

# Merging statistics and geospatial information, 2017 projects - Croatia

Statistics Explained

## Merging statistics and geospatial information in Member States – improve the integration of geospatial and statistical information to maximise the utility of data collected for statistical purposes; 2017 project; final report 17 December 2019

This article forms part of Eurostat's statistical report on the *Integration of statistical and geospatial information*.

### Problem

Key phenomena which need to be precisely understood at a local level need to be more accurately measured, analysed and communicated, thus allowing policy initiatives to be better defined and monitored.

### Objectives

To improve the integration of geospatial and statistical information as it offers important opportunities to maximise the utility of data collected for statistical purposes.

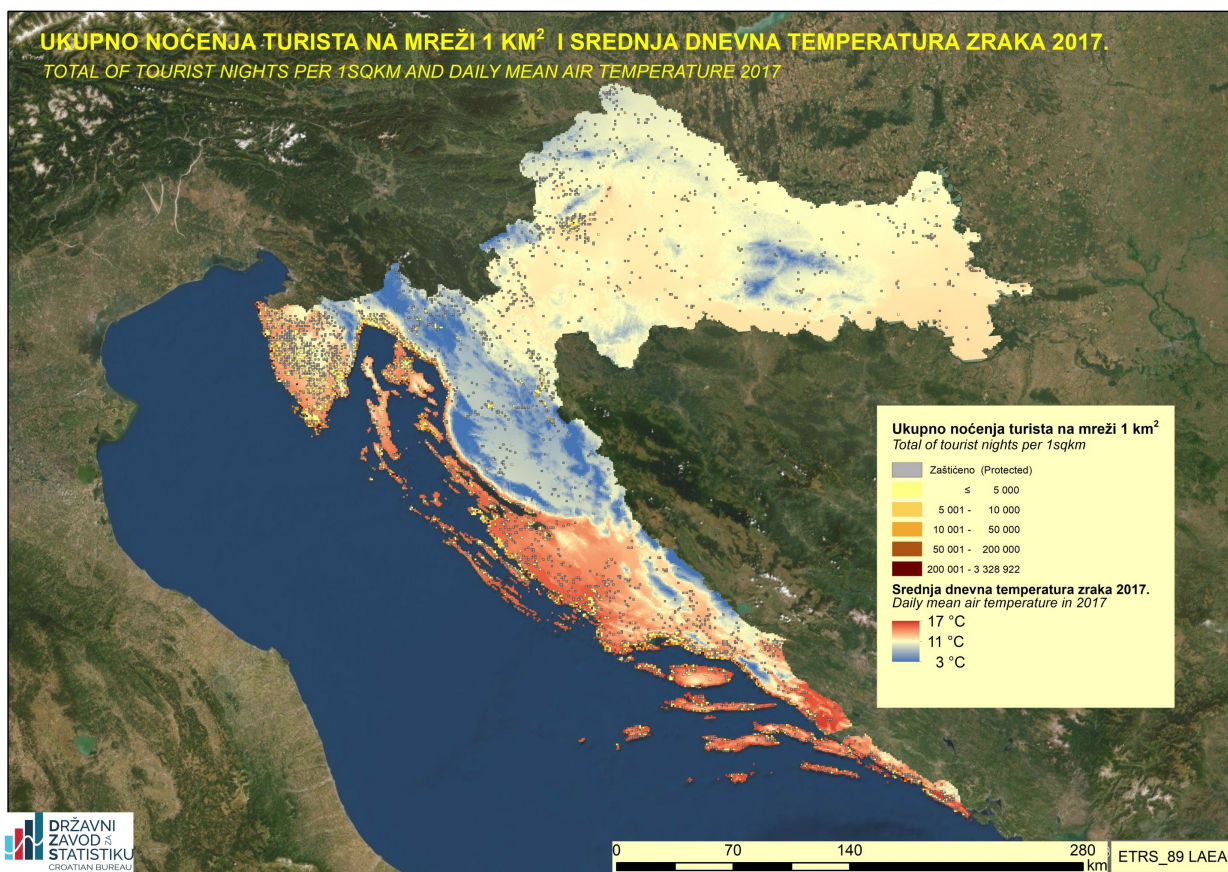
- Establish internal and external processes which are required for a continuous automated regular update of geospatial data sources for statistics.
- Upgrade and redesign a web application.

### Method

In order to increase the awareness of the importance of using geospatial information and tourism data (one of the most important economic activities in Croatia), data on accommodation capacity and tourist activity were merged with data from the spatial statistical register.

A large number of tourism-related sources were analysed, including data on the number of rooms, the number of beds, accommodation facilities and households providing accommodation services to tourists. The data concerning the number of tourists included information on their country of residence.

Other sources were also analysed, such as natural factors like sea and air temperature, quality and salinity of sea water, cloud cover, solar radiation and precipitation. The Croatian Meteorological and Hydrological Service submitted monthly climate maps. In addition, data on the location of places of cultural and archaeological interest were also used.



**Figure 1: Total tourist nights per 1 km<sup>2</sup> grid and daily mean air temperature, 2017**

Data were compiled for 1 km x 1 km grid cells and were aggregated from point-based data or enumeration area data. An algorithm was developed for data protection.

Concerning existing demographic data available on the GeoSTAT portal, the web services WMS and Atom were implemented.

- A web map service (WMS) is a standard protocol for serving web-based georeferenced map images.
- The use of the Atom service makes it possible for users to subscribe to content (updates). Atom Syndication Format (ASF) is an XML language used for web feeds (content and metadata). The Atom Publishing Protocol (AtomPub) is an HTTP-based protocol used to create and update web resources.

## Results

Data were published on the GeoSTAT portal. Users can track, on a grid of 1 km x 1 km cells, the number of domestic and foreign tourist arrivals and nights spent, as well as information on accommodation capacity.

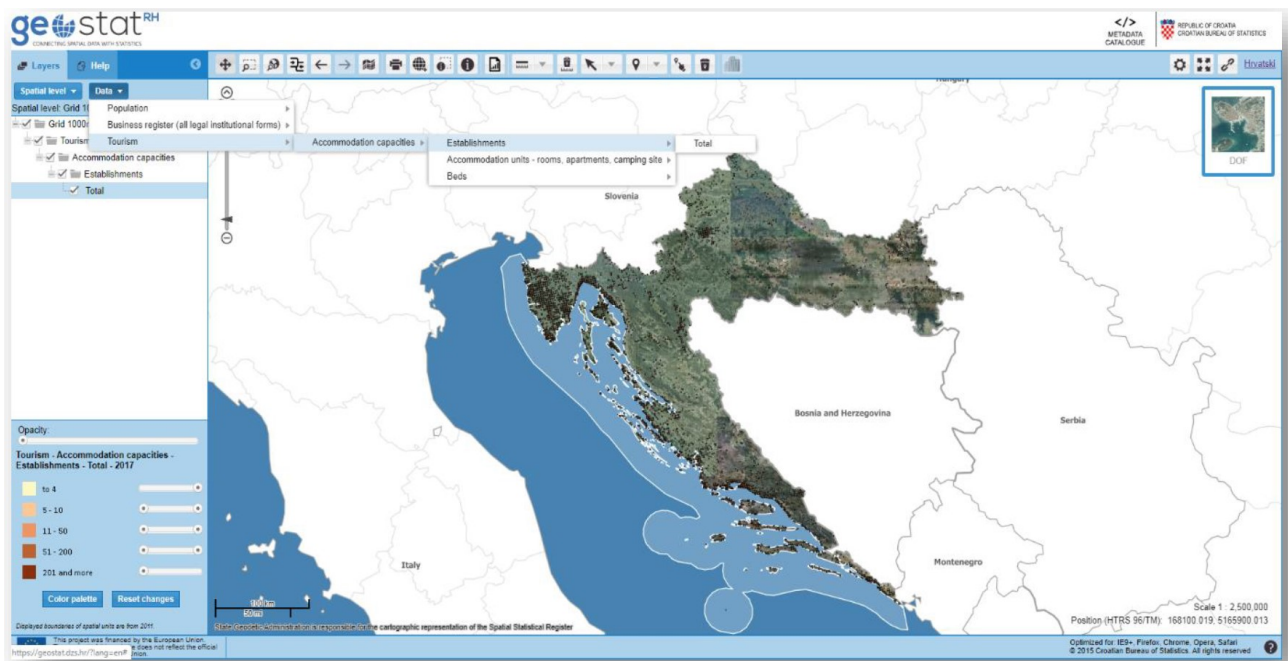


Figure 2: The homepage of the GeoSTAT portal accommodation capacities, 2017

## Methodology

- [Final report \(EU Login required\)](#)

## External links

- [Croatian Bureau of Statistics](#) , see:
  - [GeoSTAT portal](#)
  - [Accommodation capacities](#)