

Florence, Italy
30th September – 2nd October 2019

Paper Ref #
(the paper ref# will be supplied to authors)

THE CADASTRE OF UNDERGROUND INFRASTRUCTURE NETWORKS: THE MODEL OF LOMBARDY REGION

Abstract:

The purpose of this paper is to explain and describe the benefits achieved after seven years of underground register management. In a very heterogeneous situation as the Italian one, regarding underground management, Lombardy Region stands out with the regional law n. 7 dated 18 April 2012 “Procedures for economic development and occupation” that, for the first time in Italy, established the legal framework for the creation of a local underground infrastructure register.

The Underground Cadastre, as defined by the Law, is configured not only as a tool to catalogue the underground infrastructures (pipeline of water supply, waste, public illumination, gas, broadband, ecc) but above all as the set of tables, maps and related documents suitable to represent:

-the stratigraphy of the soil and subsoil

-location and dimension of infrastructures for the distribution of public services

-attributes related to the property, the management and the service delivery

The benefits that a knowledge instrument of this type offers are both for policy makers and for the stakeholders: a better use of the resources, a shared planning of interventions, a reduction of excavations and accidents.

While creating the Cadastre, the Lombardy Region has provided: the enactment of mapping specifications for data acquisition (GPR and no-dig technologies), the interoperability standards for the exchange of dataset information, a modern dedicated webgis, the IT security criteria.