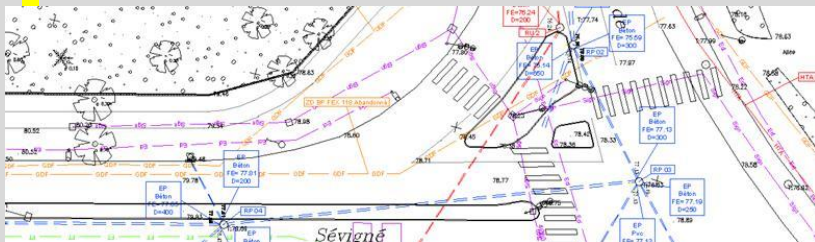

The implementation of a Large scale core street map by the Energies public body (Siéml) in Maine-et-Loire

7th of December 2017

Members Meeting



Who is Siéml ?

- ✓ **Siéml** : Syndicat Intercommunal d'Énergies de Maine-et Loire – Energies public body in Maine-et-Loire (800 000 inhabitants)
- ✓ All municipalities and public institutions of intercommunal cooperation (EPCI: community of towns, community of agglomeration and urban community) are members of Siéml
- ✓ Purposes of Siéml directly connected to roadworks:
 - ❑ Public electricity distribution
 - control of the power operator
 - project management
 - ❑ Public lighting
 - management of public lighting networks (100,000 devices)
 - project management
 - ❑ Large scale core street map (PCRS)

Evolution of national laws

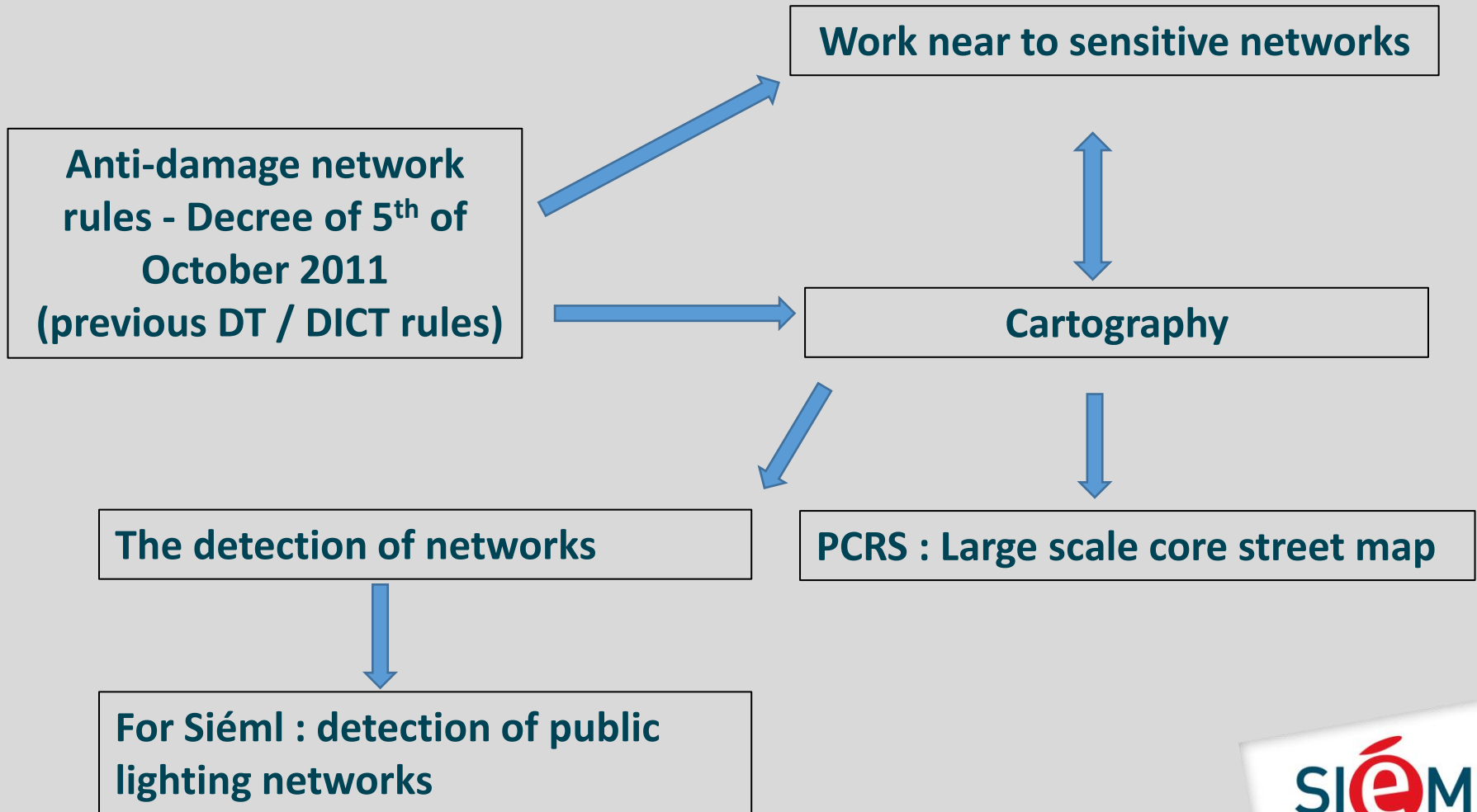
Anti-damage network rules - Decree of 5 October 2011

- ✓ Established after some fatal accidents



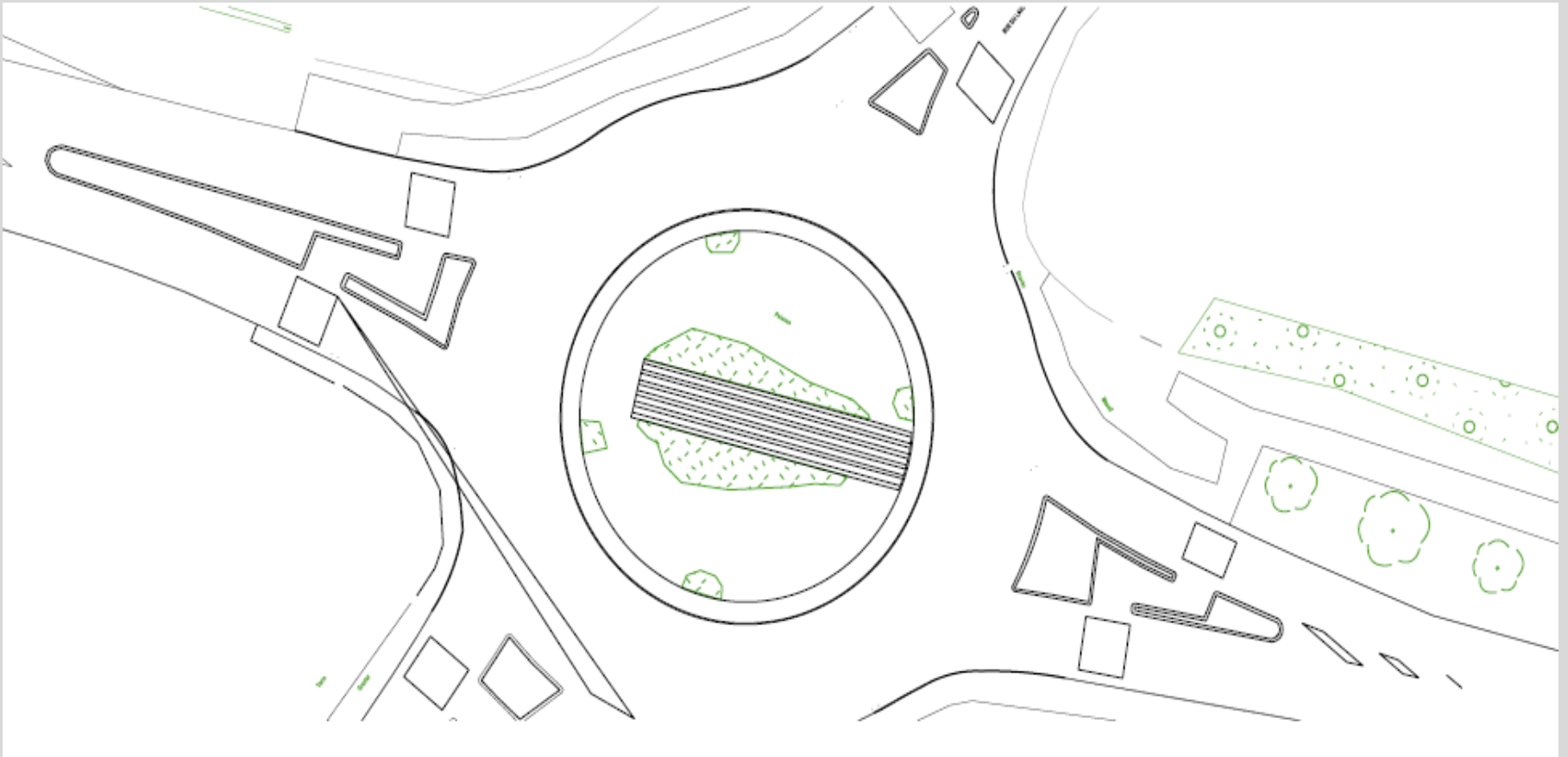
- ✓ Imposes very strict procedures for working near dangerous networks
- ✓ Defines everyone's responsibilities (project managers, companies ...)
- ✓ **Constrains all sensitive networks operators (electricity, gas, street public lighting, ...) to transmit their networks on very accurate maps (accuracy class is 10 centimeters)**

Acts and consequences for GIS



Techniques of implementation

- ✓ In urban areas: Vectoral Large scale core street map
- ✓ Each object is filled with attributes



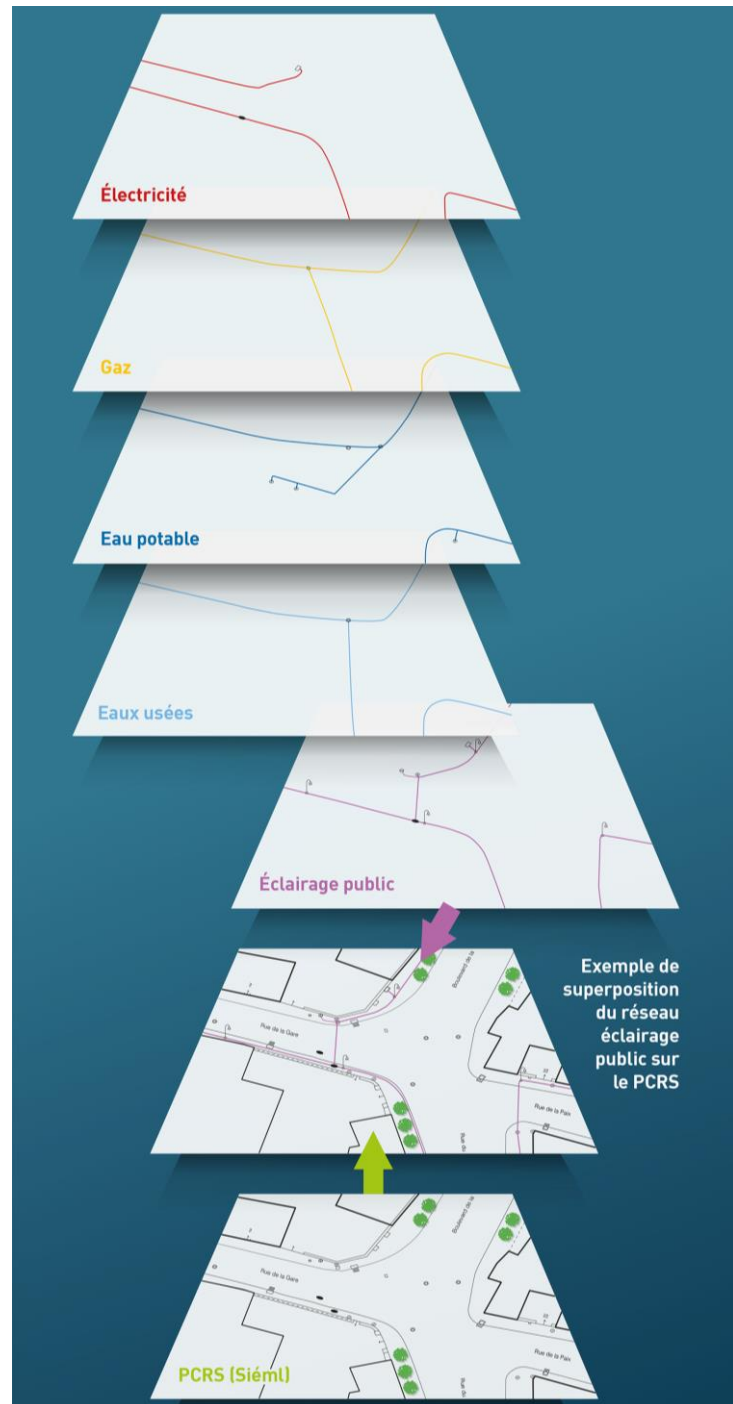
Techniques of implementation

- ✓ **Orthophotography : Raster Street Map – all over Maine-et-Loire (6400 km²)**
- ✓ **Pixel of 5 cms for a precision class of 10 centimeters**



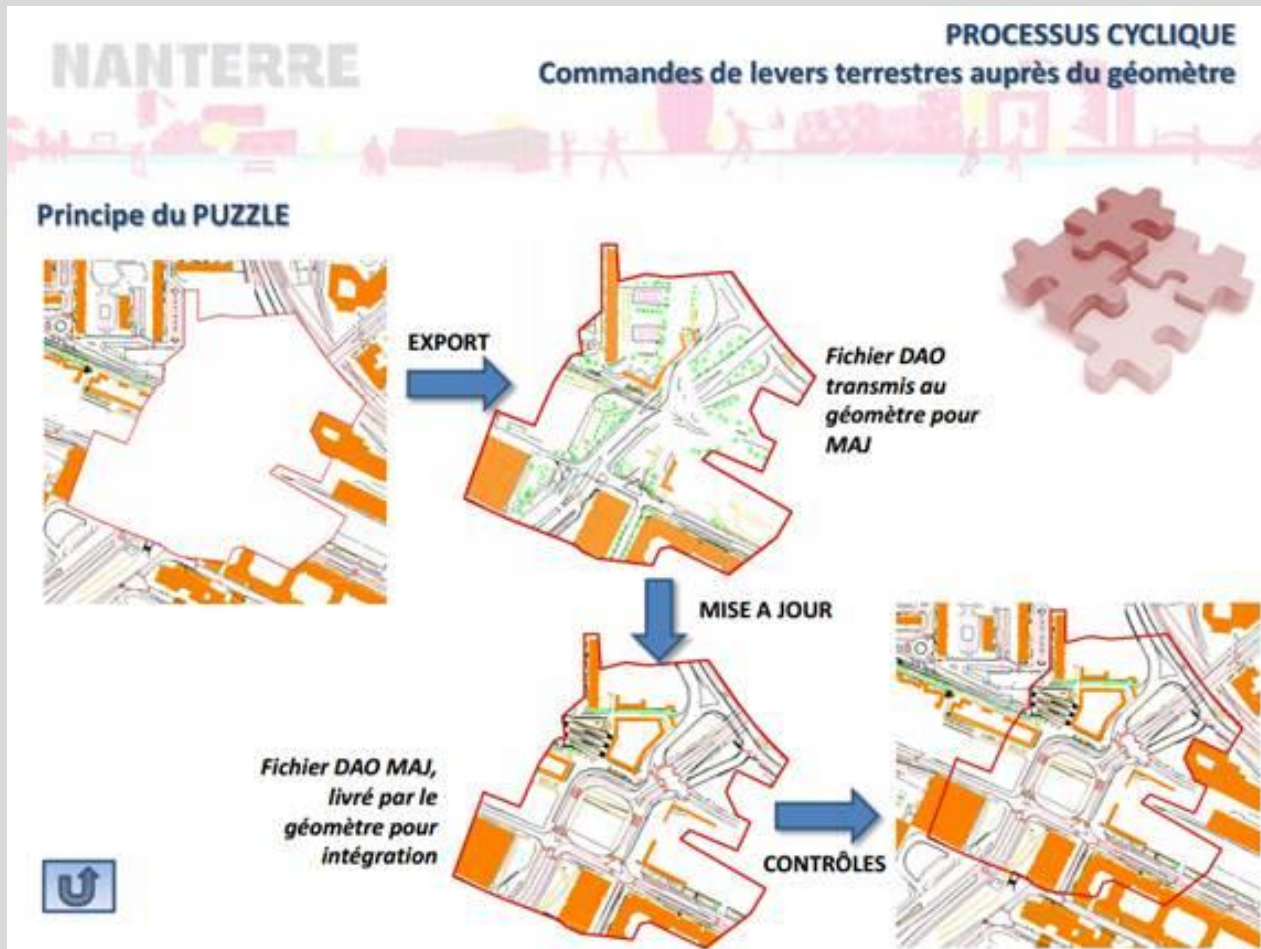
GIS organization

- ✓ Each network is detected and geolocated in the GIS
- ✓ The PCRS represents the basic layer - each network can be positioned on this background
- ✓ The geo-referencing of networks and PCRS allows these 2 elements to adjust themselves automatically
- ✓ Each layer will be updated by its own manager



Update of PCRS

- ✓ Siéml manages the updating of this Large scale core street map (PCRS) on behalf of all the partners by integrating the new updated plans as roadwork progresses.



Update process

working company

Large scale core street map (Siéml)

Extraction

Extract of PCRS

Studies and works



New map



Update the PCRS extract

PCRS extract updated

Data integration

PCRS, an example of pooling and sharing

- ✓ **Communities are responsible for public services related to networks:**
 - operated by itself
 - delegated to a company
 - transferred to another community at the same time as the competences
- ✓ **Managers of these networks will need the Large scale core street map**



Pooling and sharing

- ✓ **Siéml - manager of this Large scale core street map :**
 - For its implementation
 - 4000 km (Vectoral)
 - 6400 km² (Raster)
 - For its update
- ✓ **Partners : Siéml (public lighting), Enedis (electricity), other public bodies (water)**

Details of pooling and mutual funds

A contract for Sieml's provision of PCRS to partners

Article 18 of Order No. 2015-899 of 23th of July 2015 on public contracts authorizes cooperation without competition between contracting authorities and also between contracting authorities acting as contracting entity

- ✓ Duration: 10 years
- ✓ Sieml: implements, controls, puts to use and updates this Large scale core street map (PCRS)
- ✓ Each partner : Benefits from the PCRS, becomes owner of the PCRS at the end of the 10-year contract, Pays its participation over 10 years
- ✓ Governance: all decisions are taken by all partners

Public works contracts

Public works contracts = Contracts entered into for consideration by one or more public purchasers with one or more public or private economic operators, to meet their needs for works, supplies or services.

The 3 principles of public tender :

- Freedom of access to public order
- Equal treatment of candidates
- Transparency of procedures

Maximum duration: 4 years

Sieml - several public contracts in progress:

- Geo-referencing of public lighting networks
- Controlling of this geo-referencing
- Implementation of Simplified Street Map and its controlling



Thank you for your attention.

Any questions?