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URBAN GROWTH SOLUTION PRECURSOR: DEDICATED VHR SOLUTION

DEDICATED VHR SOLUTION

General solution description:

• The goal is to identify new built-up areas with a pixel resolution of 5m

• It will be developed as enhancement of the ISPRA institutional activity on soil consumption monitoring

Input data:

• Free images such as Google Maps

Satellite data:

• Sentinel 1 and Sentinel 2

In-situ and auxiliary data:

• Local data on built-up (provided also by municipalities), roads (OSM), orthophotos, etc....

DEDICATED VHR SOLUTION

Methodology:

• The land cover change due to soil consumption will be photointerpreted every year. The changes will be mapped in a GIS

Expected results:

• VHRL of built-up changes with 5m spatial resolution

• (Potential application) elaboration of specific indicators such as

— *SDG 11.3.1:* Ratio of land consumption rate to population growth rate, that is the variation in land consumption with respect to population variation (dimensionless)

— *Per capita soil consumption:* the rate of land consumption per inhabitant in a year (square meters per inhabitant per year)

• Interaction with local stakeholders

—Mapping of industrial areas fallen in disuse or contaminated

Timeframe and scalability:

• A first intermediate product will be available on June 2019, scalability from local to national level