

TERIA
The GNSS Network for France
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The Ordre des Géomètres Experts (OGE)

- The organization of the 2000 French (private) surveyors, who are entrusted with a public mission: delimitation of land parcels boundaries
- Apart from representing the surveyors, it also has to guarantee both the quality of their professional activity, and its conformity with the profession's regulations and ethics
- Since both market and legal requirements have become more demanding, the OGE decided to explore ways and means to establish a permanent GPS network.

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GPS and GNSS

As you all know, GPS needs a differential technique in order to gain accuracy;
 This implies the use of two receivers, one fixed and another mobile; this procedure overcomes error margins.
 This technique is also enhanced with real-time technology, with the immediate transmission of corrected data to the mobile receiver (the user) via GSM or radio.

Moreover, OGE uses the GNSS acronym, since its project will be compatible with the American GPS, the Russian Glonass, and the forthcoming European Galileo.

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100 STATIONS DE REFERENCE

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TERIA

- Is a network of about 100 permanent stations
- Provides real-time positioning, with centimetric accuracy (0-5)
- Is usable at any time, any day
- Is based on the FKP system provided by the Franco-German consortium Thalès and Geo++
- Is fully compatible with the French mapping agency (IGN) and the French Cadastre standards
- Is therefore the powerful positioning tool set up collectively by the French surveyors and their Order

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First Experience

In 2001, OGE has launched an experimental project in Biarritz.
After several tests, the conclusions were:

- Data quality was guaranteed up to a 20 km distance.
- Whereas with longer distances, quality became more uncertain.
- An overall coverage of France would require a huge number of independent stations.

To overcome these difficulties, there was one solution: to establish a network of inter-connected stations.
This solution was the best, both in technical and economic terms.

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TERIA will provide real-time positioning for the following tasks:

- Geodesy and topography
- Real estate and housing development
- Public works
- Underground and overhead networks
- Road infrastructures
- Railway infrastructures
- Marine infrastructures
- Meteorology and protection of the environment
- Geology and geomorphology
- Civil security
- Accurate agriculture
- Teaching and research
- Fleet management
- GIS
- Hydrology and bathymetry

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TERIA and the French Surveyors responsibilities

Thanks to Teria, the Géomètres Experts will be able to position and georeference all real estate data (for each boundary and each marker).
It shall therefore provide both our surveyors and the landowners, gradually, with a national digitized real estate data base, providing a legal tool and an accurate description of the estates.

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Teria and other experiences

Several countries have set up similar networks, or are in the process of doing so;

But TERIA is the project of the French surveyors, and of their Order; they are setting it up and they own it...
It is therefore yet another proof both of their professionalism, and of their capacity to lead nation-wide projects.

TERIA will allow any customer to use its services against a fee, and numerous potential customers have started to call...

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Benefits

- Global coverage
- Networking
- Unique geographical system
- Garantee of boundaries with digital management

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TERIA






Thank you

For your attention

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