



## MUNICIPALITY OF DONOSTIA/SAN SEBASTIÁN, PIONEER IN MOBILE MAPPING FOR CITIZENS

OPEN GOVERNMENT AND TRANSPARENCY ARE THE KEY COMPONENTS OF A MODERN MUNICIPAL STRATEGY. WITH THESE CORE PRINCIPLES IN MIND, THE CITY COUNCIL OF DONOSTIA/SAN SEBASTIÁN DECIDED TO EMBED ORBIT 3DM PUBLISHER IN ITS WEB ENVIRONMENT, IN ORDER TO PROVIDE ITS CITIZENS WITH THE MOST ACCURATE AND UP-TO-DATE MAPS OF THE CITY.

### History

In compliance with the European INSPIRE directive, the City of Donostia/San Sebastián is the competent authority to generate, organize, manage and share municipal geographic information. For this reason, the City Council has been in charge of the management and maintenance of the Municipal Base Cartography (MBC) since the year 2000.

This MBC, as a representation of the municipal territory, is produced mainly with traditional topographic techniques and is able to represent the buildings, walls, sidewalks, signs, street furniture and a long etc. of our city with accuracy down to the centimeter. From the beginning, it was a priority of this municipality to share and publish externally all geospatial information, so it would be available to different user profiles.

As a result of that broad scope, a Web Viewer and a public download portal were developed.

At present, the MBC of Donostia/San Sebastián is used not only by municipal services but also by external users. At City Council level, the data is used by Urban Planning, Works and Projects, Environment, Municipal Guard, the Fire Brigade, etc.



*Donostia Oinez powered by Orbit 3DM Publisher*

Externally, it is used by the Cadaster and Territorial Planning offices of the Region of Gipuzkoa, as well as by engineering and architecture firms, other professionals and citizens. In all cases, the MBC fulfills the expectations of a multipurpose, updated and accurate cartographic service.

### Mobile Mapping in Donostia/San Sebastián

In 2012, the City of Donostia/San Sebastián tested a new technology, called Mobile Mapping, in several of its districts. Thousands of photographs were taken, and millions of points were measured in order to support its cartographic service and asset management. The technique was

used in different scenarios, such as Projects and Works, Construction, Maintenance, Emergencies, Traffic, Security, Asset Management, Tourism, Urban Planning, etc.

In 2016, the City Council chose Geograma to carry out the Mobile Mapping survey of the complete city, with almost 400 km of road street network.

Once the municipality had access to a powerful source of geospatial information, the next phase of the project, finished at the beginning of 2018, focused on providing the Mobile Mapping data to the citizens. This new web environment, called **Donostia Oinez**, is embedded with the **Orbit GT**

software technology, specifically the platform **Orbit 3DM Publisher**.

The new web application of the municipality makes use of this mobile terrestrial technology to provide more than 115.000 panoramas and over 3,5 million of measured cloud points, that can be downloaded and reused by both citizens and professionals.

**“This new generation of embedded tools reinforces the commitment of the City Council to open government and transparency: we make available to all citizens the information we generate in our everyday life”** said **Ibón Ramos**, Director of the Municipal Information Unit at Donostia/San Sebastián.

With the use of **Donostia Oinez** based on Orbit technology, users gain access to an ecosystem that not long ago would have been unthinkable!

Private companies that work in facades are able to quote their services with higher accuracy, without the need for complicated measurements in situ, reducing resources and increasing security.

Citizens are able to measure both surfaces and heights, distances from their house to containers, heights of trees in front of their windows... allowing them to complain about certain situations. Municipal services – the fire department, for instance – can measure the height of buildings to foresee the infrastructure and materials needed in case of emergencies. They can both quantify and qualify the existing obstacles on any street, helping them to select the emergency vehicle that will get them to the location.

### Donostia Oinez links

Viewer: <http://www.donostia.eus/DonostiaOinez/Donostia/index.html>

YouTube (English subtitles): [https://www.youtube.com/watch?v=\\_pqKVh5l\\_14](https://www.youtube.com/watch?v=_pqKVh5l_14)

Local TV Media: <https://www.eitb.eus/es/noticias/sociedad/videos/detalle/5314337/donostia-oinez>

## ABOUT THE AUTHORS

Juan Miguel Álvarez, Geoinformation Manager at Geograma and project leader; and Ibón Ramos, Director of the Municipal Information Unit of the Municipality of Donostia/San Sebastián and lead project manager.

## ABOUT GEOGRAMA

Geograma is a Spanish company founded in 1998, specialized in providing geoinformation solutions and services to both public and private customers. The company has relevant references in digital mapping through Mobile Mapping technologies and maintenance of reference cartography to different bodies of the Spanish Public Administration.

Geograma's services are: field data collection services, geoinformation projects, development of geosolutions, consultancy, cloud geoservices and licensing of geospatial tools and data. The skills of the company cover the whole cycle of the geographical data, which provides a different perspective to ensure the success of the projects. Geograma works with a team of 35 GIS consultants.



*Donostia Oinez,  
the new viewer of  
the Municipality*