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BUENAS PRÁCTICAS

Operaciones Cofinanciadas

**Unified Digital Street Map of
Andalusia (CDAU, for its acronym
in Spanish) mobile phones**

IECA

Programa Operativo de Andalucía

Fondo Europeo de Desarrollo Regional

Año 2016

UNIFIED DIGITAL STREET MAP OF ANDALUSIA (CDAU) APPLICATION FOR MOBILE PHONES

Andalusia

The project consists of a **Unified Digital Street Map of Andalusia (CDAU, for its acronym in Spanish)** as one of the basic geographical infrastructures to exploit information services related to the visualisation, geocoding and maintenance of Andalusian postal addresses.

Of all the information that can be spatially located, a high percentage of it is done by postal addresses, either in the form of street and number, or in the form of road and kilometre point. Elements such as accommodation (apartments, rural lodgings, hotels, hostels, etc.), restaurants, shops, monuments, municipal facilities (schools, kindergartens, high schools, health centres, adult education centres, etc.) are the type of information whose territorial location is likely to be categorised and geo-referenced by the public administrations, and communicated through information products accessible from the Internet, using a viewer and the cartographic database of the CDAU. Thus, it is possible to offer citizens innovative information services about the location of such elements and even all the available information on them, for example, telephone number, public opening hours, type of economic activity, etc., through mobile applications.

The project implies the use of new technologies at the service of citizens and the public administration. For this reason, its implementation has been funded by the European Regional Development Fund of the European Union within the 2014-2020 Community framework.

The total cost was 60,125.57 euros, with European co-funding by the ERDF of 80% (60,125.57 euros).

It is considered a Project's Good Practice since it meets the following criteria:

- 1. The ERDF's role has been suitably disseminated among the beneficiaries, potential beneficiaries, and the general public:**

The SEPIM is a tool that provides ongoing information about the different elements of interest from the municipalities that use it. Although there is not a fixed channel for the dissemination of applications, the Institute of Statistics and Cartography of Andalusia (IECA, for its acronym in Spanish) provides information on all of them through numerous dissemination activities:

The IECA website

1. Inside of the CDAU portal (<http://www.callejerodeandalucia.es/portal/web/cdau/>), in the "RESOURCES" section.



2. In the European Funds section of the IECA website:

The IECA includes on its website a section specifically devoted to the dissemination of the highlights of the 2014-2020 Community framework, which is part of the unique web portal of the Directorate General of European Funds of the Ministry of Finance as the Authority of the ERDF Management:

<http://www.juntadeandalucia.es/institutodeestadisticaycartografia/ieagen/iea/fondos/index.htm>

This section includes a description of the co-funded actions by the European funds, within the IECA field of action, as well as direct access to the statistical or cartographic product, and a gallery with a selection of visual resources related to the product:



| | |
|---------------------------|---|
| | <p>Postales.</p> <ul style="list-style-type: none"> • Trabajos para la realización de los análisis de los modelos de datos, flujos de trabajo y sincronización en el marco de los callejeros de ayuntamientos Editores 1 para su incorporación al proyecto CDAU. • Detección de las vías y aproximaciones postales procedentes del censo de población y viviendas de 2011 para su incorporación al Callejero Digital de Andalucía Unificado. |
| Acceso al producto | Callejero Digital de Andalucía Unificado (CDAU) |
| Acceso a imágenes | Galería |
| Nombre | Servidor de puntos de interés basado en MAPEA |
| Objetivo | Desarrollar una aplicación informática instalable en móviles Android a disposición de la ciudadanía (residentes, visitantes, turistas,...) y de fácil manejo, que incorpore en CDAU información categorizada sobre puntos de interés en el municipio. |
| Actuaciones | <ul style="list-style-type: none"> • Servicio de desarrollo de software para consolidar y productivizar el servidor de puntos de interés basado en MAPEA "SEPIM". |
| Acceso al producto | SEPIM (Servidor de puntos de interés de MAPEA) |
| Acceso a imágenes | Galería |
| Nombre | Inventario de Sedes y Equipamientos |
| Objetivo | Garantizar la calidad y la accesibilidad mediante servicios interoperables a la información sobre los servicios públicos, su integración con cualquier conjunto de datos, su utilidad en modelizaciones SIG de soporte a actividades de planificación de servicios públicos y su reutilización. Además, gracias a la interoperabilidad de los datos se podrán generar aplicaciones para soportes móviles que provean servicios de proximidad, incrementándose de este modo los canales de difusión del ISE. |
| Actuaciones | <ul style="list-style-type: none"> • Trabajos de interoperabilidad y aseguramiento de la calidad para la difusión mediante geoservicios del inventario de sedes y equipamiento de la Junta de Andalucía (en licitación). |

Events held at the initiative of the IECA or in which the IECA participates:

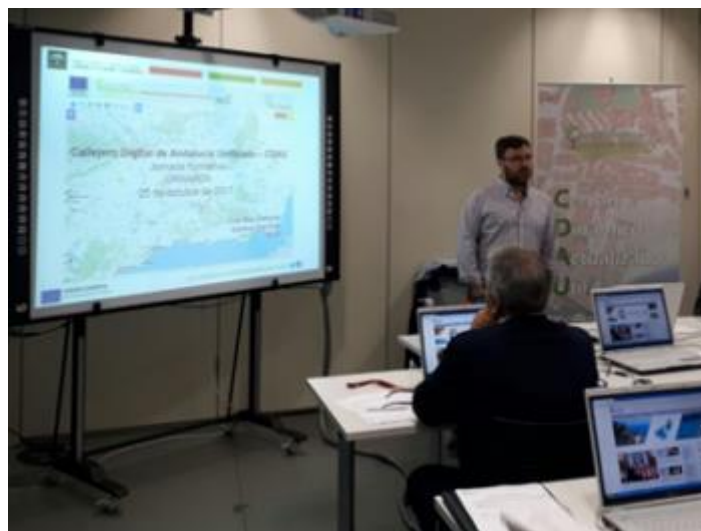
The IECA, through the dissemination of its activities, holds many events. It also uses other forums and events to make its activity known. The following photographic documentation shows some of these initiatives that reflect the image of the EU:



Presence of the IECA in the 3rd Fair on Innovation and New Technologies by the Regional Council of Seville.



Speech on "Development of an APP with information on the main resources of your municipality on the basis of the street map. An example of success. City Council of Casariche", within the context of the 3rd Fair on Innovation and New Technologies by the Regional Council of Seville.



Technical seminar in Granada



Technical seminar in Almeria



“Official Guide of Úbeda” APP release



“Tourist Guide of Osuna” new mobile phone application release



“Tourist Street Map of the Province of Sevilla” application release in FITUR 2017

Social networks

The IECA makes use of social networks (Facebook, Twitter) to access all types of information users and thus, expand the dissemination of the ERDF:



Dissemination carried out by the city councils

Likewise, each city council offers information about the applications (APPs) through different channels, web pages, launch events in the city councils, etc.

These applications are also disseminated through the television programme "Éste es mi pueblo" (This is my town) in "Canal Sur" channel, when the programme deals with a municipality that has one of the developed applications.

For download, these applications are available on Google Play: (<https://play.google.com/store?hl=es&tab=w8>).

Google Play search is done by typing "cdau ieca". This way, people will have access to all the applications already launched. In addition, a search can be done with the name of the application itself.

2. The action incorporates innovative elements:

The project incorporates several innovative elements:

Methodological: Information about the street map that city councils maintain is highlighted, so that they collect the data of interest they want to make accessible to the users of their applications, either information about resources of public interest (health infrastructure, educational, social, etc.) or private (bars, hotels, hiking trails, etc.). In addition, the maintenance of all these elements allows to find errors on the street map itself, which in turn allows to solve them in parallel, thus ensuring that the best possible street map is available without having to carry out any additional job.

Technological: Mobile technology has provided users with a wide range of tools of all kinds. Without a doubt, this type of technology, together with the possibilities that the use of the GPS provides, allows the system to bring the territory and its elements to the users of this type of applications. Thus, it is possible to have the entire catalogue of services offered by any municipality in the mobile phone, along with their location and associated information, so that users can know the main features of that element, navigate it, access information hosted in the cloud, make a phone call without having the phone number saved, etc.

3. Adaptation of the obtained results to the established objectives:

The main objective is to facilitate and bring together the use of the Unified Digital Street Map of Andalusia to the public administrations and to the citizens through the technology of installable applications in mobile devices.

The SEPIM allows to develop applications for mobile devices that can be used by any user, in the public and private sectors. In addition, it implies the reusability of a product: it is not necessary to undertake a customised development for each of the municipalities that wants to disseminate their information of interest through the tool, which implies, without a doubt, a great saving for the Public Administration.

Also, having the information that city councils generate allows the administration to have a large database with a multitude of elements of interest, their characteristics and their location in the territory. This fact facilitates the reuse of data by those users who, as in the case of "Emergencias Andalucía" (Andalusia Emergencies), require this type of information for the improvement of the provision of services.

4. Resolution contribution of a regional problem or weakness:

The statistical and cartographic activity of the Government of Andalusia is governed by a legal instrument which includes, as information infrastructures, the Unified Digital Street Map of Andalusia (CDAU) and emphasises the fact that municipalities must communicate to the Institute of Statistics and Cartography of Andalusia the register, deregister and modification of the naming of public roads and the numbering of buildings. To this end, this tool that allows updating is made available to the local administration. However, the instrument is not always used by city councils for various reasons. That is the big problem when facing the CDAU, and the SEPIM tool collaborates in its solution.

The tool allows municipalities to detect deficiencies and errors in their streets, solve them and incorporate them into the CDAU, thereby increasing the quality of this information infrastructure.

"SEPIM" was born as a "proof of concept" that sought to assess the feasibility of city councils of having a tool that motivates them and helps them to improve the quality of their town CDAU. To this end, a "prototype application" was built that, through cartographic viewers on mobile devices, it allowed to store and exploit these categories of municipal data for later dissemination.

There are many Andalusian municipalities that have participated in the project, use the SEPIM, and even have their own mobile applications in GooglePlay. Given the success of the proof of concept, it could be said that the SEPIM is already one more CDAU functional complement, that is also being highly demanded by the participating municipalities in the CDAU project.

5. High target population coverage:

The information disseminated through the applications built with the SEPIM is available to the public administration and to the whole society. The number of downloaded applications can be quantified on a daily basis as thousands have been recorded since the project was started.

The direct beneficiaries and the target audience are diverse: local authorities, which are the ones that develop the contents they want to bring to applications' users and that in this way disseminate their resources, aimed both at neighbours and non-neighbours; the professional organisations of the municipality, who see how their information is offered to potential users of the resources they offer through these applications; the economic and social agents who, like the previous collective, can directly participate, in coordination with the city council, in the preparation and selection of contents; and finally, education and research institutions, which can also use these applications as a channel to offer their services.

6. The horizontal criteria for equal opportunities and non-discrimination, environmental sustainability and/or social responsibility have been taken into account:

With regard to the use of data, the information offered in mobile applications through the SEPIM is provided within the field of action of the local administration, at the service of all of the citizens and public administrations, and accessible with great simplicity, like other public and private

applications. In addition, this is already existing information, so its development is not repeated, but simply packaged and offered to the population through mobile devices of general use.

7. Synergies with other public intervention policies or instruments:

The SEPIM project guarantees the coordination with other actions addressed by the IECA, in particular the "Unified Digital Street Map of Andalusia (CDAU)" project and the "Technological Evolution of the CDAU Towards the Management of Postal Addresses" project, both also co-funded by the European funds. With the development of applications within the SEPIM framework, a contribution to the improvement of the postal information collected in the CDAU is made, as the development of an APP requires a review of the street elements, which are the ones that serve as the geographic base for geo-positioning the points and elements of interest stored in an APP.

In turn, the SEPIM contributes to the collection of geo-referenced information of interest such as public buildings by typology, commercial and tourist establishments, routes, etc. All of this information constitutes the basis for decision-making in all the political areas in which these data are relevant, in particular the tourism, environmental, territorial management, infrastructure, patrimony and health policies among others.