

## National CERCO Work Group VIII and EUREF

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### 1. What is CERCO

CERCO is the abbreviation of the French term "Comité Européen des Responsables de la Cartographie Officielle". Its members are the appointed heads of 37 European National Mapping Agencies (NMA) or their nominated

deputies. The Committee is administered by its Secretary General, JOHN LEONARD, in collaboration with the President, a CERCO Member appointed for a two-year term. The mission of CERCO is helping its members to meet both nation and Europe-wide needs for their mapping and geospatial information.

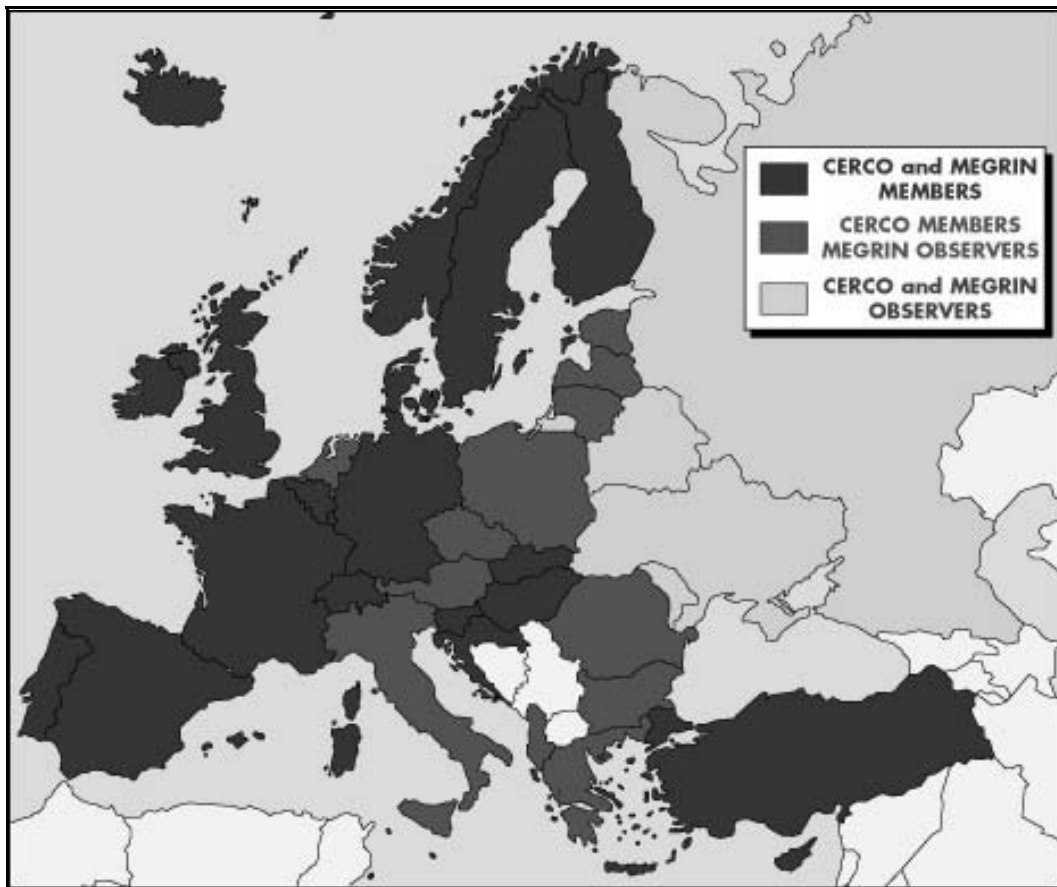


Figure 1: CERCO and MEGRIN members

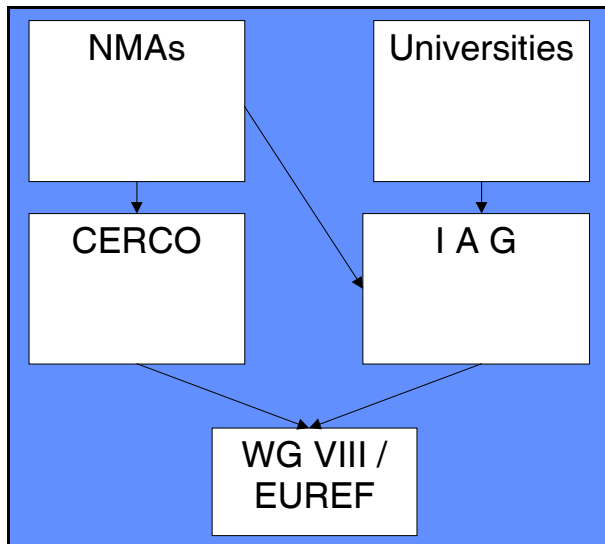
CERCO holds at least one General Assembly each year, and supports a number of on-going Work Groups studying such objects like copyright, pan-European geodesy, the maintenance of databases, and quality management. For further details see its web page [www.cerco.org](http://www.cerco.org).

### 2. CERCO Work Group VIII, Geodesy

Some 12 years ago CERCO formed a special Work Group which was to deal with all topics concerning geodesy. At that time the upcoming Global Positioning System was the main subject of interest. The first Chairman of the Work Group was HERMANN SEEGER from the BKG (Bundesamt für Kartographie und Geodäsie), Frankfurt, Germany. Almost at the same time, in the scope of the International

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Association of Geodesy, a new Subcommittee EUREF was formed which had the well-known goal of establishing and maintaining a new, state-of-the-art reference system for Europe. In this situation H. SEEGER wisely decided to merge the two groups into one. Whereas in CERCO only NMAs are represented, the Subcommittee EUREF includes representatives of the universities as well – an important fact in view of the scientific problems encountered in this field. In other words, CERCO WG VIII is a subset of the EUREF Subcommittee comprising the representatives of the NMAs.



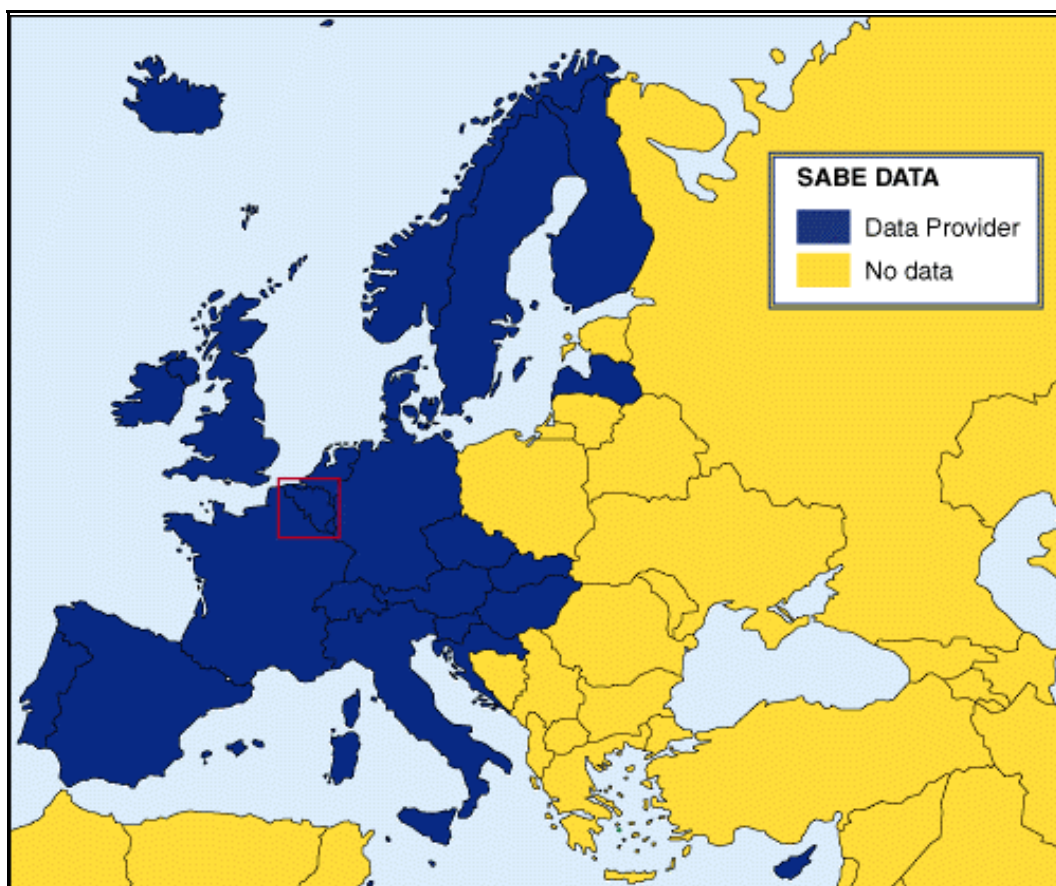
This approach has proved extremely successful in the past. In many countries the tasks are shared between the two groups. The universities are more involved in research and development and the NMAs routinely run the permanent GPS stations, data centres, etc. CERCO regularly supports the work of the Subcommittee by sponsoring travel expenses for

- participating in the EUREF Symposia
- collecting data, e.g. height data in Eastern Europe.

### 3. MEGRIN

MEGRIN stands for "Multipurpose European Ground Related Information Network" and is a company under French law. It was created in 1993 as a subsidiary of CERCO to help National Mapping Agencies meet the increasing demand for cross-border products and services. Today 20 CERCO countries are also members of MEGRIN. The others have the status of observers and contribute periodically (see Fig. 1).

One of the first products of MEGRIN is the data set SABE (Seamless Administrative Boundaries in Europe) which contains the vector data of the boundaries of the municipalities, districts, cantons and countries of most of Europe.



Other data sets are in production. One of them is LaClef, which has the following main objectives:

- To investigate the conditions necessary for the online supply of data from National Mapping Agencies, particularly copyright, security of data, and supply terms and conditions;
- To improve the existing database of geographic information (GI). This will include the introduction of a multi-lingual interface and the use of profiles and keywords to facilitate searching;
- To provide high-resolution metadata (map-sheet level), index maps, sample data and prototype services;
- To provide metadata for complementary GI data sets and to link the MEGRIN metadata service with other related metadata services, i.e. for geological surveys;
- To create a prototype system for demonstrating the on-line delivery of data by e-commerce from two distributed databases.

For details see [www.megrin.org](http://www.megrin.org).

#### 4. Spatial Reference Workshop

On November 29 and 30, 1999, MEGRIN organised a workshop in Marne-la-Vallée, France. The main objective was to examine the options and issues related to a European Reference System for spatial information. Exact knowledge, understanding, management and subsequent processing of the co-ordinates of any GI data set is one of the central aspects of cross-border GI interoperability. Therefore, the Joint Research Centre, on behalf of the European Commission, requested MEGRIN to organise a workshop with a panel of relevant experts whose objectives were:

1. To advise the European Commission on data specification related to spatial referencing systems;
2. To identify and assess, at the European level, the issues involved;

3. To identify the relevant actors for addressing them;
4. To eventually draft an initial action-plan.

The following representatives from EUREF/CERCO WG VIII took part: CLAUDE BOUCHER, PAUL DUNKLEY, ERICH GUBLER, JOHANNES IHDE and GEORG WEBER.

Some of the major conclusions of the workshop were the following recommendations to the EC:

- To adopt ETRS89 as the geodetic datum for the geo-referenced co-ordinates of its own data;
- To promote the wider use of ETRS89 within all member states;
- To adopt the results of the EUVN/UELN (now EVRS) initiatives when available, as definitions of the vertical datum;
- To promote the wider use of the European vertical reference system within all member states.

The proceedings are available under

[http://www.megrin.org/NEWS\\_AND\\_EVENTS/recommendations.pdf](http://www.megrin.org/NEWS_AND_EVENTS/recommendations.pdf)

#### 5. Conclusions

1. This means that ETRS89 and EVRS become de facto standards for the European Union, a major breakthrough in the promotion of our work!
2. It also means that we urgently need transformation formulae and the capability to compute transformations between the national systems and these new standards, at least with an accuracy of 1 to 2 meters. Therefore, this information has to be collected, validated and made available as soon as possible.

The EUREF Technical Working Group has started a project for this purpose. Johannes Ihde will report on this in one of the following reports.

***I urgently ask the representatives of the National Mapping Agencies to support this important activity.*** It is vital for the acceptance of our work.