

TERIA

A new GPS network in France

By

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And

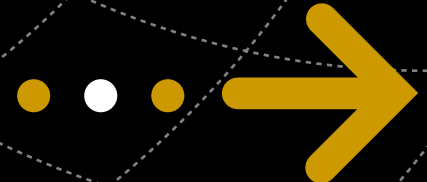
Rafic KHOURI



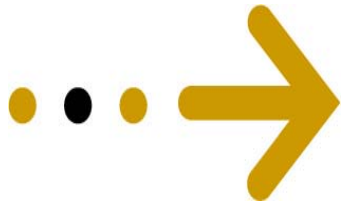
**TERIA : the permanent GPS network
of the French licensed surveyors**



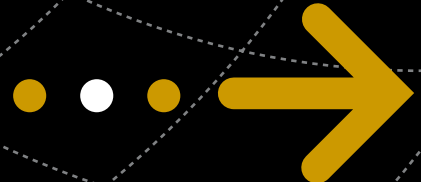
A reality by the end of 2006



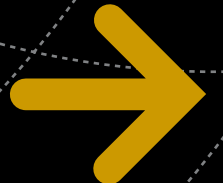
TERIA the real time GPS network :



Why ?
How ?
With whom ?
When ?



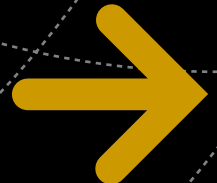
TERIA Why?



TERIA WHY ?



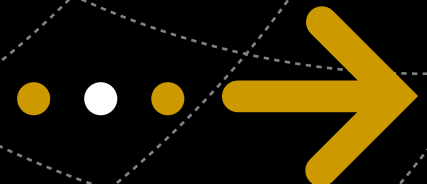
- Explosion of GPS technology : explosion of the satellite offer (GPS, GLONASS, GALILEO)
- Compulsory unification with the national grid : by the 26th of december 2000 decree
 - France on its European neighbours' path



TERIA WHY ?

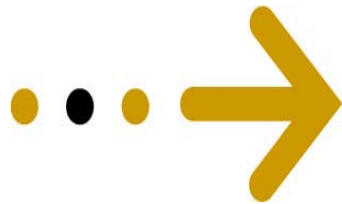


- The current offer to be completed : metric, centimetric (post-processing permanent network), real time
- The Licensed Surveyors' Order will to provide accuracy and coherence for the data produced by the profession
- **SETTING UP A NATIONAL EVOLVING DATA BASE**



TERIA For which uses ?

Geo-referenced geographic information at the very core of our civilisation



Technical – sociological – political –
économical; sectors require positioning

Topography – bathymetry – land management
(servitudes)

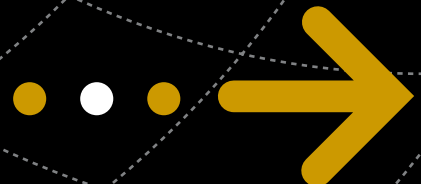
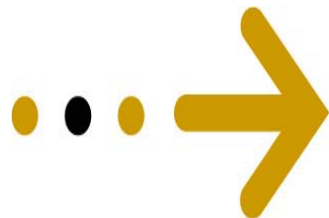
Public works – guiding for vehicles

Infrastructures: roads, ports, railways,...

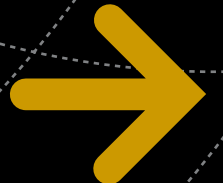
Maintenance of ground networks – GIS

Accurate Agriculture

Fleet management – civil security ...



TERIA How?



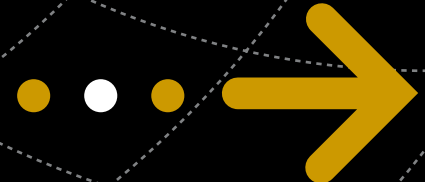
TERIA: THE FRENCH REAL-TIME KINEMATIC NETWORK

CURRENT MAP OF STATIONS DEPLOYMENT

- △ green : fully equipped site
- △ blue : validated site
- △ purple : eligible site
- △ yellow : site being prospected



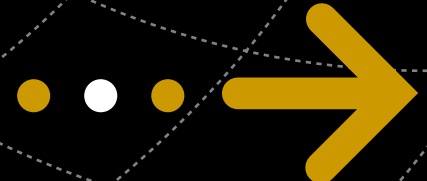
Wegener Nice 6th of September 2006



TERIA HOW ?



- A constructor : MARTEC THALES – 5 years maintenance
- A network with about 100 stations – A server centre in Paris
 - The network software GNSSMART from GEO ++
- DSL connections between the stations and the operational centre
 - GSM or GPRS connections for users



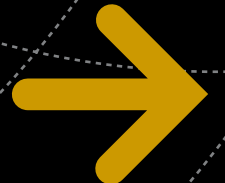
TERIA'S OUTPUT ?



- Positioning in a unique reference grid – enhancing reliability
 - Higher working quality and competitiveness
 - Permanent accessibility along the year
 - Lower investment for the user



TERIA With whom?



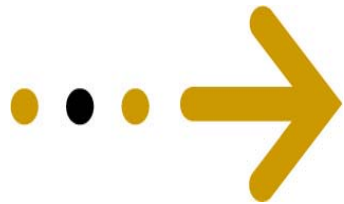
TERIA WITH WHOM ?



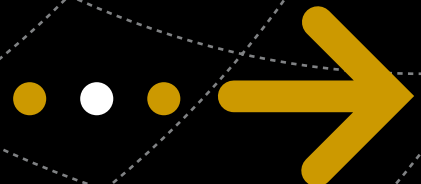
- Nearly 50% of the profession members are involved : owners network
- Partners : IGN (NMA), Cadastre, RENAG (geophysicians), university, Association of French Mayors
- Concession by the Licensed Surveyors Order to a commercial company called EXAGONE (licence agreement)
 - Access possible to all customers, with an admission charge



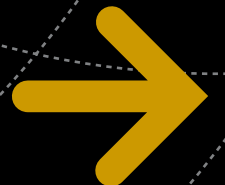
Main points in the agreement between OGE and IGN:



- . Validation by IGN of the coordinates of the reference stations belonging to the TERIA network.
- . Provision of the post-processing data produced by the stations of the TERIA network to IGN's network (RGP).



TERIA When ?



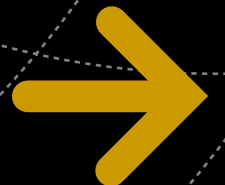
TERIA WHEN ?



- Decision of OGE's Higher Council on the 15th of April, 2003
 - First deployment on the Paris-Lyon axis
- First encouraging accuracy tests (June 2006) : 2 to 3 cm.
- Network should be fully operational by the end of 2006



Conclusion



CONCLUSION



- Conclusion of new partnerships in order to use and develop new applications
- Enhance TERIA's European dimension and its interoperability with neighbouring countries





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