

Portugal

A year of accomplishments in Portugal

2017 was a year of significant accomplishments for Portugal's Directorate-General for Territory (DGT) in geodesy, cartography and geographic information.

Activities focused on GNSS, satellite images, technical specifications, land cover and land use, INSPIRE and research and development.

DGT has created a new website for ReNEP, the Portuguese GNSS Continuously Operating Reference Stations Network, that gives real-time information about the operational conditions of each station and allows a simple registration for new users. The network has 42 reference stations on the Portuguese mainland with six on Azores and on Madeira.

IPSentinel is an infrastructure for the dissemination of Sentinel satellite images for the Portuguese territory and for the search and rescue area on the ocean. It is a partnership between DGT and the Portuguese Institute for Sea and Atmosphere. The infrastructure provides quick access to the Sentinel 1 satellite images through a dedicated connection with the Azores Collaborative Ground Station. This allows users to access images before they are delivered to the European Space Agency (ESA)



Land cover land use maps - www.renep.dgterritorio.gov.pt - www.ipsentinel.pt

repository. IPSentinel has 300 registered users and a storage capacity of 35 TB, enabling images from the previous month and a half to be downloaded immediately.

DGT is producing new technical specifications for the Portuguese cartography that simplify the harmonisation of spatial data in accordance with INSPIRE. The work is also driven by new technological developments which have significantly changed the way geographic information is used and explored.

Portugal continues to collaborate in implementing the INSPIRE Directive. In the past two years, the number of spatial datasets available through Web Map Services (WMS) has roughly quadrupled and those available through Web Feature Service (WFS) has approximately tripled.

Land cover land use (LCLU) maps, with spatio-temporal harmonisation, have been published for 1995, 2007 and

2010. All maps have a minimum mapping unit of one hectare, a minimum feature width of 20 metres and a hierarchical nomenclature based on the CORINE Land Cover one. In 2017, DGT also finalised a land cover land use map with a simplified nomenclature for 2015. All maps are available under an open data policy.

DGT's research and development activities are supported by national or European funded projects and initiatives. They include the extraction of LCLU information from satellite and other Earth Observation data, Spatial Data Infrastructures (SDI), the use of spatial information and technologies in different domains, such as environmental analysis and modelling, spatial and urban planning, risk assessment, citizen participation and volunteered geographic information (VGI).