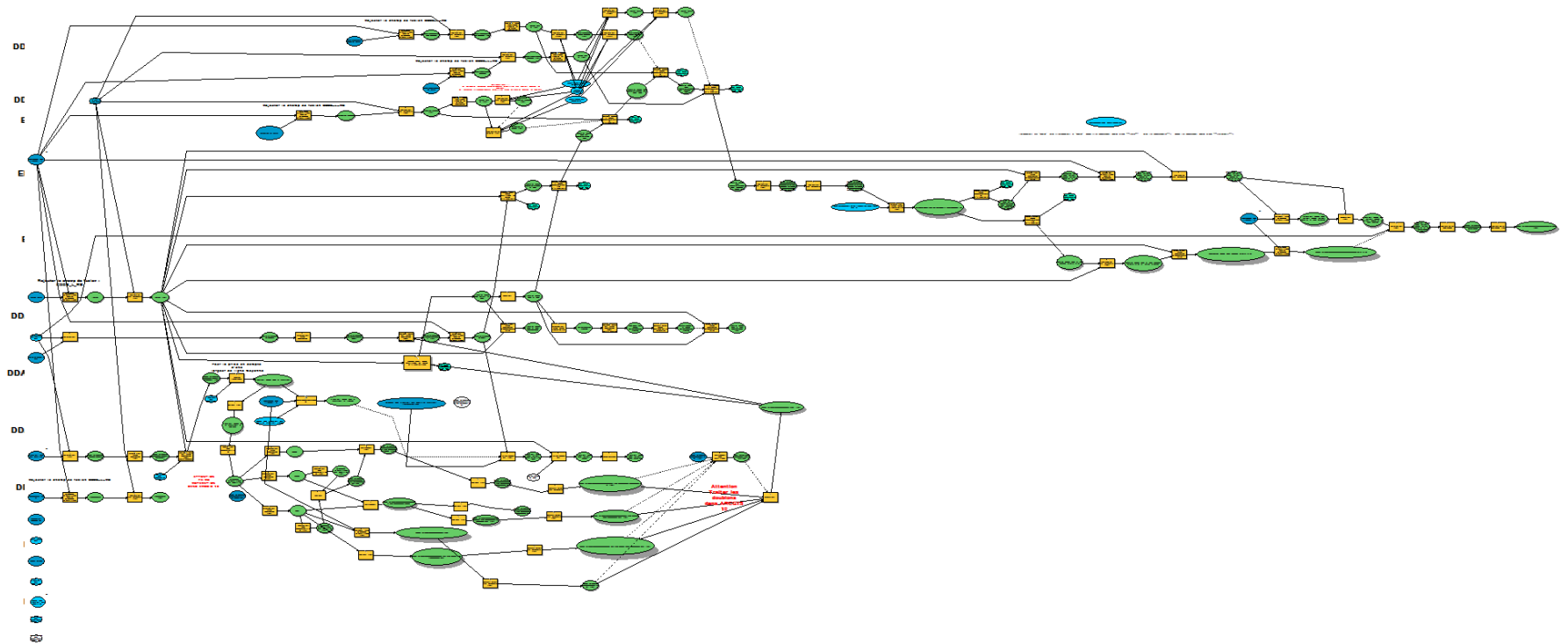
2 administrative regions



2 specific territorial authorities for WATER

But currently we have
2 different data sets
for the same sector

AGGREGATE AND STANDARDISE PPC DATA IN A SINGLE NATIONAL LAYER



COMPLEXITY OF DATA RECEIVED

Due to lack of coordination, the data received is not uniform:

- Differing formats linked to the different software used

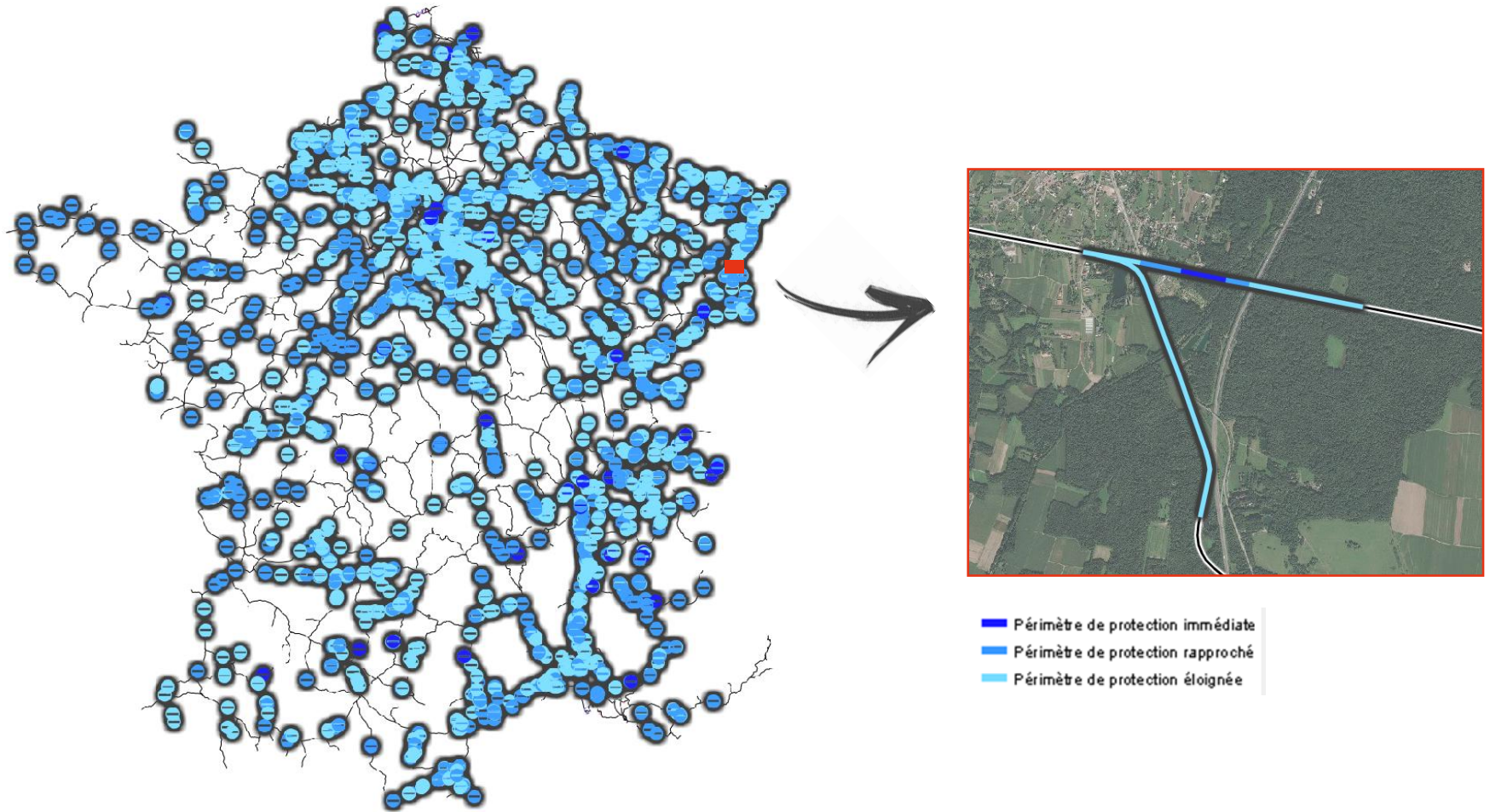


...and unusable formats (not SIG) : .pdf

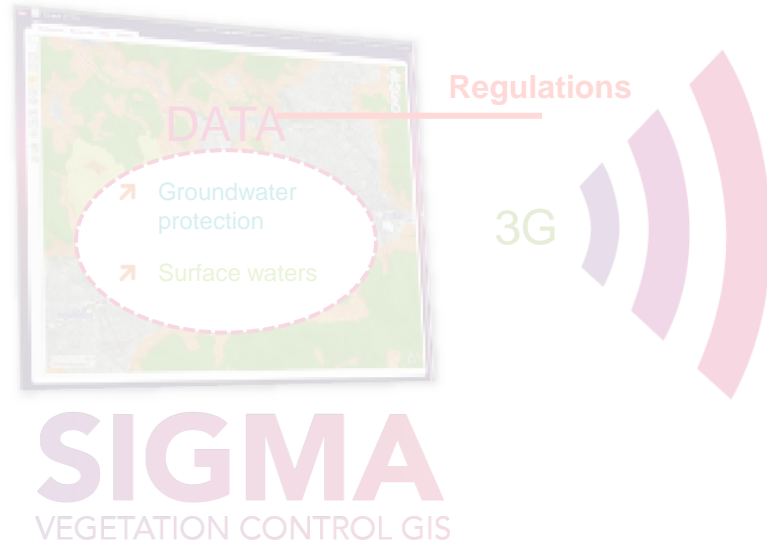
- Quality not uniform
- Metadata (data about data) not always supplied
- Differing coordinate systems, etc.

→ NEED TO START AGAIN FROM SCRATCH

COMPLEXITY OF DATA RECEIVED



ACTUAL MANAGEMENT OF VEGETATION CONTROL DATA – TREATMENTS AND RECORD KEEPING



Upload mapping regulatory data to on-board vehicle systems



DATA

- X,Y
- Date
- Time
- Product
- Quantity of product
- Speed
- Operator

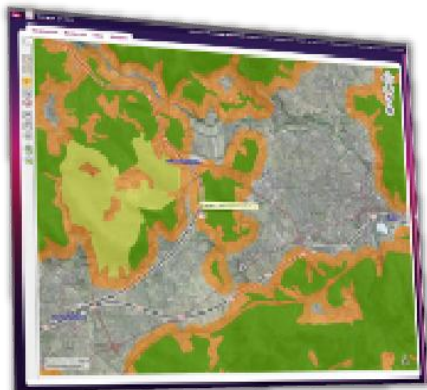


Record detailed information of different treatments undertaken
Interruption to treatments according to the regulations in force

ACTUAL MANAGEMENT OF VEGETATION CONTROL DATA – TREATMENTS AND RECORD KEEPING



ACTUAL MANAGEMENT OF VEGETATION CONTROL DATA — PRESENTATION AND ANALYSIS OF INFORMATION (1/2)



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Spatial data analysis and
integrate into GIS

GPS CHEMICAL TREATMENT

VISUALISATION AT DIFFERENT SCALES

Traditional GPS tracking* (in form of several polygons)

Very large-scale visualisation

Searchable and filterable data

Searchable and filterable data

Zoom

France

Multi -
regions

Region

Multi-
town

Town

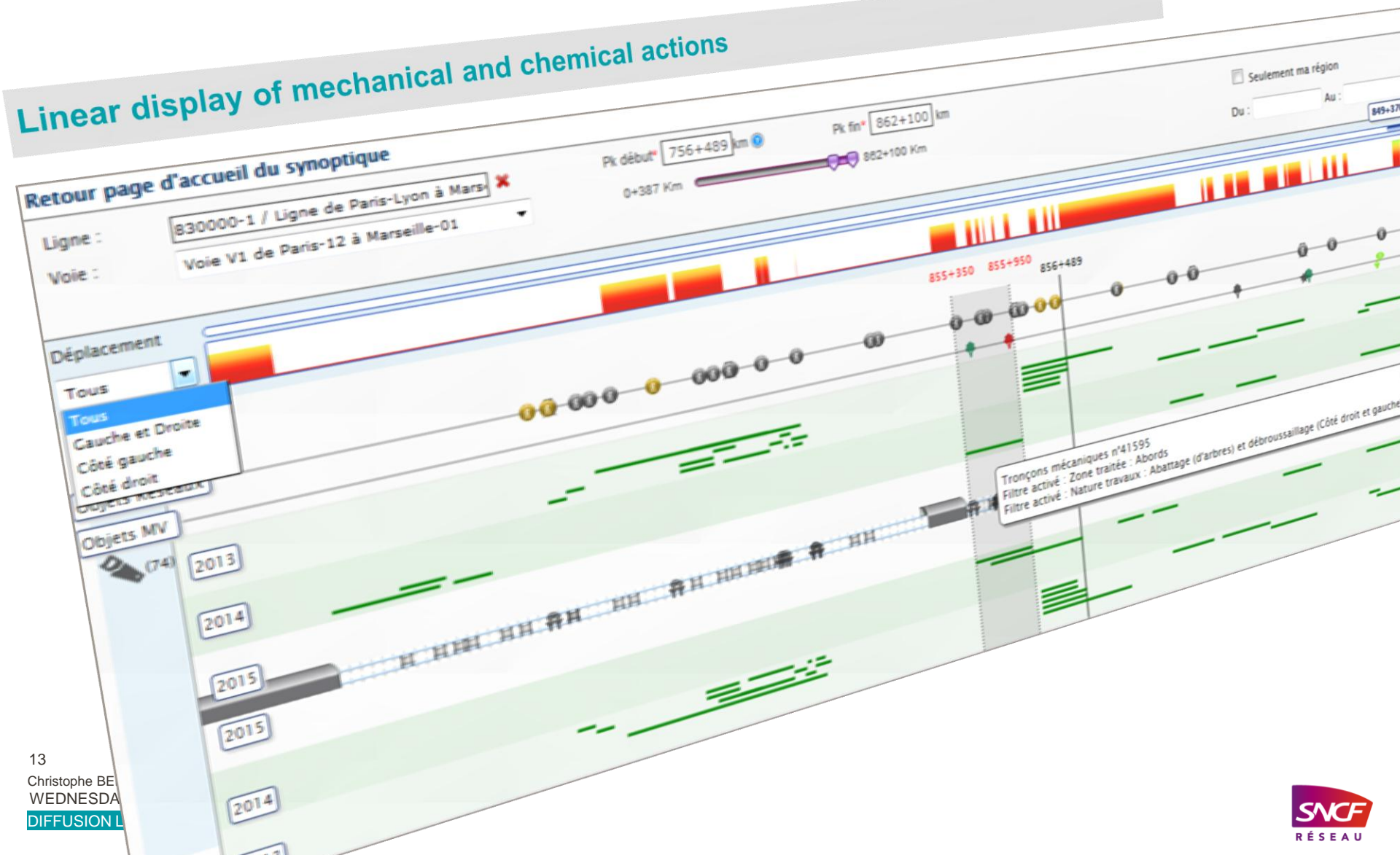


Railway
right-of-way
SNCF
RÉSEAU

GPS CHEMICAL TREATMENTS

LINEAR DISPLAY OF ACTIONS ON A SECTION OF LINE

Linear display of mechanical and chemical actions



ACTUAL MANAGEMENT OF VEGETATION CONTROL DATA – TREATMENTS AND RECORD KEEPING (2/2)

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Maîtrise de la végétation
EPICEA
Espace de Pilotage, Cartographie, Evolution et Analyse



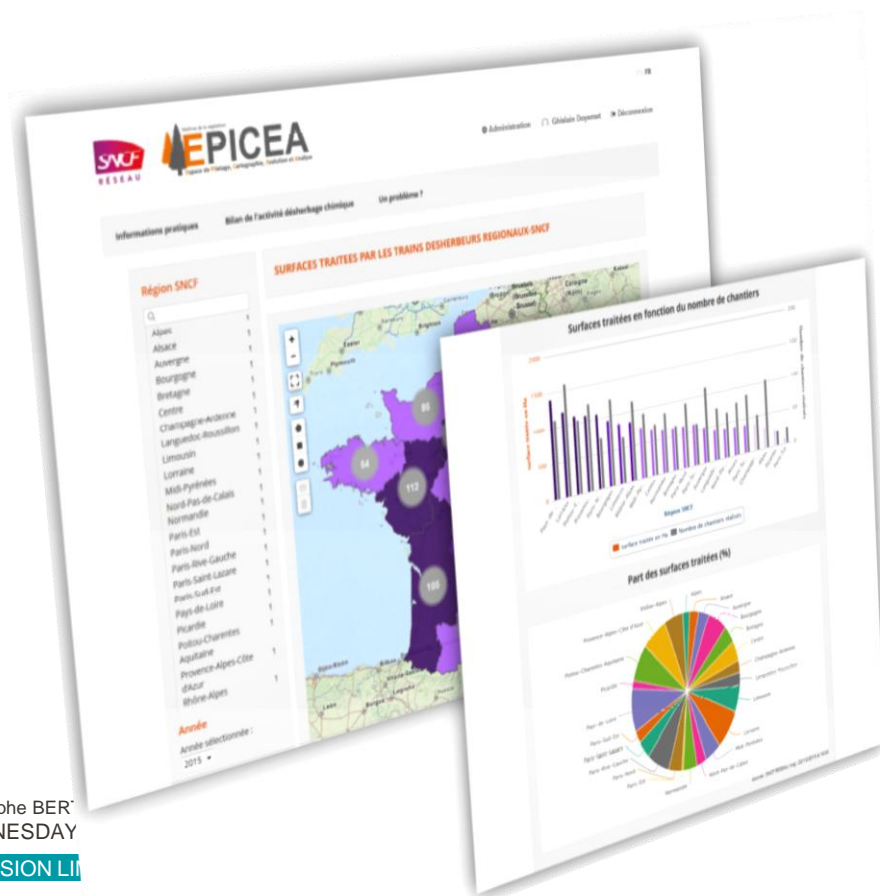
+ Area for monitoring and analysis of Vegetation Control

+ Themes

- Chemical actions (TDR and Trucks, quad, gator fitted with GPS)
- Regulation (Perimeter of protection of catchment area)

+ 4 methods of disseminating information:

- Cartographical and statistical
- Spreadsheet
- Main figures
- Comparative

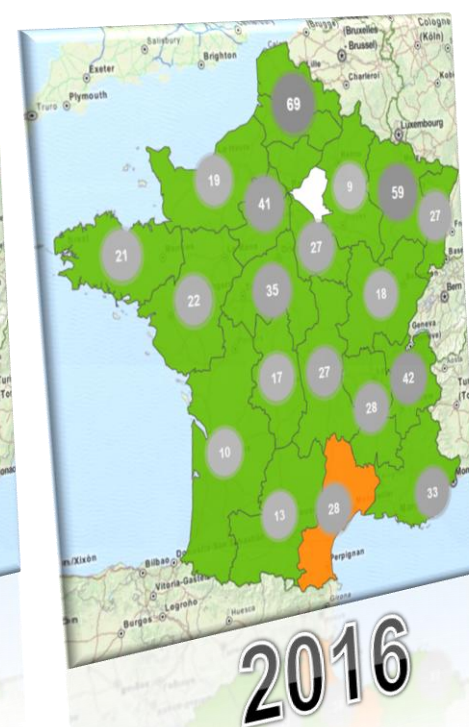
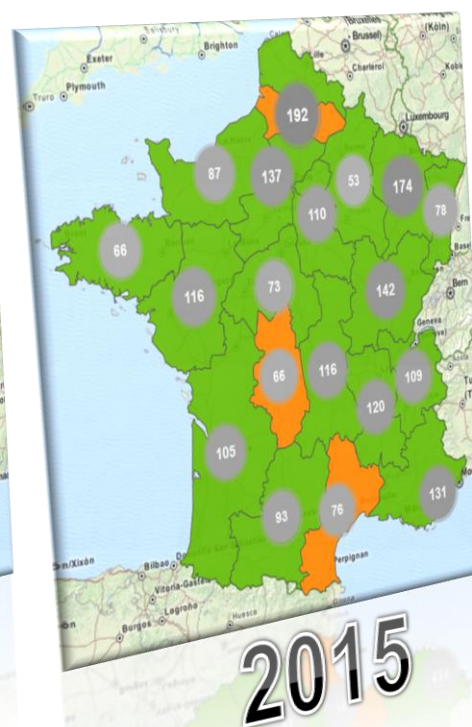
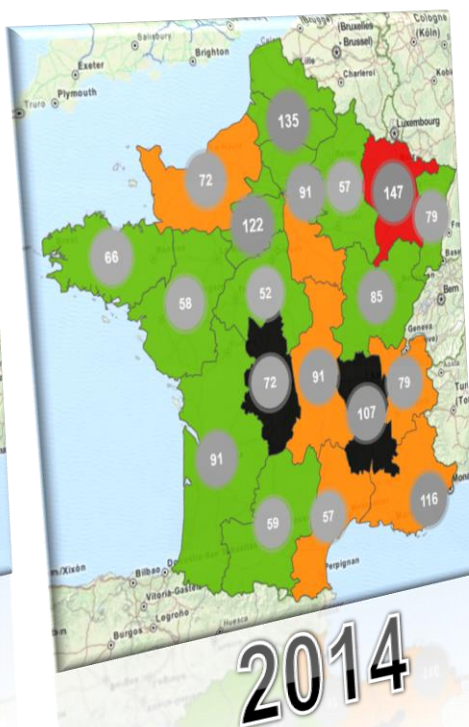
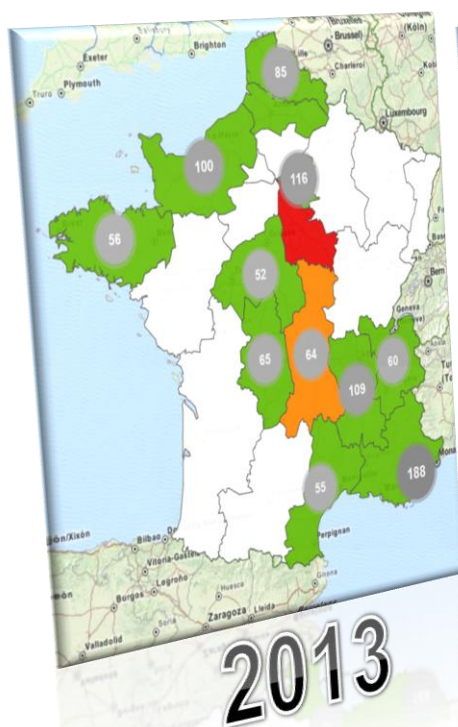


The screenshot shows the EPICEA web application interface displaying a table titled 'TABLEAU RECAPITULATIF DES CHANTIERS REALISEES PAR LES TRAINS DESHERBEURS REGIONAUX'. The table lists various regions and their corresponding treated surfaces. The interface includes a sidebar with a list of regions and a top navigation bar with the EPICEA logo and navigation links.

Région	10 PE	14 CA	17 LOR	18 AL	20 PN	23 NPC	24 PIC	30 PSL	33 NOR	34 PRG	36 BR	37 PDL	43 PCA	44 LM	46 CEN	47 MPY	56 PSE	58 BFC	64 RA	65 AU	67 ALP	68 FAK	69 LR	10 PE	14 CA	17 LOR	18 AL	20 PN
10 PE																												
14 CA																												
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37 PDL																												
43 PCA																												
44 LM																												
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67 ALP																												
68 FAK																												
69 LR																												
10 PE																												
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17 LOR																												
18 AL																												
20 PN																												

ACTUAL MANAGEMENT OF VEGETATION CONTROL DATA – PRESENTATION AND ANALYSIS OF INFORMATION

Example with sites which have no products entered in the SNCF regional vegetation-control trains



CONTACTS

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- + Jean-Pierre PUJOLS

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The Enterprise Social Network

- + Christophe BERTHAUD



THANK YOU FOR YOUR ATTENTION.