



Increasing the efficiency and sustainability by institutional cooperation: The example of the Addresses Database of Catalonia

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Diputació de Lleida



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Agenda

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2. Background
3. Reasons for the change
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Introduction

Initial works
at the ICGC

Introduction



Institut Cartogràfic de Catalunya (ICGC)



Diputació de Lleida

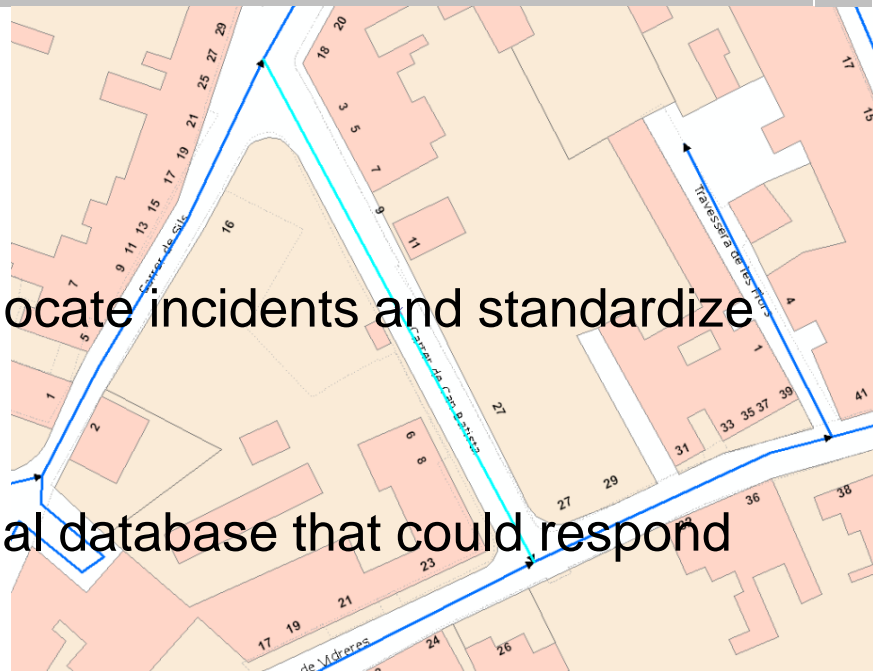


Background

Initial works
at the ICGC

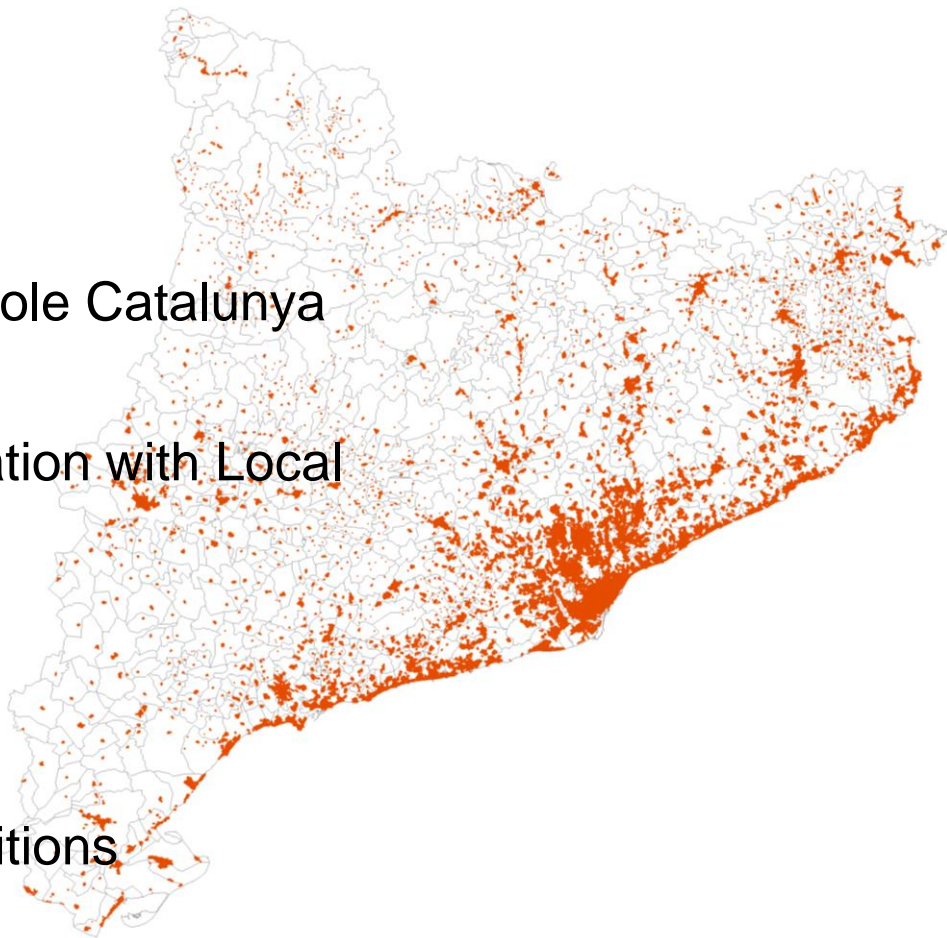
Goals

- 1999: Catalan Police needs to locate incidents and standardize addresses
- At that moment there was no spatial database that could respond to these demands
- 2000: ICGC started the compilation of a geospatial street DB: street axis with its number ranges for all the Catalan towns



Working method

- 2000-2007 First compilation of whole Catalunya
- Mainly compiled by field work
- At the end of this phase, collaboration with Local Administration begins
- 2008: Continuous updating
- 2010: Compilation of address positions



strengths and weaknesses

- Systematic and standardized update
- Skilled personnel carries out the work
- A single database queried by geoservices
- High cost to get current, valid and complete information
- Some problems with data sources:
 - Field work
 - Available data
 - Collaboration with agencies

Background

Initial works at
Diputació de Lleida

Goals

- 2009: Compilation of street information was started, in order to meet the needs arising from the local responsibilities
- Provide SITMUN viewer a validated database for management applications
- Local government responsibilities (Municipality)

Working method

- There is no online tool available. Diputació de Lleida provides the municipality the available information on paper
- Field work is performed by the municipality
- Information is digitized and stored in databases to be monitored from SITMUN viewer
- Information is attempted to be crossed with available alphanumeric databases.

Strengths and weaknesses

- It's easy to capture Information
- Complete final information.
- Diputació de Lleida tracks the performed works
- High initial digitalization costs and future update
- Information only used by municipalities
- Information is only “official” for the city council

Reasons for the change

Reasons for the change

- Both agencies compile similar information at the same territory
- The procedures of both agencies had weaknesses that could be improved, so the benefits of working together were analyzed

Advantages of working with ICGC

- Decrease of digitization economic costs
- Standardized and uniform digitizing criteria
- Systematic Quality Control
- Speed up sign in into Catalunya's Cartographic Register
- Distribution of information to organizations and citizens

Advantages of working with Diputació

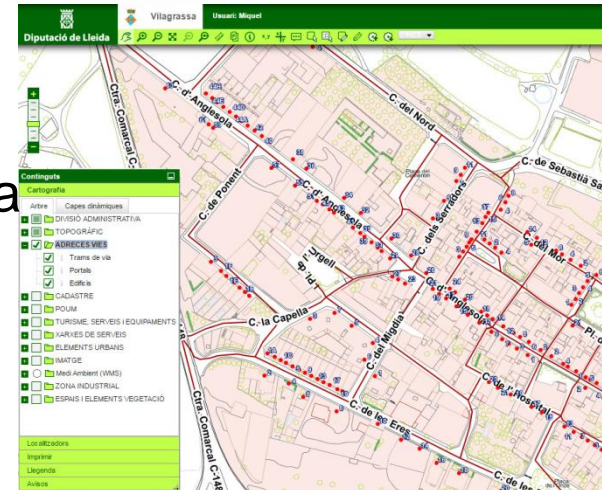
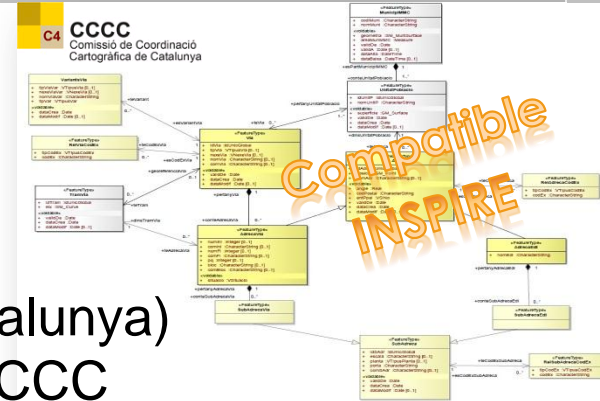
- Close knowledge of the territory and municipality needs
- Access to municipalities by a single interlocutor that also standardizes procedures
- Decrease costs
- Municipalities training in methods, uses and applications
- Provide municipalities with a maintenance tool

Advantages of working with Municipalities

- Access to the information closest to the territory
- Full and updated information (even in scattered places)
- Final validation of compiled information

Other factors

- The BDMAC (Base Municipal d'Adreces de Catalunya) model is a common data model, defined by a CCCC working group with representants of municipalities, county councils and Government
- SITMUN2, the new version of Diputació de Lleida corporate viewer, allows to keep easily the information updated



Working together

Goals

Goals for Diputació de Lleida and municipalities

- Supply digitized information with both graphics and content quality, without economic cost
- Using the ICGC distribution channels for disseminating information

Goals for ICGC

- Have a workflow for the database continuous update, maximizing efficiency and minimizing costs

General Goals

- Supply a single dataset that allows the unification and standardization of addresses, that will be spread to other agencies BD

Work division

- Each agency is responsible for certain **phases** of the production process
- Each task is carried out by the more **suitable** agency

work division

Diputació de Lleida:

- Supply base information
- Coordinate the validation works
- Communication between ICGC and municipalities

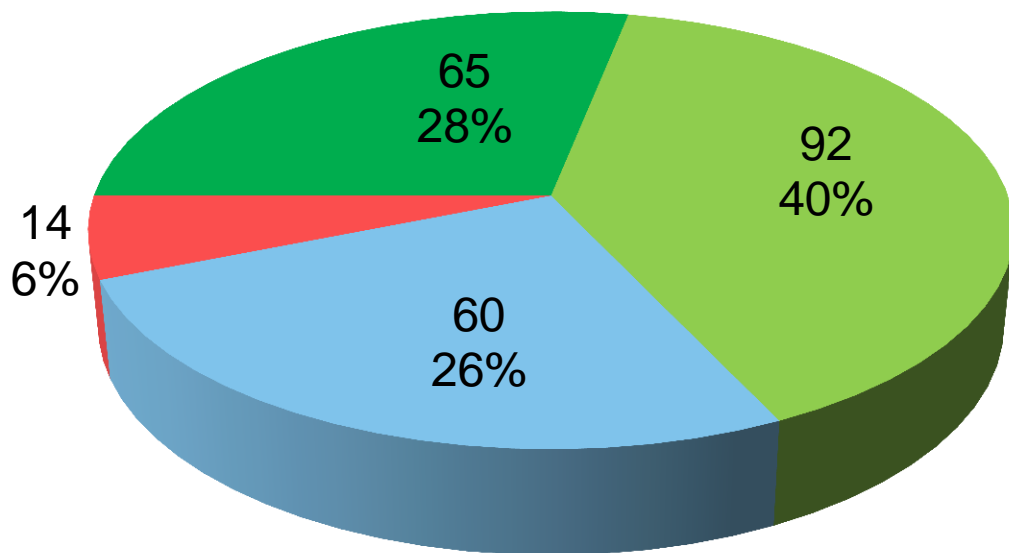
Municipalities:

- Provide the whole information to compile
- Solve doubts and conflicts
- Final approval

ICGC:

- Digitizing and compile the information
- Lack and inconsistencies detection
- Quality Control process
- Review names and standardization proposal

Results so far



Municipalities

- Update Finished + managing Register
- Update Finished
- Update in process
- Pending

Collaborative work

Strengths

- Current, valid and complete información
- The final product, that it's shared, has a lower cost
 - Globaly: without duplicities
 - Individually: each agency performs only certain phases
- Each phase is carried out by the more specialized agency
- Higher quality requirements
- Convergence of the databases of the different agencies

Collaborative work Weaknesses

- The collaboration involves additional tasks: inter-agency coordination, but in our case coordination has been fluent
 - ✓ complicity
 - ✓ confidence
 - ✓ flexibility



Immediate future

Nomenclature standardization

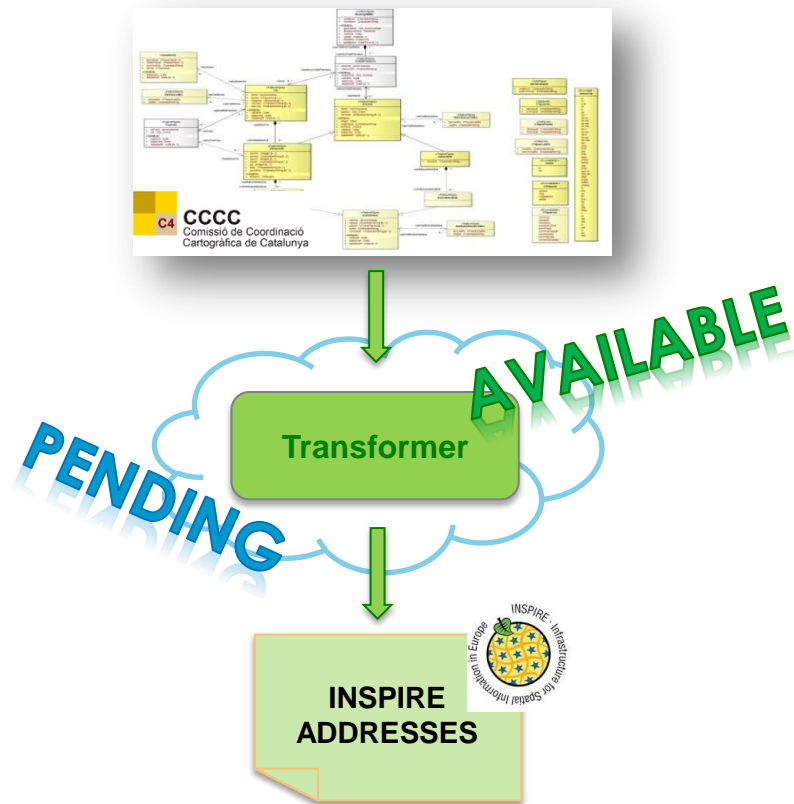
- A new phase is being incorporated into the workflow:
 - ICGC will carry out a proposal for standardization of street names
 - Municipalities will approve and validate it

Continuous synchronization

- It has started continuous update, and it is intended to perform continuous data exchange in both directions
- Meetings, analysis and definition of procedures and workflows
- Software development (during 2017)

Geoservicios INSPIRE

- BDMAC is INSPIRE compatible
- ICGC has developed a transformer from BDMAC data to INSPIRE Addresses
- The transformer will be published



Conclusions

Conclusions

- Achievements
 - ✓ Having a set of common data
 - ✓ Location of all houses / properties in urban areas and scattered places
 - ✓ Having an official register of addresses approved by municipalities
 - ✓ Having a solid base information for other applications for municipal management, other authorities and citizens
 - ✓ Provide public Geoservices for using this information

Conclusions



Thank you

Diputació de Lleida

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