

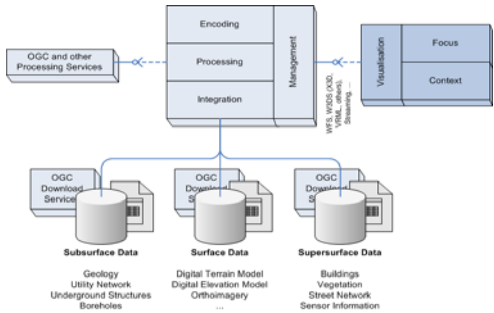
# DeepCity3D

## Integrated 3D visualization for urban surface and underground data

*BRGM, Fraunhofer IGD, Mairie de Toulouse*

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[www.deepcity3d.eu](http://www.deepcity3d.eu)

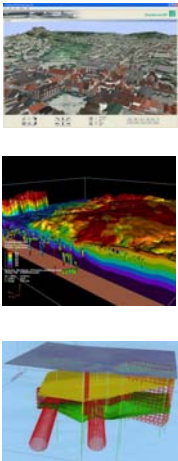
### Objectives of the project and challenges

Cities and their hinterlands are major foci of business, development, heritage, and culture. Many have geological issues that inhibit economic and sustainable development. Moreover, underneath today's city streets exists a labyrinth of caves, quarries and lifelines.

DeepCity3D project intends to develop application-adaptive 3D visualization tools that integrate underground data and City models (both provided in standardized formats) with advanced functionalities to support decision making in Urban Planning, Construction Companies, Insurance Companies, Architects, or Environmental Protection.

**Challenges:**

- Integration of 3D City Models with geoscientific information
- Visualization techniques for suitable visualization of different types of data
- Orientation tools to explore underground objects
- Integration of generic kinds of simulations or simulation results
- Geoprocessing like intersecting or generating cross-sections on 3D bodies



### Creation of long-term strategic French-German alliances

BRGM and FhG-IGD have both a strong strategic interest in developing further their expertise and technological solutions on 3D visualization for geospatial decision making support. They combine in a unique way their specialized knowledge to develop new technologies and scientific approaches in city information systems.

### Expected results and market opportunities

The main final product of the DeepCity3D project will be a set of software components which will allow integrated management and visualization, called the DeepCity3D Suite.

This 3D suite for underground data and city models with enhanced decision support functionalities is of high interest in a number of application areas, including urban planning, environmental management, utility management, and disaster management.

Potential customers include construction companies, architects, city administration and private sector utility.