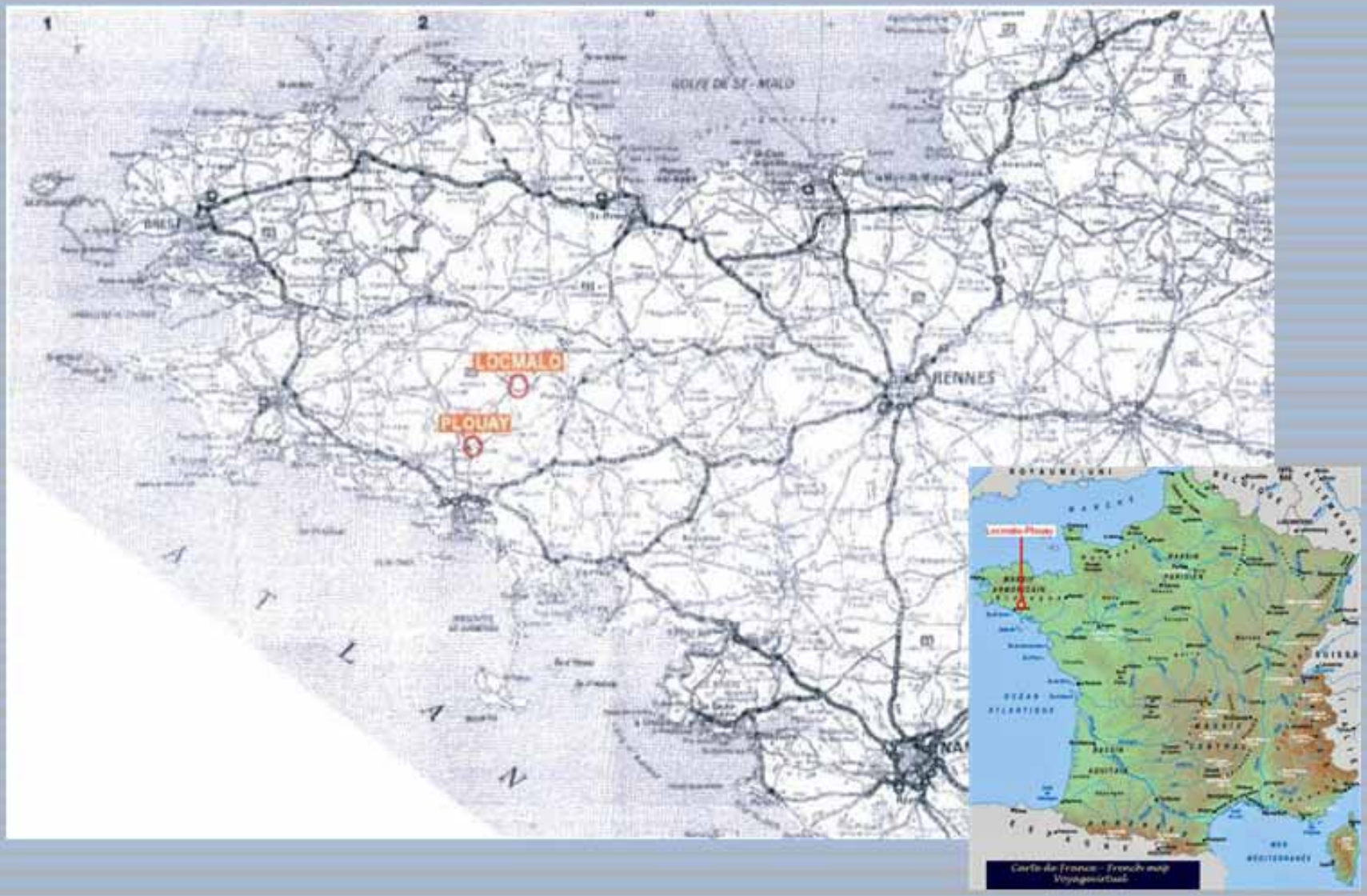
Gestionnaire
du Réseau de Transport d'Electricité

Locmalo-Plouay

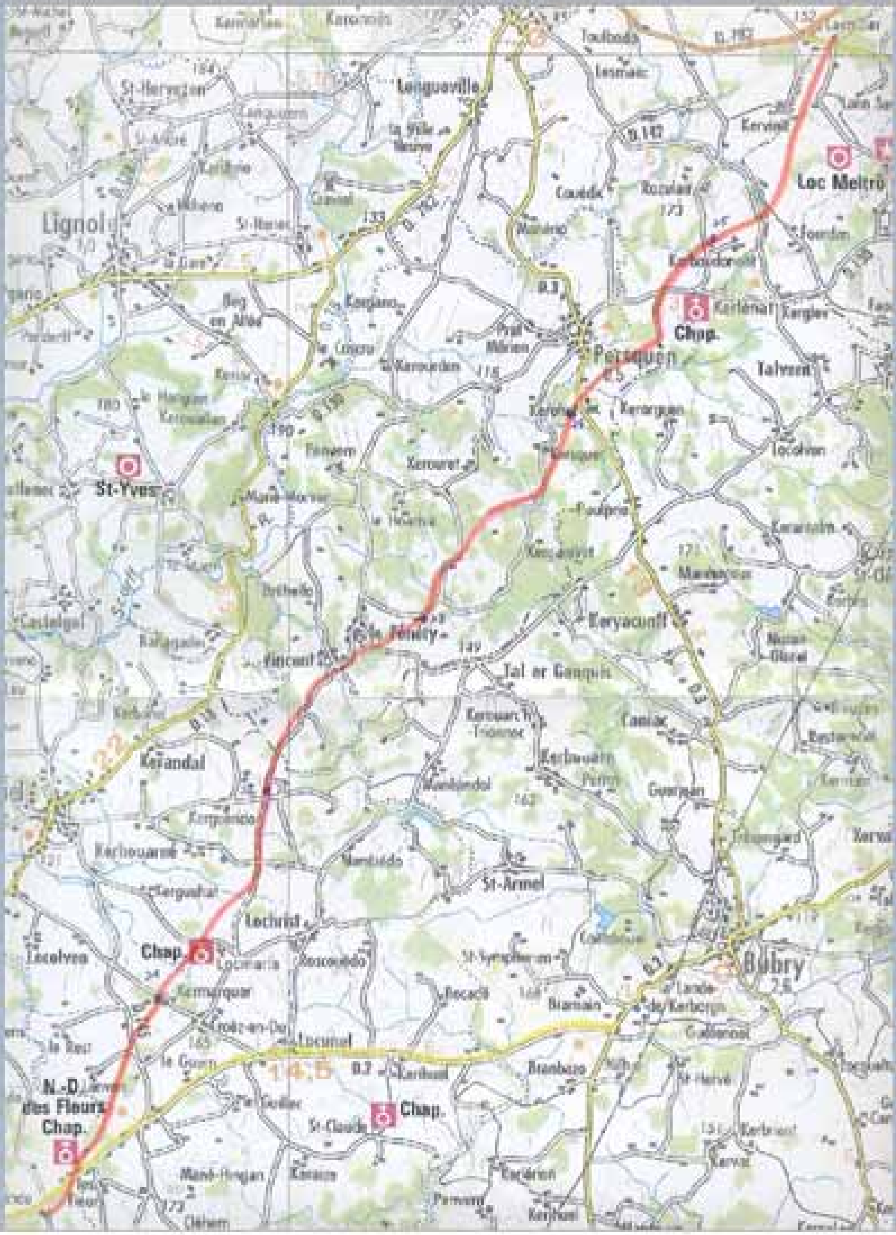
Location



Data

- Commissioning date : February 2005
- Characteristics
  - length : 20 km
  - 100% rural area, straight cable route
  - Transmission Power : 77 MW in nominal conditions
- Cable Design
  - 63 kV 800 mm^2 cable Aluminium conductor Aluminium sheath
  - Overall diameter : 68,5 mm
  - Weight : 5,1 kg/m

Cable route


Longueville
Loc Meltro
Lignol
Chap.
Talvern
St-Yves
Kerandal
Lochrist
St-Armel
Bubry
Chap.
N.-D. des Fleurs
Chap.

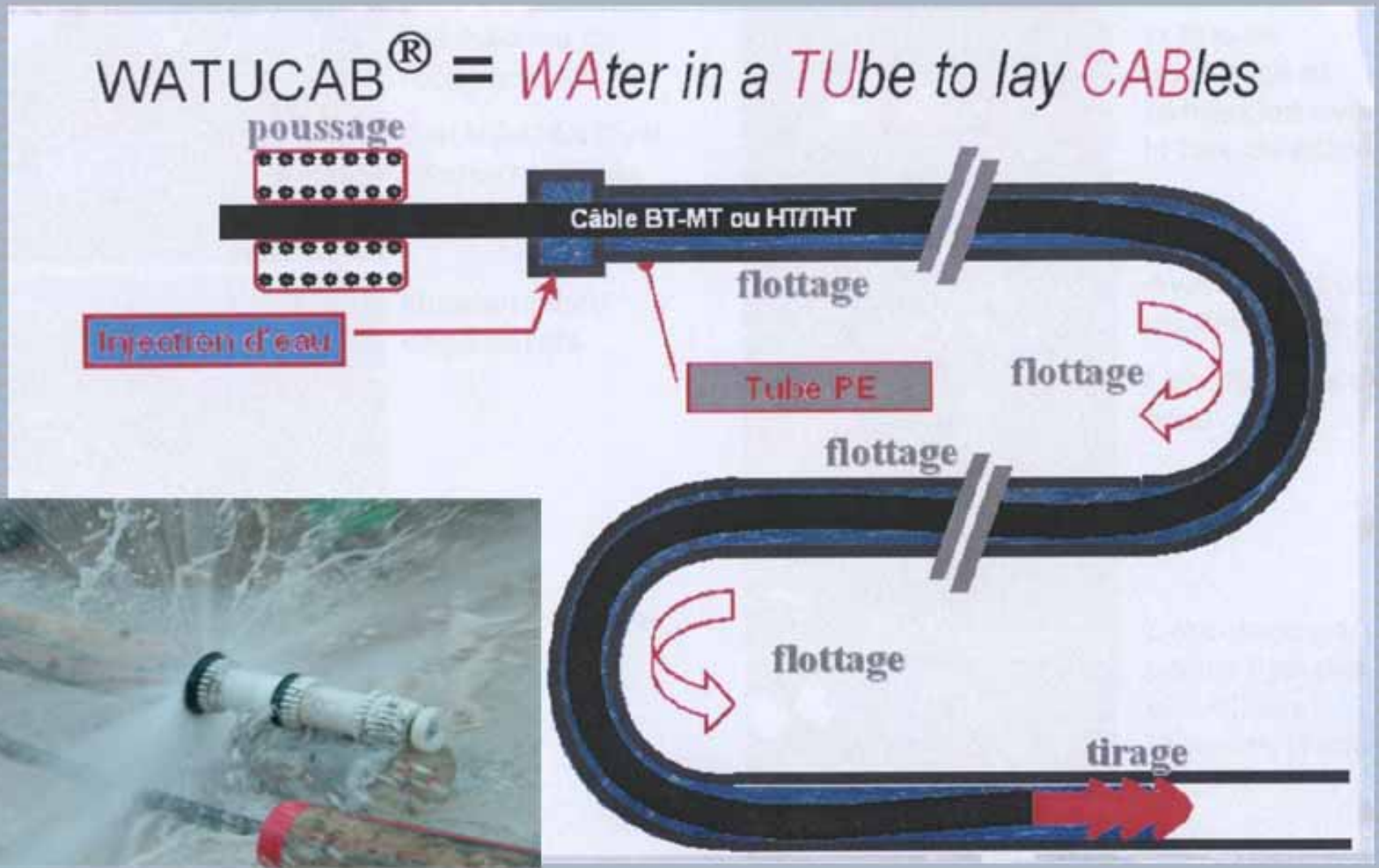

06.08.2004

Technical Innovations

- Transverse welding of Aluminium sheath
  - cable lengths from 2 811 m to 3 304 m
  - 5 joint bays instead of 11

- Pushing floating laying method
  - longer transportable lengths of cable
  - Pulling Speed : 20m/minute instead of 13m/minute with classic laying method

Pushing floating laying method



Environmental study

(Environmental Study from 2004 to December 2006)

- Improvement of RTE knowledge in environmental impacts of underground lines during :
  - Working Phase
  - Recovering Phase
- Study content
  - actual impact on the physical natural and farming landscape
  - vegetation behaviour above the UGC
  - determination of impact limitation measures

Recovering process

The healing process is observable in the natural grassland

Main Results

❖ Working Phase :

Slight differences between the real impacts observed and the ones mentioned in the Environmental Impact Assessment

❖ Recovering Phase :

- Healing process observable in the natural grassland;
- Need for special attention to the wetlands (ruts impacts due to the soil sensitivity). Nevertheless, new habitats favourable to the development of biodiversity were generated;
- Vegetation renewal, emergence of micro habitats diversification;
- The draining effect, even if favourable for cultivated areas, may dry wetlands.

Guidelines

During the working Phase :

- Pay a special attention to protect the aquatic environments and sensitive wetlands
- Respect the use of land “horizons” when re-filling the trench
- Reconstitute the crossed riverbanks
- Reduce as much as possible the work footprint in the sensitive areas

Best working period:

- Soil and vegetation: In order to avoid soil and vegetation degradation especially in wetlands ⇨End of summer (avoid rainy periods)
- Wooded areas: less sensitive from an environmental point of view but landowners prefer autumn and winter because of the impact of the wood value.