



GAZ RÉSEAU  
DISTRIBUTION FRANCE



# Cartographic issues

Eurogi, december 7th 2017

6 décembre 2017

# Presentation

GRDF is a leading operator in the energy sector and an expert in the gas energy field. It is the main operator of the French natural gas distribution network

GRDF (Gas Réseau Distribution France) was founded on **31 December 2007**, and is an independent subsidiary that includes the natural gas distribution activities and is fully-owned by ENGIE.

## **Our roles:**

- Designing, building, maintaining, and operating the 197,128 km of the natural gas distribution network;
- Transmitting natural gas on behalf of 46 suppliers in a completely impartial manner;
- Distributing natural gas to our 11 million customers in a completely secure manner;
- Promoting the use of natural gas and a profitable expansion of the distribution network and gas energy
- Supporting biomethane producers and connecting them to the network.

# 2015 key data (12/31/2015)

The longest natural gas network in Europe

**197,928** km

natural gas network, i. e. a network that could circle the Earth almost five times!

**277** TW h

of natural gas delivered

**€745** million

invested in order to develop, maintain and operate the network

**€1** million

every day, dedicated to the security of the network

And energy conduits serving the French-regions

A dynamic company

**10.9** million customers in France

**9,528** districts

supplied by the natural gas distribution network

**77%** of the population

lives in a district covered by the GRDF network

**17** biomethane injection facilities (all network operators)

**11,431** employees

**582** hired staff and **1,040** student apprentices will be trained in 2016

**€3,409** billion in revenues

# Our goal for 2018

20  
18

## Being the gas energy specialist

the trusted partner for our customers, suppliers, professional outlets, and regions in the transition to a low-carbon economy.

## Providing exemplary public service

both in terms of the quality of service to our customers, and of the operation of the network in a completely secure manner.

## Being a gas supplier that is hailed

for its standards, its performance, and its capacity to innovate, both in France and abroad.

## Being an attractive employer

that is considered a reference in its societal role.

# Our stakeholders

**Other actors in the  
energy sector**

**Professionals in the  
industry**

**Customers**

**CRE**  
French Energy  
Regulation  
Commission

**Consumer  
organisations**

**Local authorities and  
concession grantors**



**ADEME**  
French Environmental  
and Energy  
Management Agency

**Natural gas suppliers**

**Public construction  
works companies**

**Government  
Authorities**

# Gaz network cartography french law july 2000

## Article 15 [En savoir plus sur cet article...](#)

Modifié par [Décret n°2009-235 du 27 février 2009 - art. 5 \(V\)](#)

Cartographie.-Documentation.-Repérage des éléments du réseau.

L'opérateur tient à jour un dossier contenant les informations nécessaires à la sécurité d'exploitation du réseau.

Ce document comporte notamment :

- une liste des organes de coupure tels que définis à l'article 14, paragraphe 1 ci-avant ;
- un schéma d'exploitation du réseau faisant apparaître son architecture générale.

Il met en oeuvre des procédures garantissant sa mise à jour dès qu'intervient une modification de quelque nature que ce soit dans la configuration du réseau et des équipements ;

- une cartographie du réseau qu'il exploite à une échelle permettant de localiser chaque organe de coupure et chaque branchement.

La mise à jour de cette cartographie est réalisée à la suite de chaque intervention, dans le cadre de procédures précisées par les cahiers des charges particuliers correspondant à chaque catégorie de réseau concernée.

Any french gas distributor must have a cartography in order to :

- locate the pipes and buried accessories
- know the exploitation framework

This cartography as to be reliable !

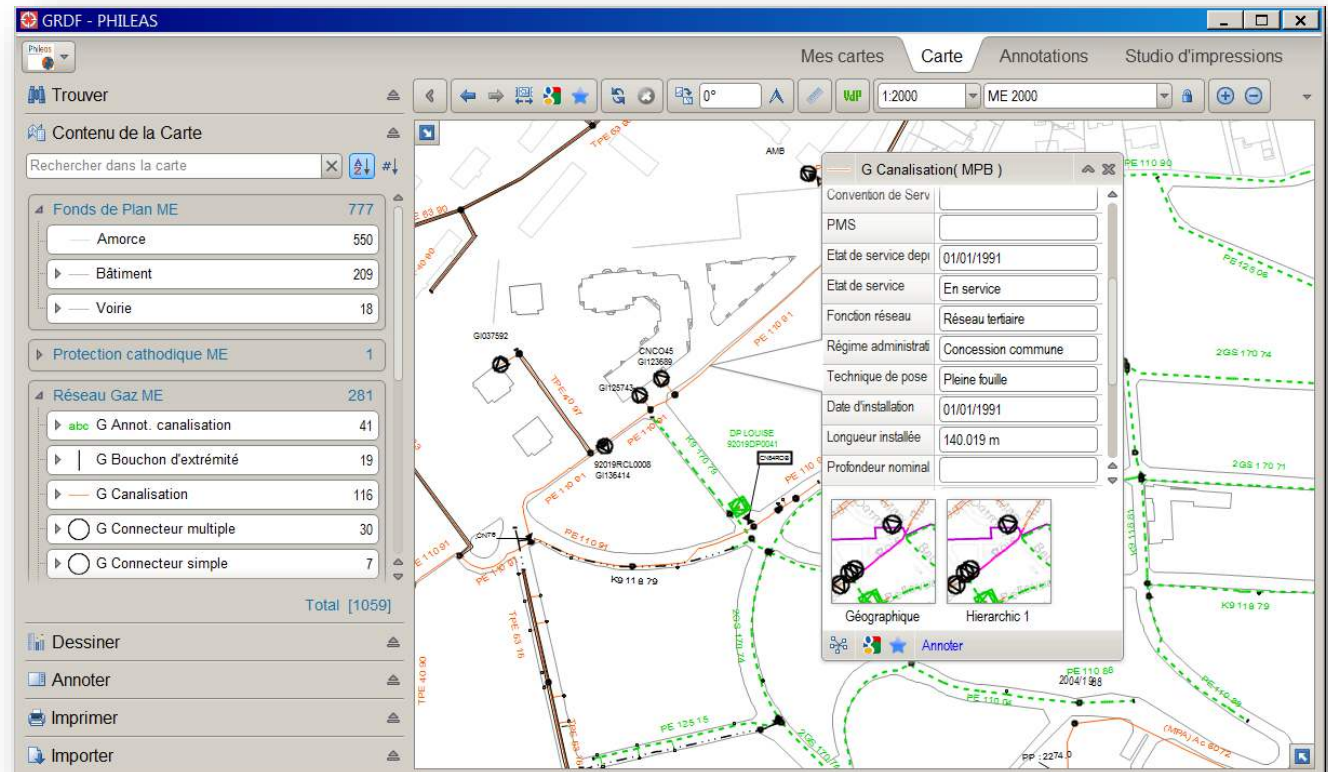
# GRDF cartography in a slide

## Staff :

- 250 cartographer
- 50 geographic surveyor

## Datas :

- 14 million line segment describing pipes in the GIS
- 1,3 millions large scale maps (1/200)



## Budget (2016) :

- 50 millions € (includes IT systems)

Phileas : map viewer 1 700 daily visitors out of 8 000 potential users

50 % collecting geographic data for new laid pipes  
50 % existing data improving

# Anti damages rules februar 2012

Cartographic features :

- Single portal (INERIS)
- Maps sent by network operators as an answer to DT/ DICT requests

Géo-referenced maps

Precision Classes (A/B/C)

Unique basemap (PCRS)

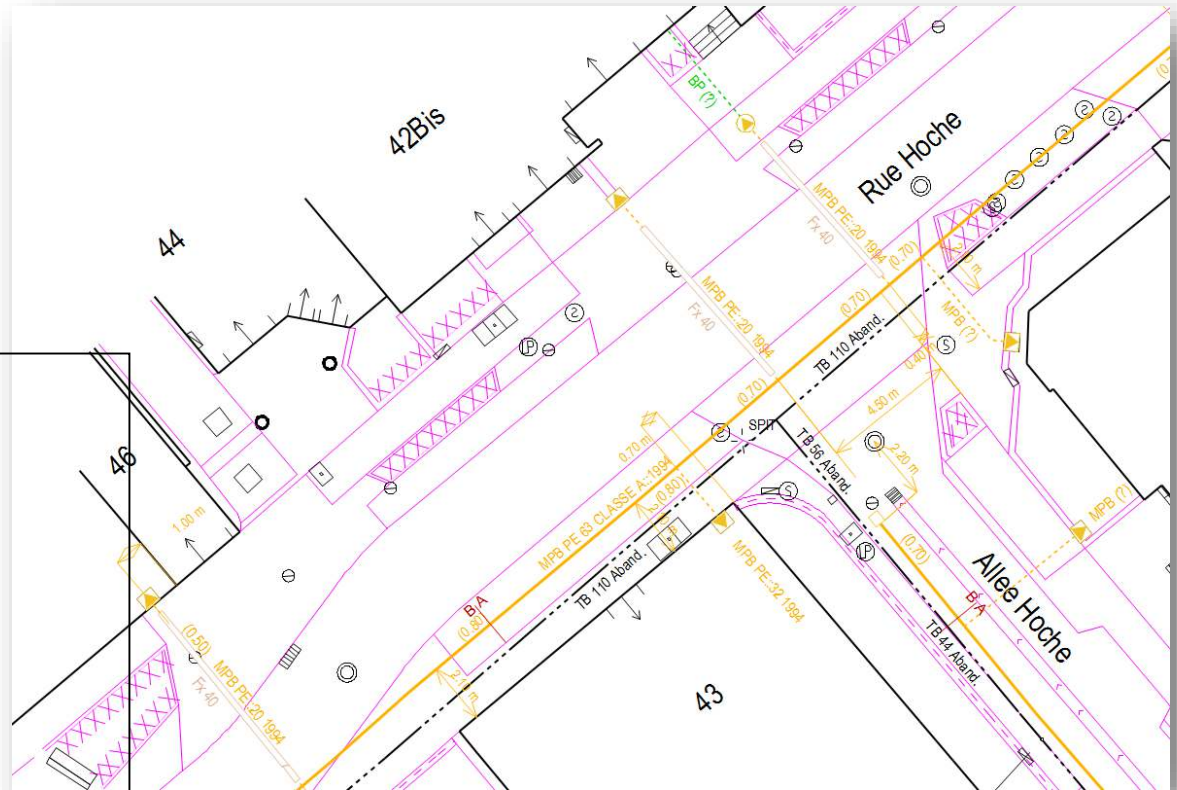
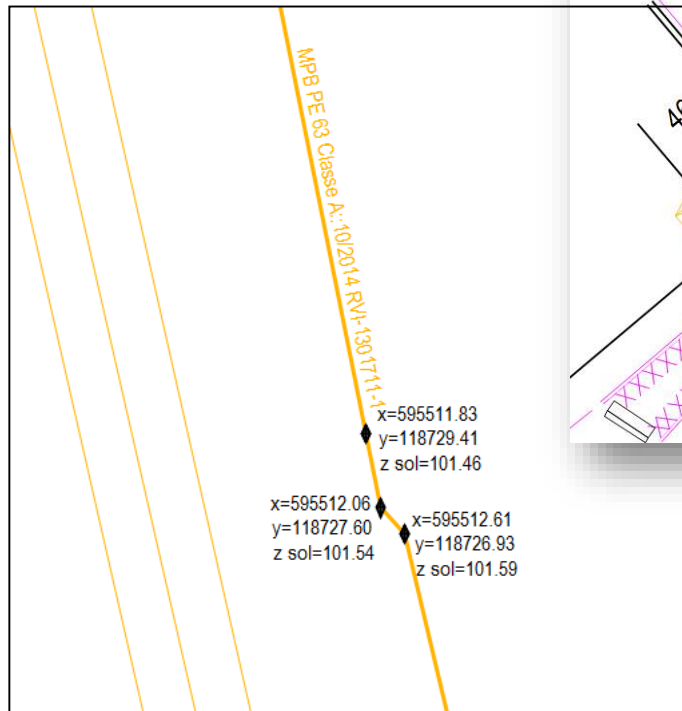
- Basemap owned by local authorities
-

# Map extracts for DT/DICT

Precision Classes (A/B/C)  
3 years project

Géo-referenced maps  
10 years project

Current basemap : GRDF-owned  
Many years project



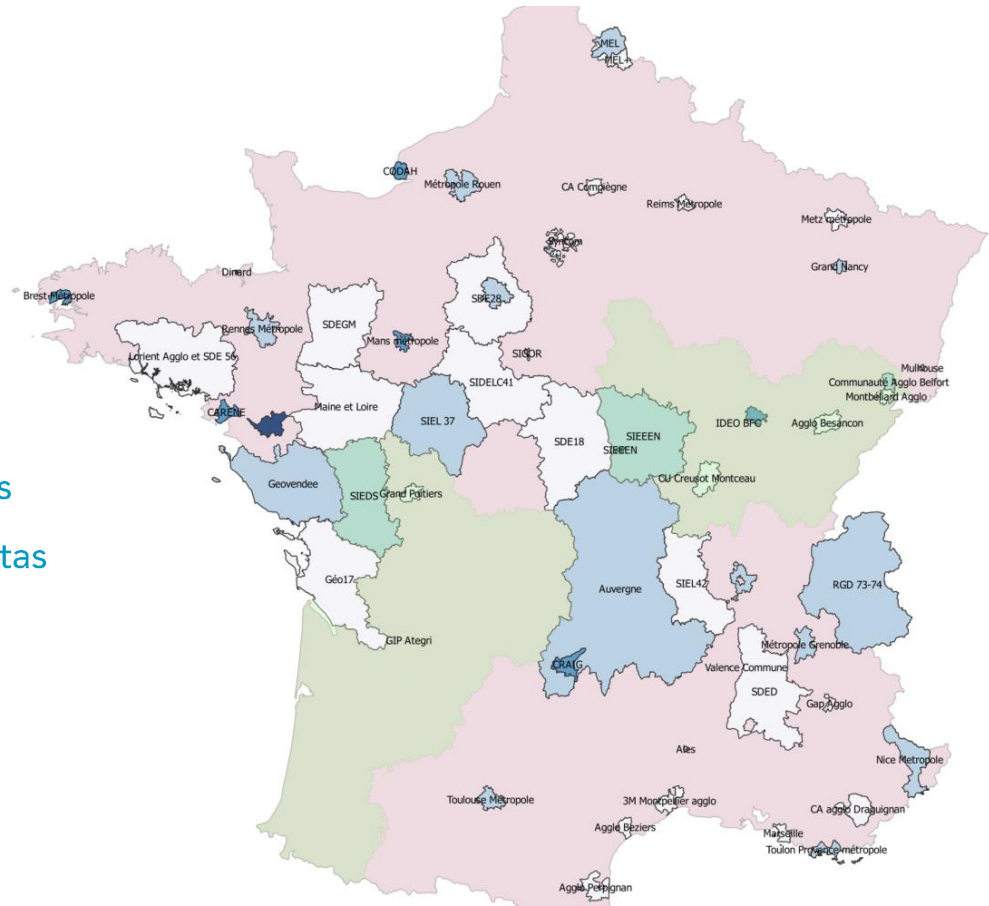
# Map extracts for DT/DICT Basemap

PCRS, high scale basemap for network mapping :

- XML standard designed by CNIG
- Local authorities initiatives

## GRDF committed to PCRS initiatives :

- GRDF database to start with
- Financial support for new LIDAR surveys
- Long term involvement for updating datas



## Known initiatives september 2017