

## TOPOGRAPHIC CARTOGRAPHY OF TARRAGONA 1:1 000

In November 2006 the ICC and the Diputació de Tarragona (Regional Council) signed a cooperation agreement in order for the ICC to do the digital 1:1 000 3D topographic cartography of various urban areas of municipalities in the province of Tarragona. The project is currently under way.

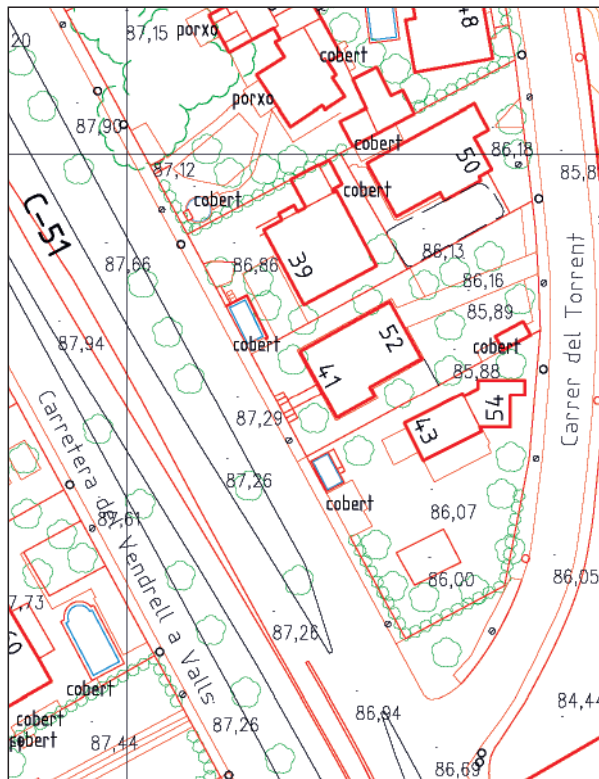
The agreement is a result of the need of this Regional Council of having a topographic cartography that reflects faithfully and in detail the territorial reality of the urban areas in its municipalities.

Additionally, during the term of the agreement with the Regional Council, and within the framework *Mapa urbà de Catalunya 1:1 000* project (MUC, Urban Map of Catalonia), the ICC will update 33 516 hectares of the Diputació de Tarragona territorial scope within the Programme Contract with the Departament de Política Territorial i Obres Públiques (Regional Planning and Public Works).

The ICC will take all the necessary steps so that both institutions provide each other the cartography they already own so as to avoid duplicating efforts.

**The term of the agreement is 2006-2009**

2006	1 053 ha
2007	2 305 ha
2008	5 182 ha
2009	6 789 ha
DPTOP	33 516 ha
<b>Total period</b>	<b>48 845 ha</b>



## DATABASE OF STREETS IN CATALONIA

During the years 1999-2005 an agreement was signed with the Departament d'Interior (Home Affairs) to create a model that enabled the collection of data on the streets in Catalonia. This model consists of two main entities: streets and crossings, and their relationship.

The objective of this database is to provide the necessary information to normalize and geocode postal addresses.

The names of the streets and the building numbers were obtained from maps provided by the city councils, from data collected with field work, from topographic cartography 1:1 000 by the ICC and from commercial street guides. The INE street code and the population entity (the *llogaret*, i.e. a small village with no city council) are taken from the *Callejero del censo electoral* (Electoral roll street guide) of the Instituto Nacional de Estadística (INE, National Institute of Statistics). In order to obtain this information various agreements were signed with several city councils, the Diputació de Barcelona and the Mancomunitat de Municipis de l'Àrea Metropolitana de Barcelona (Association of Municipalities of the Metropolitan Area of Barcelona).

The layout of the street (street axis) is digitalized on 1:5 000 topographic database, on a 1:5 000 orthophoto or on a 1:1 000 cartography. The solution adopted for villages of less than 500 inhabitants was to assign the streets included in the INE tables for each village in the municipality to a single characteristic site. The official names of the streets are used.

### SUMMARY

Topographic cartography of Tarragona 1:1 000

Database of streets in Catalonia

Topographic maps of Catalonia 1:450 000  
and 1:100 000 (in relief)

2007 ICA award

Photographic exhibition: "The Peru of Reparaz: The view  
of the geographer and heritage sites"

Regional atlases of Catalonia: Cerdanya and Baix Empordà

Digitalization of the Cartoteca de Catalunya collection

Catalonia Road Map 1:250 000 (5a edition)

25 years of ICC with more than 1 000 cooperation  
agreements

Commemorative book of the 25 years of ICC

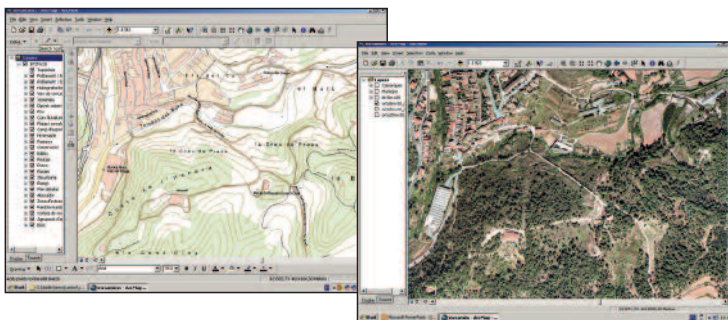
1 000 000 cartographic downloads

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## TOPOGRAPHIC MAPS OF CATALONIA 1:450 000 AND 1:100 000 (IN RELIEF)

In July 2005 the ICC published the *Mapa topogràfic de Catalunya 1:450 000* (in relief), and in February 2006 it started the *Mapa topogràfic de Catalunya 1:100 000* series, also in relief, with the publication of the first *comarca*: Maresme.

**“THE ICC PUBLISHES FOR THE FIRST TIME A RELIEF MAP OF CATALONIA WITH ALTIMETRIC CONTINUITY: EARTH-SEA”**

The map 1:450 000 (in relief) is the first map produced by the ICC where the relief is continuous: earth-sea. This allows viewing, comparing and touching the relief and height of both surfaces. The altimetric scale is 1:150 000.

The Maresme topographic map 1:100 000 is the first relief map of a *comarca*. Its objective is to express the geographic image of the *comarca* which is as faithful as possible to reality showing the original location of the planimetric elements on the relief. Its altimetric scale is 1:33 000.



## 2007 ICA AWARD

The 23rd International Cartographic Conference was held in Moscow (Russia) from the 4th to 10th August 2007.

This biannual conference is promoted by the International Cartographic Association (ICA) and deals in depth with the main disciplines related to cartography, remote sensing and geographic information systems.

The participants are renowned experts of the cartographic community, students showing their academic work, representatives of the national map agencies and companies working in these disciplines.

**“THE OFFICIAL COMMITTEE OF THE ICA GRANTED AN AWARD TO THE MAPA TOPOGRÀFIC DE CATALUNYA 1:450 000 IN THE RELIEF AND GLOBE MODELS CATEGORY”**

This is the eight consecutive conference where the ICA members give a prize to our cartographic products, and this is the tenth prize the ICA has granted us.



## PHOTOGRAPHIC EXHIBITON: “The Peru of Reparaz: The view of the geographer and heritage sites”

Exhibition consisting of 20 photographs from different places in Peru taken by the geographer Gonçal de Reparaz (1901-1984).

The exhibition shown at the ICC from the 2nd to 11th October 2007 has been organized by the Biblioteca Nacional del Perú owing to the presence of Peru in Bar-

celona as a guest to the 25th Book International Fair LIBER 2007.

In the opening ceremony were present Mr. Oriol Nel·lo Colom, Secretary for Territorial Planning at the DPTOP and the Ambassador of Peru in Spain, Mr. José Luis Pérez Sánchez-Cerro, who participated in a panel session that paid tribute to the figure of Reparaz.

This cooperation between Catalonia and Peru is due to the fact that the bibliographical collection and personal archive of G. de Reparaz, coming from the family home of his daughter María del Carmen de Reparaz, was deposited in 2005 at the Cartoteca de Catalunya of the ICC (Map Library).





## REGIONAL ATLASES OF CATALONIA: Cerdanya and Baix Empordà

The ICC and the Diputació de Girona published, between May and June 2007, two new volumes of the *Atles comarcal de Catalunya*: Cerdanya and Baix Empordà, in CD-Rom format. With these two atlases, there is now a total of five volumes published in digital format.

The application developed for this product allows to view directly the 1:50 000 topographic map and the 1:25 000 orthophotograph of the *comarca*.

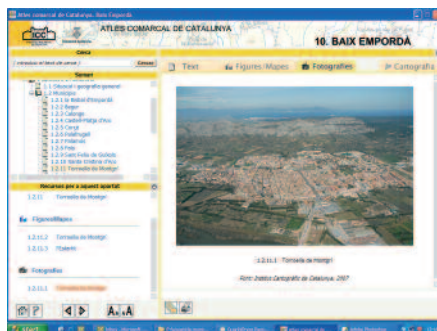
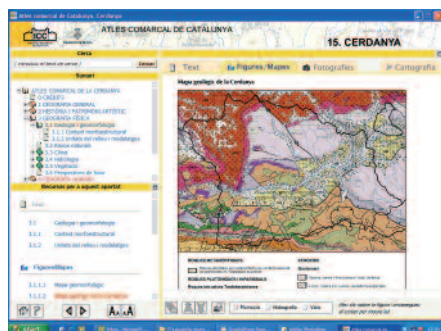
The following enhancements have been implemented to the *comarques* of Cerdanya and Baix Empordà:

- The possibility of viewing the raster cartography of all Catalonia through the connection to the VISSIR application of the ICC: 1:5 000, 1:10 000, 1:25 000,

1:50 000 and 1:250 000 topographic maps; 1:5 000 and 1:25 000 orthophotographs; 1:250 000 satellite image, and 1:50 000 and 1:250 000 geological maps.

- Access to the metadata catalogue of the Infraestructura de Dades Espacials de Catalunya (IDEC, Catalonia Spatial Data Infrastructure), which collects all the territorial data available about the district.
- The inclusion of the section "Know more", which is a list of links to other webs that complement the information in the atlases.

The volumes of Gironès and Selva will be published shortly.



## DIGITALIZATION OF THE CARTOTECA DE CATALUNYA COLLECTION

The Cartoteca de Catalunya (CTC) started in 2002 the digitalization of its collection with a roll scanner. In 2007 a flat 2A0 scanner was acquired that has allowed to scan the most sensitive materials.

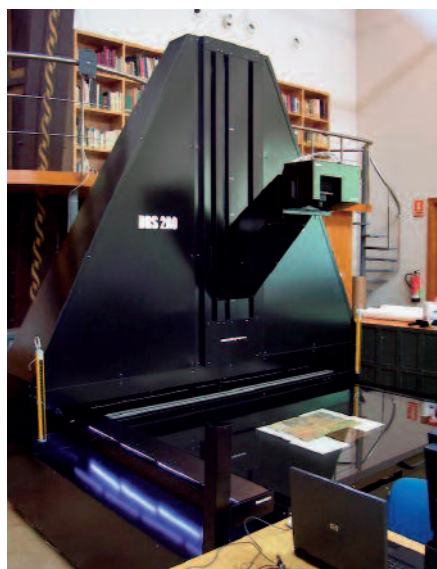
**"THE CTC HAS SCANNED 19 867 MAPS IN FIVE YEARS (2002-2007)"**

Today 5 000 digital maps and photographs can be viewed and downloaded at high and low resolution thanks to the new online viewing programme.

The photographic library has a specific plan for digitalizing its whole collection of photographs. In the mid 1990s the ICC started the process of digitalizing its aerial photographs integrated in the cartographic process of production of the ICC. In 1999 the digitalization was complete for all production, and the photographs are both in analogical and digital format as of this year.

Similarly, the ICC started digitalizing its old photographic collection, so a large number of the 1940-1960 negatives are also available in digital format.

**"THE DIGITAL PHOTOGRAPH LIBRARY CONSISTS OF MORE THAN 200 000 FILES OF VERTICAL AERIAL PHOTOGRAPHS"**



## CATALONIA ROAD MAP 1:250 000 (5th edition)

The ICC published in May 2007 the 5th edition of the *Mapa de carreteres de Catalunya 1:250 000*. In this map, the road information is complemented with tourist information as well as information about the different sights. This edition includes new cartographic data to offer a more comprehensive product to tourists and make the map more user-friendly.

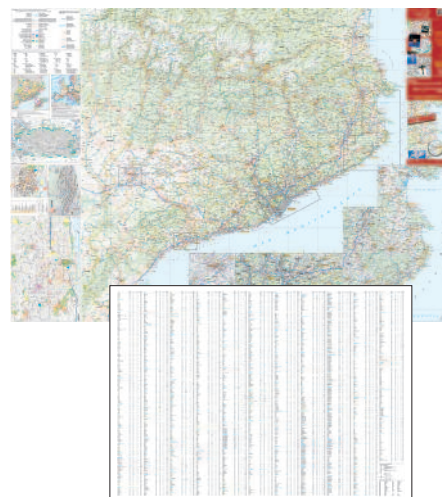
**"THIS NEW EDITION ALSO CONTAINS ADDITIONAL CARTOGRAPHIC AND GRAPHIC DATA AND A TOPONYMIC INDEX"**

The updated map contains information from the Catalonia Transport Infrastructure Plan approved in July 2006, as well as the current road naming system.

Besides the four cartographic windows shown in previous versions for the cities of Barcelona, Girona, Lleida and Tarragona, a new window has been included for the Costa Brava region. Two tourist maps are also included: a 1:25 000 map of the city of Barcelona with an enlargement of the *Ciutat Vella* (old quarter) and a global map of Barcelona with its ring roads. A map of the Barcelona subway network is also included.

Two schematic maps show the distances in kilometres both at the level of Catalonia and Europe.

On the back of the road map there is a toponymic index that includes the geographic concepts: orography, hydrography, urban areas and sights.



## BRIEF NOTES

COMMEMORATIVE BOOK  
OF THE 25 YEARS OF ICC

In October 2007 the ICC published a book commemorating the 25 years of its creation (1982-2007).

The book illustrates the milestones reached by ICC with its large institutional series and maps and with the projects it has carried out in Catalonia, Spain and abroad, as well as with the developmental projects and services provided by ICC.

Additionally, the book shows its history, its legal framework and the evolution of cartographic technologies.

Finally, a list of awards granted to ICC is included.

1 000 000 CARTOGRAPHIC  
DOWNLOADS

In April 2007 we exceed the figure of 1 000 000 downloads from the ICC website ([www.icc.cat](http://www.icc.cat)) of topographic maps and orthophotos at different scales since November 2003, when free information was made available online.

The most popular products are the 1:5 000 orthophotos and topographic maps followed by these products at smaller scales.

COMISSIÓ DE COORDINACIÓ  
CARTOGRÀFICA DE CATALUNYA

According to Law 16/2005, of 27th September, of cartographic information and the ICC it grants the official character to the cartography elaborated by the ICC on the territory of Catalonia as well as the cartography developed by other administrations and public or private entities in Catalonia will be deemed as official provided it complies with the rules and standards established by the Comissió de Coordinació Cartogràfica de Catalunya (CCCC), registered in the Registre Cartogràfic de Catalunya, and providing that it is properly updated for its potential users.

In this regard, the Resolution PTO/568/2007 of the 26th February publishes the decision of the CCCC on the official standards to be met for the preparation of the following cartography: 1:1 000 and 1:2 000 topographic cartography, v.2.1; 1:5 000 topographic database of Catalonia, v.2.0; 1:50 000 topographic database of Catalonia, v.3.1; 1:5 000 orthophotos and orthomaps of Catalonia, v.5.0.

The documents included in these standards and regulations are available for downloading:

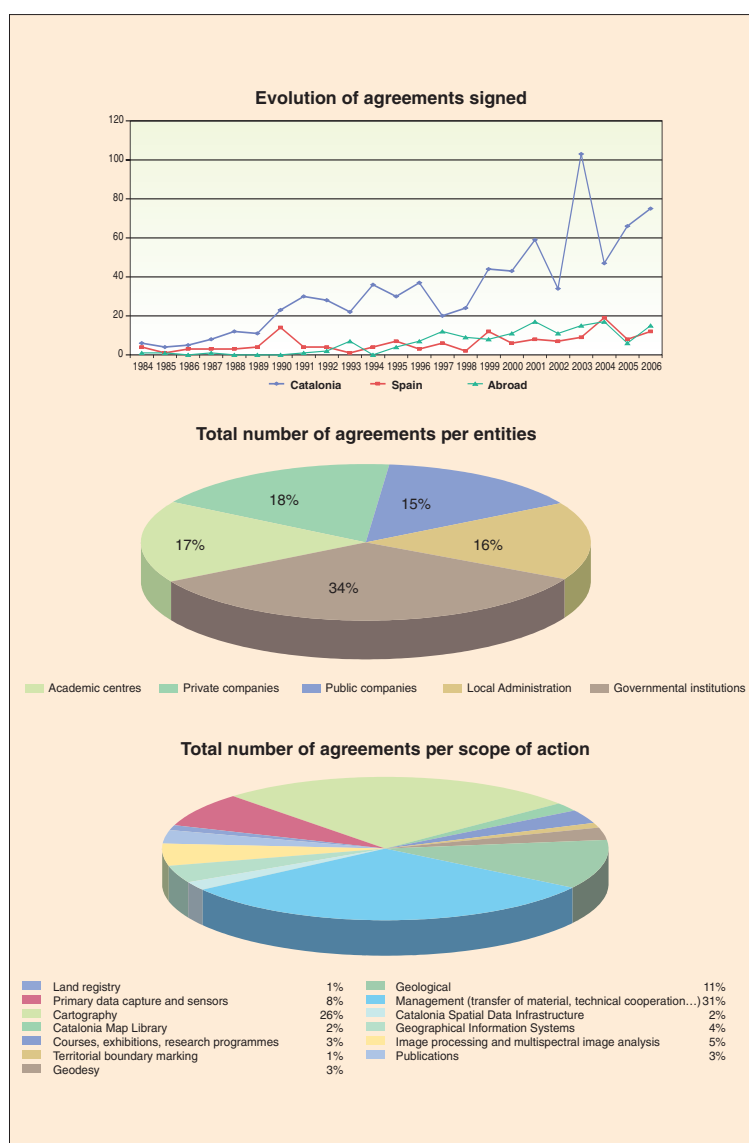
<http://www.cccartografica.cat>

25 YEARS OF ICC  
WITH MORE THAN 1 000  
COOPERATION AGREEMENTS

In addition to its institutional cartographic maps and collections, the ICC carries out projects for other Catalan, Spanish and foreign institutions. These projects are developed through contracts and agreements.

In 2006 the 1 000th agreement was signed. This milestone evidences the large number of links established with private, public, national and international institutions for the execution of productive and developmental projects.

The ICC took up in 1997 the tasks of the Catalonia Geological Service. The following charts show the number of agreements signed by this Service between 1997 and 2006 (year when the Catalonia Geological Service became independent of the ICC).



1,050 agreements have been signed in 25 years (761 with Catalan entities, 144 with entities from the rest of Spain and 145 with foreign entities).

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