

Achievements, Strengths and Weaknesses of a Two-level Organisational Model: CERCO-MEGRIN

Performances, Forces et Faiblesses
d'un modèle organisationnel à deux niveaux

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Summary

CERCO¹ the mother, MEGRIN² the child? CERCO the forum, MEGRIN its commercial branch?

The relations between the two faces of the organisation of the European Mapping National Agencies may be approached from various points of view.

The creation of MEGRIN came from the need to provide CERCO, the forum of the Heads of 35 European National Mapping Agencies, with an operational and commercial branch. The original objective, still relevant, was to establish a permanent body:

- serving as a unique focal point for the distribution of information on products and services available from within its member organisations;
- and suitable for the study, creation, maintenance and distribution of pan-European mapping products.

MEGRIN has fulfilled the first level of its objectives with the completion of SABE³, and of the GDDD⁴. The second level of implementation is now within project phases, with PETIT, a feasibility study for a pan-European topographic database at scale 1:250 000, and La Clef, aiming at an upgrade of the GDDD metadata service.

The CERCO-MEGRIN model is unique, and has proved its worth by its practical achievements. It is more and more recognised by external partners who find in that structure the focal point they often need whenever cross-border geographic information is required. However, risks do exist, most of them a consequence of MEGRIN's success and rapidly growing level of activities. From this awareness, the current model implementation must be checked against its objectives and the rapidly changing market place in which it operates.

¹ CERCO : Comité Européen des Responsables de la Cartographie Officielle

² MEGRIN : Multipurpose European Ground-Related Information Network

³ SABE : Seamless Administrative Boundaries of Europe

⁴ GDDD : Geographic Data Description Directory

CERCO

The origins

In 1979, the then Director General of Institut Géographique National of France (IGN-France), Mr. Mayer had the following reasoning: 'All my best staff are attending world-wide symposia, conferences, workshops, and so on. They meet with their foreign colleagues, exchange ideas and create common new concepts, while me, sitting at the top of the pyramid, do not even know who my immediate neighbours are'.

Consequently, IGN-France invited the heads of its neighbouring NMA⁵s to a meeting in June 1979. Enthusiastic discussions followed, and all participants agreed on meeting regularly in order to set up an effective and long lasting collaboration in the field of cartography.

The actual conception of CERCO took place in January 1980 in Brussels, Belgium, where the same group was invited by Mr. Robert Verberckt, then Director General of Institut Géographique National of Belgium. Four decisions were made.

- 1 To use both French and English languages as official languages of the group.
- 2 To appoint as Secretary General of the group Mr. Joe Mousset, then technical advisor and public relation officer of Director General of IGN-Belgium.
- 3 To give a name to the group; the name was later created by Jean Gateaud of IGN-France, who proposed the acronym C.E.R.C.O. standing for 'Comité Européen des Responsables de la Cartographie Officielle' (CERCO).
- 4 To inform the European agencies and officials of the existence of the group and of its potentials in the field of mapping.

Six more months of gestation passed before the formal legal birth of CERCO. The group was created in January, but it soon became manifest that it could not play a major role in Europe without official recognition. The first step was then to write and adopt the CERCO by-laws and have them registered. That was the main result of the first Plenary Assembly convened in June 1980 in Madrid, Spain, by Sr. Rodolfo Nuñez de las Cuevas, then Director General of Instituto Geográfico Nacional of Spain. Belgium, France, Germany and Spain agreed then on the creation of CERCO, whose main goal was defined as being:

'Mutual information, consultation and co-operation in the field of cartography as defined by the United Nations, with the exception of military mapping and hydrography'.

A short time later, in November of the same year, through the support of Dr. Jean-Pierre Massué, CERCO was invited to the Parliamentary Assembly of the Council of Europe and accepted and registered as one of its Working Groups.

Now on firm legal and political grounds, practical tasks could begin. The first working group of CERCO was immediately created, to address one of the important issues that challenges all mapping agencies. WG 1 on 'Copyright in the field of Cartography and Remote Sensing' was initially chaired by Great Britain and is still very active to the present day.

⁵ NMA : National Mapping Agency

More working groups followed during the following 20 years of existence, and membership has expanded regularly to bring CERCO to its present pan-European extent.

Membership

CERCO started as a very small club of neighbours. It has developed to include today representatives of most European countries, from Russia to Portugal, and from Iceland to Cyprus. In principle, CERCO members are the Heads of the National Mapping Agencies. However, each country has its own specific setting and NMA of country A may greatly differ from NMA of country B in nearly all aspects, that is, size, remit and mission, regulatory authority and so on.

Exceptions also exist. For example, the United Kingdom is represented by Ordnance Survey of Great Britain and by Ordnance Survey of Northern Ireland. A different set-up exists in Germany, a federal state, which is represented by three organisations, BKG (Bundesamt für Kartographie und Geodäsie), previously IfAG, the federal mapping agency, one LVA (Ländesvermessungsamt: state mapping agency) of Northrhine-Westfalia, and the AdV (Arbeitsgemeinschaft der Vermessungs-verwaltungen: association of the LVA of the 16 states).

Member organisations are grouped into four categories, according to their financial contributions.

Potential new members are accepted as observers for two years, during which time they neither pay fees nor have voting rights. The status of observer can not be prolonged over two years.

The General Assembly

The main decisional body of CERCO is the General Assembly that meets once a year, generally in September. If a small meeting room was sufficient in the infancy of CERCO, General Assemblies of today need professional seminar facilities, as they tend to gather some hundred people for three days. Needless to say that such a big gathering would not be able to achieve practical results, were they not supported by the preparatory and organisational work of dedicated persons and teams.

The Executive

Three elements comprise the executive of CERCO:

- **The President** holds office for 2 years and is selected from amongst CERCO's Members. The honour is offered in alphabetical order of the countries' names and thus France which succeeded Finland will be followed by Ireland; Greece and Hungary having declined the opportunity.
- **The Secretary General** is contracted for a period of 5 or more years. In 1996 John Leonard, past Deputy Director General of Great Britain's Ordnance Survey, succeeded Joe Mousset – who had held the post for the previous 16 years.
- **The Management Board** which comprises the President and his immediate predecessor or successor plus 3 elected members provides policy direction which the President and Secretary General then carry out.

The working groups

Much of the work of CERCO is carried out by its Working Groups. These are groups created on an ad-hoc basis to deal with on-going topics. They are composed of staff from CERCO members, involving as many as twenty people. CERCO has created a number of such WGs over the years:

- I Copyright and relations with private sector (now legal and economic affairs)
- II Standardisation in digital cartography (1:1,000,000 scale)
- III Advisory group to the president
- IV Carte de la Pollution de la Nappe Phréatique Rhénane
- V European Territorial Data Base
- VI Education and training
- VII Database specifications for road navigation
- VIII Geodesy and GPS
- IX Updating databases
- X Preliminary work on MEGRIN
- XI Quality

The evolution of these various groups varies widely, as does their scope and objectives. WG1, VIII, IX and XI are still active while the others have either completed their objectives or are no longer relevant.

In addition CERCO undertakes studies and currently these include 'The benefits and usage of geographic information', 'A survey of NMAs', and the 'Pros and cons of membership of OGC'.

MEGRIN

A short history of MEGRIN

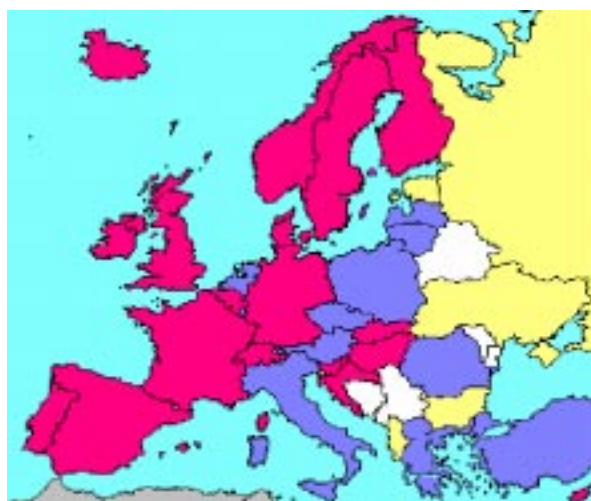
Following the report on MEGRIN from WG X at the 1991 plenary assembly of CERCO in Southampton, the *Groupe Technique Permanente* (GTP) in French, *Permanent Technical Group* in English, was created in Paris in September 1991, in order to start investigating the issues related to pan-European Geographic Information (GI had already superseded the previous term of 'Cartography'). Three persons comprised the GTP: Paula Ahonen (Finland), Neil Smith (GB) and François Salgé (France).

The initial findings of the GTP were that the creation of pan-European datasets by assembling nationally produced GI databases would not be seriously hindered by technical limitations. Certainly technical difficulties existed but none for which the solution was perceived as out of reach. What was regarded as the main issue was that such a pan-European approach might encroach with the individual national legal frameworks, commercial policies or organisational structures and mechanisms. Consequently, it was decided to create a stronger organisational framework suitable for addressing those issues. Preparation of such a proposal supported by a sound business plan was then tasked to the GTP.




As a result, the 'MEGRIN Group' was created in Helsinki (Finland) on 15 June 1993 with the signing by 17 CERCO members of a Memorandum of Understanding (MoU). The MoU followed the GTP recommendations and gave MEGRIN its mission and objectives, an organisational structure and a budget. However, its legal identity was still considered too loose for its intended objectives, and a new step was made by registering MEGRIN as a Groupement d'Intérêt Economique (GIE) under French Law in September 1995 with the signing of the GIE agreement in Budapest.

The GIE MEGRIN of 1999 counts nineteen full members, and it is proposed that several other CERCO members, convinced of the success of MEGRIN, will also become members by the year 2000.

Membership



Above figure : Membership as of the year 1998

	MEGRIN members
	CERCO members, MEGRIN observers
	CERCO & MEGRIN observers

Members of MEGRIN need to be firstly CERCO members. All CERCO members and observers are by default MEGRIN observers. To become an active MEGRIN member, with full voting rights, an organisation has to sign the GIE Agreement, and to pay an annual fee.

The relatively simple arrangement for calculating CERCO membership fees was not considered appropriate for the bigger budgets required by MEGRIN. A more complicated formula involving each country's GNP has been devised and further refinements are in hand. This results in a much greater diversity of contributions than is the case for CERCO subscriptions.

The Management Board

The MEGRIN General Assembly comprises one representative of each of its members. Representative of the other CERCO members are invited as observers. The MEGRIN General Assembly meetings are held once a year, jointly with the CERCO General Assembly, as they convene the same participants.

In the course of the year, MEGRIN activities are monitored by its Management Board composed of six people representing the principal contributors. The interests of all CERCO members are looked after by the Secretary General who attends as an official observer.

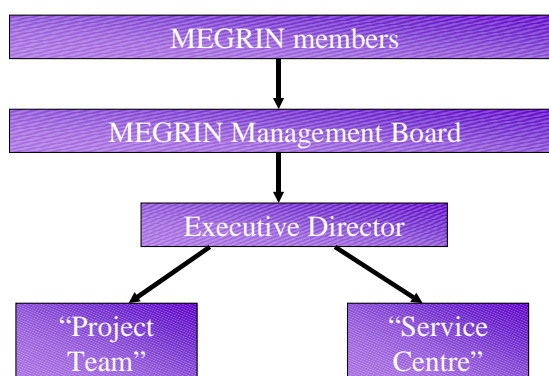
The Management Board currently meets about six times a year.

The operational units

The initial MEGRIN organisational chart was very simple, and suitable for its early stages, providing the required highly flexible pattern for small sized teams.

The Executive Director is mandated by the Board for day-to-day management of the activities. He directly manages the Project Team and shares the same premises provided by IGN-France at Marne-la-Vallée (previously at St-Mandé, up to March 1998). The Project Team started with two members and is now composed of five members, plus a secretary.

The Executive Director and the Project Team are all staff of CERCO member organisations, generally seconded to MEGRIN for a two-year term.



Above chart: original simple MEGRIN organisational model

The Service Centre is located in BKG's office (Budesamt für Kartographie und Geodäsie, previously IfAG) at Frankfurt-am-Main, Germany. It is composed of an average of three persons from BKG staff.

Distribution of the tasks between the two teams has been very flexible, with a tendency for the Paris team to specialise in project management, while the Frankfurt team tackles technical issues and data processing.

A milestone

The year 2000 may be a significant milestone in the history of MEGRIN. Not only will 2000 mark the twentieth anniversary of CERCO, but it will also be the fifth anniversary of the MEGRIN GIE, and the end of its first life cycle, since the initial agreement was signed in 1995 for a duration of 5 years. Thus the question of whether to continue, to terminate or to change MEGRIN will have to be formally asked and answered at the 2000 MEGRIN General Assembly.

Consequently, now is certainly the right moment to start reviewing MEGRIN's past achievements, today's objectives, and future organisational pattern. To make an objective evaluation it is best to approach MEGRIN from three complementary perspectives.

The organisation today

MEGRIN status, position and image

Starting from being a working group of three persons, MEGRIN is now an organisation of some ten permanent staff divided between two teams, with additional limited short-time resource support from its members. From the initial concept of a 'working group' (part-time distributed resources) it became a 'project', and is still sometimes referred to as such. However, this is no longer consistent with the scope of today's activities. MEGRIN needs a more professional work organisation and image to produce, update and license commercial products and to run a metadata service on the Internet.

Important efforts in communication and marketing have been made in 1997 and 1998 to develop the image of a professional organisation. These efforts include the development of the web site, papers and presentations in conferences, a new logo and leaflets, the development of a network of contacts in the GI professional community. Such efforts have not been wasted, as MEGRIN is becoming much better known as a focal point for matters related to pan-European GI and to the NMAs. Similarly, the demand for SABE increases, as well as the revenues for MEGRIN and its members.

There may be potential risks associated with developing a strong identity. No longer seen as dependent, MEGRIN was beginning to be viewed by its members, and even by its mother CERCO, as an independent organisation. The original synergy was in danger of disappearing, duplication of efforts became probable, and without the necessary coordination there was even a risk of conflicting actions.

This danger has been recognised in time, and is now hopefully contained following a review of the operational relationship between CERCO and MEGRIN. The gap between the two levels of the organisations has been bridged by two decisions, implemented before the end of 1998.

Firstly, MEGRIN Management Board meetings will regularly be held jointly with the CERCO Management Board meetings. As a complementary measure, the executive of one organisation will always be invited in the Board meetings of the other.

Secondly, MEGRIN staff will systematically participate in the relevant activities of the CERCO Working Groups, and these will review MEGRIN papers, proposals, legal and commercial documents whenever appropriate.

Thus, MEGRIN will come back into full collaboration and consistency with all activities mandated directly by CERCO. The gap is being bridged. But the distance between MEGRIN and its individual members remains a more subtle issue and one which cannot be solved as easily. Staffing provides one of the possible remedies.

Staffing

The methods by which MEGRIN is staffed are different for the two operational teams.

The Frankfurt team (the Service Centre (SC)) is an independent team directly staffed by BKG from its own human resources. It is thus in fact better described as a particular BKG unit specialised in pan-European issues, that works for MEGRIN. Links with the member NMAs exist, but in the present work pattern the SC does not have the same pan-European flavour as the Paris team.

The Paris team, on the other hand, is composed of staff seconded by member organisations. They are selected from the candidates proposed by member NMAs when a call for personnel is issued, typically twice a year.

The rationale behind this policy is the benefits of a two-way exchange.

When the selected staff come to MEGRIN, they bring to the project team not only years of professional experience, but also most importantly the particular company culture of their parent organisation. At the end of a typical two-year secondment, the returning staff take back a pan-European experience, together with a flavour of the developing MEGRIN culture.

It is common for previous MEGRIN staff to keep in touch professionally and thereby to provide a very useful continuity.

This mode of staffing is certainly a remarkable way to preserve and improve the links between MEGRIN and its member NMAs. However, it can be invalidated in two ways.

The first, and most critical, is the current difficulty in finding appropriate staff. This difficulty has grown with the development of the Project Team from two to five persons. Given the size of the reservoir, obtaining 2-3 highly qualified persons needed for the highest responsibilities within MEGRIN team is usually possible. But getting more has been increasingly difficult, and we will see that this situation has brought us to envisage a different organisational model.

The second perspective that does not support this mode of staffing is the economical one. Staff seconded to MEGRIN are generally expensive. Further, as the staff turn-over is rapid, and the MEGRIN work pattern rather irregular, the unproductive starting-up periods are an important charge on each seconded person.

For these reasons, MEGRIN has considered recruiting new staff from the general market. However, the financial justification for such a choice is doubtful, and it could result in a heavy cost penalty to MEGRIN, directly and indirectly.

Directly because of the lack of flexibility inherent in direct recruitment. Indirectly because of the obvious widening of the gap between MEGRIN and its members, and the difficulty in dealing with those important issues that require trust and confidentiality, such as pricing policies, commercial strategies, and so on.

Commercial objectives and cost recovery

A discussion topic that comes up most often is 'Is MEGRIN's main objective commercial, that is, does MEGRIN exist mainly to make money ?'

Answers to the question vary from 'yes', to 'no, not really', and include many 'yes, but...'

One major problem is the diversity of data policies between its member organisations, and the resulting difficulty in defining consistent data pricing and distribution policies. Some member NMAs are focused on cost-recovering strategies while others are more public service oriented. Some are even pure military agencies. Consequently, it is somehow expected that MEGRIN products should be commercially profitable, while not competing with the individual national products from which they issue.

To add to the confusion, we must not forget the still unclear policy of the European Commission in terms of public data, and more specifically in terms of geographic information. Two main policy papers are of interest, available today as discussion papers.

One is the Green Paper on *Public Sector Information*⁶, the other is *Geographic Information in Europe* commonly known as the GI2000 document⁷. The future of these papers and of other related initiatives is still, at the date of writing, only in the domain of pure speculation.

To return to the fundamental question. MEGRIN's foundation was backed with a business plan written in 1992 that predicted cost recovery within the first five years. We know that these expectations have not been satisfied, and that we are still, two years later, far from full cost recovery.

What happened?

Well, it was impossible back in the early nineties, without some powerful magic, to get a clear vision of how, and how fast, the GI sector would develop. Geographic Information Systems were still in their infancy, and Internet was as yet something on another planet (at least in our professional sector). MEGRIN activities have also been re-directed to options that were not designed in the initial plans. Budget has been spent on marketing and Internet related activities (such as the GDDD metadata service), that do not bring direct revenues. Also, plans of early creation of full size pan-European datasets have been replaced by more reasonable feasibility projects, such as PETIT.

Is the MEGRIN concept still valid?

This is a general question that probably cannot be answered globally, before reviewing the different activities of the last five years.

⁶ published by the European Commission DG13 available on Internet at : <http://www2.echo.lu/info2000/en/publicsector/greenpaper.html>

⁷ available at : <http://www2.echo.lu/gi/en/gi2000/discussion98.html>

MEGRIN achievements 1993-1998

SABE : the administrative boundaries

The Seamless Administrative Boundaries of Europe product has been the priority of MEGRIN since its origin in 1992. SABE has been through its definition phase, its project and development phase and has started its authentic commercial life only since 1997. However, 1997 revenues were still negligible, and achievements for that year were mostly commercial groundwork, the fruits of which started to be harvested in 1998.



Above figure : geographical extent of SABE

- Current extent (26 countries)
- The 5 new countries planned for next release

The creation of SABE involves the stitching together of the digital administrative boundary datasets provided by 26 different National Mapping Agencies.

The technical stitching is not a small achievement as the national data was initially provided in all sorts of formats, data models, co-ordinate systems. Today the specification has been stabilised and work at MEGRIN is easier as more and more NMAs provide data that are consistent with SABE specifications.

The commercial stitching is more of an issue, as the distribution policy of the unified pan-European dataset needs to look uniform, should not conflict with the national policies, and should conform to the market potential. MEGRIN managed to sign identical agreements with all 26 SABE source data providers that permit the GIE to licence the dataset to end-users, in whole or part, and directly or indirectly through distributors. Revenues of the licences are divided between MEGRIN, the distributor, and the source data providers.

The first version of SABE was a snapshot of the administrative situation of Europe on 1st January 1991. The date was chosen to coincide with the general census in many European countries, and the product requested by EUROSTAT⁸. A first update, the 1995 version, was released in 1997, and the second update, the 1997 version, will be released early in 1999. The next version is planned for 1st January 2001 (release end 2001, beginning 2002), to coincide with the general census that will be completed in early 2001 in most European countries.

Is SABE a commercial product?

Yes! Thanks to an improved marketing policy, SABE is now known for its potential applications of data visualisation, Internet geographical indexing, market research, and so on, and the number of satisfied customers is increasing.

We can also note a growing number of competitor products that confirm the validity of the decision to create SABE!

Is SABE a commercial success?

Yes, and no.

Yes, because production costs have become lower while income has increased. We expect to break even in 1999 and the same trend will be strengthened so that yearly benefits will continue to grow gradually.

No, not yet, as we are still a long way (at least several years) to full recovery of the initial investments of the 'project phase' which amount to more than a million Euros.

Is SABE more than a commercial product?

Yes, SABE has proven that MEGRIN and the NMAs can reach a common data policy, and can act to produce a uniform pan-European product that corresponds to a real market demand. For the first time NMAs have looked beyond their natural focus on national demand and specifics in order to provide the data that Europe needs.

PETIT : the 1:250.000 topographic dataset

For some of our members, PETIT is in essence what MEGRIN is all about.

PETIT is still in its project phase, co-funded by the European Commission within the Info2000 program of DG13. PETIT is about creating a fully consistent pan-European topographical dataset at the reference scale of 1:250 000. Still a feasibility study, PETIT will result in a series of important deliverables:

- A prototype dataset of some 150,000 km²
- An Internet demonstrator
- Legal assessments and model agreements
- A marketing plan
- Production plans

⁸ EUROSTAT : the Statistical Office of the European Communities

After a review of the deliverables by the Management Board, the product marketing plan will be presented to the CERCO and MEGRIN General Assemblies for decision on whether or not the full implementation of a PETIT based product should be supported or not.

If developed, PETIT will thus be the second commercial product of MEGRIN, and one that can be considered as the complete demonstration of the MEGRIN ability to create pan-European datasets based on source data provided by the NMAs.

Metadata : GDDD and La Clef

MEGRIN has also a mission of informing, of awareness raising. The GDDD service is the most visible activity in that domain.

The GDDD is a metadata service that provides on the Internet, free of charge, consistent descriptions and commercial contacts for the main digital mapping products of 22 European Mapping Agencies. It was the first implementation of the European standards of CEN/TC287, open to the general public since 1996. Some 3,000 pages of GDDD are consulted every month which prove users' interest for the service provided.

Although an unquestionable success, GDDD has to move with rapidly changing web technology. A new project, named 'La Clef' began in January 1999 and aims to develop the GDDD in terms of :

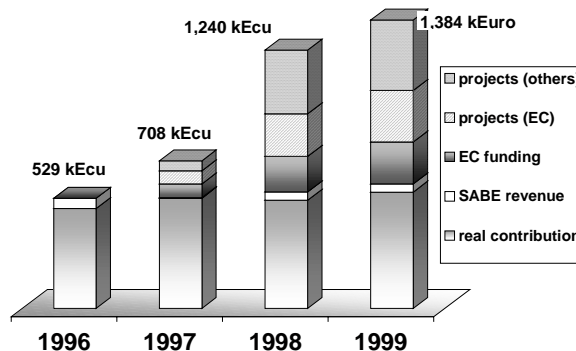
- quality and quantity of content, with higher resolution metadata, data samples, and a wider range of products;
- quality of service, essentially with a fully multilingual interface
- commercial application, with the development of an associated e-commerce facility.

This upgrading of the GDDD will have several major impacts on the running of the service.

- 1 It will obviously offer a much better, more complete service to the users, with more available information, and a facilitated access to the data itself;
- 2 Consequently, it will serve the interest of the NMAs, by its powerful cross-cultural marketing potential;
- 3 Finally, it may allow a more concrete measurement of its own usefulness and its possible future direction, with the evaluation of the e-commerce functions and results.

Success for MEGRIN?

How to measure success for an organisation like MEGRIN? Delicate challenge...



Above : the evolution of MEGRIN total budget showing a constant level of members' financial contribution for an overall increase of activities of some 160% over three years.

A seemingly objective criteria is overall cost-recovery because it can be expressed easily in figures of financial profit or loss. If brutally applied to MEGRIN, the situation might be evaluated as a complete disaster - most MEGRIN activities do not earn revenues.

Having only one 'real' commercial product, 95% of whose revenues are returned to the source data providers and the distributors, MEGRIN has problems building a positive commercial balance.

Further, the level of members' financial contributions has not decreased in the last 4 years, as the initial business plan led many to expect.

However, even with a 'bottom line myopia' attitude, a closer look at MEGRIN activities would show very positive signs. The actual level of activities has increased by 160% in three years, for a stable internal funding. The part of the external funding (or cost recovery) has increased in the same span of three years by 600%, from 10% in 1996 to 60% in 1999, this being possible thanks mainly to the creation of project consortiums co-funded by the European Commission.

Another gauge of success

A more global evaluation of MEGRIN is to relate its achievements to its official mission and objectives.

THE MEGRIN MISSION STATEMENT:

'MEGRIN is a grouping of National Mapping Agencies set up to develop pan-European products and services which will help to provide the spatial framework that will enable public and private sector organisations to realise the economic, commercial, and social benefits of using geographic information.'

OBJECTIVES

1. *to raise awareness of, provide information about, and facilitate access to products and services available from European National Mapping Agencies;*
2. *to facilitate the creation of a range of cost effective pan-European geographic datasets;*
3. *to be committed to anticipating and identifying the changing needs of our customers and to help NMAs to meet those needs;*
4. *to co-operate with and assist the European Commission in providing the European Union with the GI products and services it needs;*

The previous paragraphs certainly prove that MEGRIN has achieved a lot in the right direction. MEGRIN has created an individual company image that is now well recognised and which also helps to market its members own image, products and services through its different projects and Internet services (obj.1). It has created a needed Administrative Boundary pan-European dataset, and prepares to launch a more ambitious assembly line for a full topographical dataset (obj.2). The Internet services and the SABE dataset are in the process of being upgraded (obj.3) and MEGRIN is in permanent contact with the relevant units at the European Commission in order to ensure a consistent approach to pan-European GI issues (obj.4). MEGRIN also maintains close relationships with EUROGI (the European Umbrella for Geographic Information), and more particularly collaborates with EUROGI in two EC funded projects.

However, the tasks are not completed, and more work needs to be done. The recent evolution of MEGRIN's activities, in terms of quantity and diversity, may need re-organisation as already mentioned.

A future for MEGRIN

Now, having described the origins and past evolution of CERCO and MEGRIN, evaluated the present status and achievements of MEGRIN, we will present some speculative views on how the CERCO-MEGRIN pair could evolve.

CERCO-MEGRIN

We have seen that MEGRIN, born of CERCO, had drifted to a rather independent life a couple of years ago, until it was decided recently to re-unite the two organisations in a closer collaborative pattern. It is also expected that several new members will join MEGRIN within the next one to two years, with the consequence that the CERCO members not yet within MEGRIN will become a small minority in number.

The natural question that would arise is : ‘why keep two separate organisations, if the objectives and the membership are so similar?’

In a way, the two organisations have already started to merge, as the annual General Assembly meetings and several Management Board meetings are held jointly. It is also expected that MEGRIN and the CERCO Working Groups will work in a closer synergetic collaboration.

However, the commercial objectives of MEGRIN and the many contractual relationships it needs to develop cannot be consistent with a structure such as CERCO. It is thus expected that MEGRIN will continue being the ‘commercial branch’ of CERCO, as was intended at its creation. This nevertheless does not preclude considering an evolution of the two organisations in a way that would bring them even closer than they are now, in terms of management and decision making.

A new operational model

The current model, as presented in the MEGRIN section, is very basic. It was well suited to the early ‘project stage’ of MEGRIN, because of its high flexibility but has proven insufficient for efficient development into a professional venture.

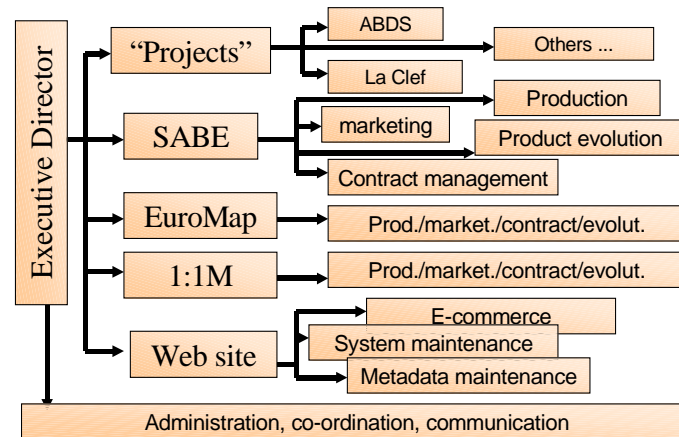
The initial pattern has actually evolved, but rather on an ad-hoc basis, with no planning other than answering to the immediate needs and constraints. The current critical shortage of suitable staff has led to very dramatic changes in the MEGRIN work pattern, proving the necessity for an in-depth re-thinking of the operational model. The imminent start of the PETIT production, a project significantly more ambitious than anything undertaken until now adds to the urgency of the situation. Also the approaching end of the first ‘GIE’ life-cycle - the current GIE agreement expiring in November 2000 – comes into the general picture of re-thinking the future.

The de-facto model that has derived from the recent growing size and activities of MEGRIN looks very professional. It distributes the different responsibilities among specialised MEGRIN staff, bearing the relevant post title. While there were only ‘project team staff’, there is now a ‘commercial manager’, a ‘project co-ordinator’, an ‘internet services manager’, and so on.

The main drawback of the model, as proven by recent experience, is that it requires at least four highly qualified staff as secondees from NMAS. In practice, this has proven very difficult to obtain, and the high staff turnover constantly unbalances the efficiency of the team.

As a consequence a new model has been recently envisaged. Although forced upon MEGRIN by the resource shortage it has become seriously considered as one most probable future for MEGRIN.

It is based on a principle of maximised decentralisation, and would bring the size of the central team – currently 6 to 7 people – to some two staff plus the Executive Director. This model allows for sub-contracting of most of the specific tasks to NMAs or other sub-contractors. It assumes that finding the two highly qualified staff required to assist the ED would be possible – a highly viable assumption.



Above chart : proposed new operational model

With this model, most tasks would be distributed among a number of coherent packages or 'project-lines', which can easily be sub-contracted while still being co-ordinated and controlled by MEGRIN.

The Executive Director and the MEGRIN team would be directly in charge of:

- general administration and finances;
- general policy, relations with the EC;
- co-ordination between projects;
- general communication;
- prospective and new projects evaluation; and
- support to the Management Board.

The main danger of this model is the risk of breaking up the strong central MEGRIN image that is important for the whole credibility of the organisation. The unique flavour could be replaced by a patchwork of national flavours that the European customer may find difficult to comprehend.

Simultaneously the distribution of work may bring side effects of duplication, inconsistencies, even conflicts between the always overlapping activities. In short, the risk is the ending of MEGRIN, being considered as an unnecessary overhead, without contributing much to practical projects that are managed within one or other NMA organisation.

These risks will be difficult to completely and durably overcome. Everything will rely on a strong co-ordination, and a strong will of all members to co-operate at continuing and improving the current exciting pan-European collaborative venture.

In order to avoid the 'scattering' of MEGRIN into different individual units, the Management Board may need to play a more active role than it plays now with a strong central Paris team. Alternatively, it may need to delegate the actual control and co-ordination of the project-lines to designated specific steering committees that could typically be composed of a minimum of 4 members: the head of the project-line, the Executive Director, one MB member, one expert.

Conclusion

MEGRIN is far from being a rigid mechanism. More like a living organism, it grows and evolves according to its own potential, and influenced by its environment. Its durable success will depend on its abilities to adapt to the ever changing conditions.

Adaptation will include constant balancing and harmonising of the roles of its different components: CERCO, the MEGRIN GIE members, its Management Board, the central team, the decentralised units.

The year 2000 will be a milestone in the life of the organisation, due the coming to maturation of some of its projects, and the launching of new challenges. Also the arrival of the expiring date for the current GIE agreement in November 2000 will naturally stimulate a complete review of MEGRIN objectives, organisation and mechanisms.

The investments made in the last five years are only now beginning to deliver their expected benefits, both financially and politically. No simple or single answer can guarantee success or even survival in the next life cycle, but there is no doubt that efforts cannot yet be discontinued.

The future course of MEGRIN will depend largely on our ability to react to the requirements of all our stakeholders – our partners, our customers, and of course our members. The successful outcome of any re-definition of MEGRIN's role, objectives, and organisational structure will only be realised however if it is wholeheartedly supported by the active participation of those who have invested and continue to invest in the organisation. Those members must feel they have real ownership and that MEGRIN is delivering their European aspirations. This is essential if MEGRIN is to continue to succeed because our various projects depend entirely on the continued input of data and information from CERCO partners. The financial and human investments made over the last five years are at last beginning to provide tangible results and it is important that these are developed and maximised, not only for our members but also for the benefit of the wider community of GI users in Europe.

Résumé (Français)

CERCO le père et MEGRIN l'enfant? CERCO le forum, et MEGRIN son agence commerciale?

Les relations entre les deux visages de l'organisation des Agences Européennes Nationales de Cartographie peuvent être évaluées depuis différents points de vues.

La création de MEGRIN dérive de la nécessité de doter le CERCO, le forum regroupant les Directeurs Généraux de 35 Agences Nationales de Cartographie, d'un organe opérationnel et commercial. L'objectif initial de MEGRIN, toujours d'actualité, était de mettre en place une structure permanente:

- fonctionnant comme un point de contact unique pour la diffusion des informations concernant les produits et les services disponibles auprès des organismes membres
- et adaptée à l'étude, la création, l'entretien et la diffusion de produits cartographiques d'extension pan-européenne.

MEGRIN a satisfait à un premier niveau de ses objectifs avec SABE, et le GDDD. La deuxième phase d'implémentation est maintenant dans ses phases de projet, avec PETIT, l'étude de faisabilité d'une base de données topographique au 1:250.000^{ème}, et La Clef, qui a pour objectif l'évolution du service de métadonnées GDDD.

Le modèle organisationnel CERCO-MEGRIN est unique et a prouvé sa valeur par ses résultats concrets. Il est de plus en plus reconnu par un nombre croissant de partenaires extérieurs qui y trouvent le point focal dont ils ont souvent besoin chaque fois qu'il s'agit d'Information Géographique Européenne trans-frontalière. Cependant, des risques existent, conséquences surtout du développement rapide et du succès de MEGRIN. Avec cette prise de conscience, l'implémentation actuelle du modèle doit être contrôlée en regard de ses objectifs et de l'évolution du marché où il opère.

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Disclaimer : the opinions expressed in the present article do not represent any official position of CERCO or MEGRIN; nor of the persons who helped in writing the article. They are solely the author's personal ideas, some mostly meant to stimulate discussion.

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<http://www.cerco.org>

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