TITLE
GIS and Augmented Reality in Pipeline Field activities

ABSTRACT
Field technicians in Oil and Gas Utilities around the world (ENEL, Endesa, Camuzzi, ADWEA, ...) are using GIS and Augmented Reality functionalities fully integrated. Main features are: dispatching of work order, field technicians agenda, satellite navigation, measurements, technical schemes and manuals, multimedia attachments, assets visualization in augmented reality, redlining of the GIS information, and accounting. This solution is working on line and off line. It is also used on consumer devices such as iPad.

KEY WORDS
Mobile GIS, Augmented Reality, Field Service Management, consumer device

GOALS
Give updated geocoded information to the technicians on field and allow them to be continuously connected with the Company IT. Huge savings in logistics, accounting time, precise information, paperless, on field data collection and sharing.

ADVANTAGES
Doubled technicians productivity, less driving distance with 30% emissions reduction, paperless, 1/20 accounting time, democratization of technology.

TECHONOLGIES INVOLVED
VRP to optimize the agenda of technicians, satellite navigation with traffic patterns to reach quickly the asset, ESRI web service to overlay the GIS layers mobile side, GPS coordinates to recognize and show in Augmented Reality assets and networks.

APPLICATION PLUS
We developed very powerful optimization engine, we developed our on Augmented Reality module.

GOAL OF THE SPEACH
To describe how GIS has been integrated with cutting edge technologies in real field application. GIS integration with cutting edge technologies

CV OF THE SPEAKER
Partnership and Internationalization coordinator in OverIT. Researcher in GIS and Geomarketing at the University of Udine, visiting professor in foreign Universities (CEPT India, EAST London, Uppsala, …). Member of the management board of CARTESIO (Research Centre in GIS and Remote Sensing).