

EURONET-DIANE

– why and how the European Commission was involved

Lennart Scharff

1. Introduction

The paper will outline the political background for why the Commission of the European Communities was involved in the development of the information services market in the eighties, and will give an overview of what was undertaken concerning:

- network development
- development of databases
- education and awareness actions

and will end up giving the author's personal conclusions concerning whether Commission activities were worthwhile.

2. Political reasons for Commission involvement

As part of the initiatives in order to strengthen the economy of the European Communities, naturally the idea to strengthen – or perhaps in reality to develop - a European Information Industry was relevant. Having, in the beginning of the seventies, seen how the market developed in the United States, and perhaps more impressive, knowing the outlines of the coming Anderla report 1973, (OECD 1973), in which Georges Anderla, at that time a Professor in Economics at the Sorbonne University, predicted the growth of information/knowledge and pointed out the necessity to develop tools and infrastructure in order to handle and "digest" the information, a programme took shape inside the Commission. Naturally enough, the broad lines of this programme was drawn up by Anderla, who was subsequently appointed as director of Directorate-General XIII (B) in Luxembourg.

Looking at the "state of the art" of the information sector/market in Europe, it was evident that:

- Europe had a very strong and valuable cultural heritage and clearly possessed a great quantity of valuable Scientific and Technical Information. There were various important information sources that could be beneficial in the development of the competitiveness of European industry;
- Only a few of these information sources were available in electronic form as abstract services – and when they were available, they were mostly via US-American services;
- Some countries had developed a national information policy - some had not – and there seemed to be no coherence between them and no clear position on what should be done nationally and what should be done in common at a European level;
- Pan-European availability of access to information sources did not exist – although in many countries there was access to US-American services (TYMNET, Telenet, etc.);
- Europe was faced with having – additionally - to fight a language barrier, since we do not have a common language;
- There was no coherence in the European Library sector.

Based on these facts, a programme was shaped, with a First Action Plan, which was later followed by two more Action Plans - to be continued in subsequent programmes (IMPACT 1 & 2). The First Action Plan – and in fact all following plans and programmes - were based on four columns:

1. Development of the infrastructure;
2. Development of the market through awareness actions;
3. Bridging the language barriers;
4. Catering for the access to original information, i.e., library actions.

Whereas the language and the library actions to a certain extent can be seen as complementary initiatives, the development of infrastructures and the awareness actions must be considered as paramount to the development

of a European Information Market and in this volume, deserves to be treated in more detail, basically because some of the initiatives taken are of importance to the developments in Scandinavia.

3. Development of the infrastructure

3.1 The network – Euronet.

The key action in the First Action Plan (1975-1979) was the development of the first data-network with – what was then termed - pan-European coverage – although it only covered the Member States. The packet-switching network Euronet was inaugurated in February 1980. In 1975, the Commission signed a contract with a consortium of PTTs – headed by the French PTT – and actually paid about two-thirds of the development costs (some €7 million) for this first packet-switched network in Europe. In addition the EC contributed to the operational costs of the network during the first three years. With the network in place, with access possibilities in all Member States at that time (Belgium, Denmark, France, Germany, Ireland, Italy, Luxembourg, Netherlands and the UK), the technical infrastructure was in place, and usage appeared and gradually increased.

By 1981 some 24 hosts were available via Euronet, with a total of some 200 databases.

The only Scandinavian presence as host was I/S Datacentralen, quite natural, since Datacentralen had been involved in the development of some of the Commission's own databases, and for years had provided "batch-access" to some international databases. In 1981, the network was used by some 1 400 users, having some 25 000 accesses per month. Impressive figures for those days, but obviously far below the available capacity and the predictions in the Anderla report.

An interesting point to note is that although a European network was implemented, it did not solve the real technical access problems. In all Member States there was one – and only one - access point, a node or a multiplexer, and to get access, a telephone connection up to the access point was needed. Bearing in mind the state of the art of telephone networks in the early eighties, one was frequently faced with access problems, simply due to problems with line capacity up to the Euronet access point. So even if the network itself was performing very well as such, it was still difficult to get access. One interesting facet of Euronet is thus that it also stimulated development of and improvements in national telephone services in some countries. Another important issue is that with Euronet – for the first time in Europe and for European Telecom administrations - we saw communication tariffs emerge, which were completely independent of geographical distance: same price for all calls completely independent of from where to where.

This was not an easy thing to get right, but it was - naturally - a very important principle for the Commission. The direct result of this was immediately recognised by users, since they could see a dramatic reduction in telecommunication charges compared to using US-based services, which of course was one of the major achievements of Euronet. No wonder that the Commission insisted on this!

A consequence of this was, however, that although packet-switching is designed for dynamic routing, where the network as such always would find the "best available stream-pattern", this was impossible for the PTTs to handle. Revenue sharing of the network-traffic fees was – like any other telecom facility – based on sharing according to usage of the different national facilities. So in order to cater for the complex mechanisms under which PTTs share income, Euronet used a sort of "fixed virtual routing", meaning that when a call was set up, the network would find the best available routing – but this then became fixed so that the "packet-stream" would also follow the same route. Otherwise revenue sharing was impossible.

With Euronet, the Member States now had a network with European coverage.

So far so good – for the Member States – but what about the rest of Europe, especially Scandinavia, where only Denmark was a Member State? This was politically a "hot potato"!

Naturally the network was only for Member States, and in the early phases, network access was severely restricted and should only be made available to citizens in the Member States. More than one "foreigner" tried – notably embassies from "outside"- but the rules were strictly applied, at least officially!

However, already at that early point in time, the technology made it obvious that, in practice there were no geographical limits. But it had to be solved case by case, and in fact other countries joined the Euronet later – all

by paying their share of the costs. Switzerland was to first to join, later followed by Sweden, Finland and Norway. By the time these countries had joined, Euronet was towards its end as a separate project and, virtually, the rest of the world got access by the interlinked national packet switching networks. Euronet therefore in many ways served as a test-bed for interlinking networks.

Although important and necessary, the establishment of the network was, as such, only the first step. Other steps followed, most important perhaps stimulation of development of databases, education and awareness.

3.2 Development of databases

Another important element in the Actions Plans was the development of European databases.

The Commission itself initiated development of databases, mostly based on its own data sources, but also by giving financial support to the development of European databases. Some initiatives were part of the Second Action Plan (1978-1980), however the majority of this support was part of the Third Action Plan (1981-1983), where some 5 million was made available for calls for proposals for development of European databases and databanks.

Some examples of Commission databases are AGREP about agricultural research projects, and ENREP about environmental research projects, but also some hitherto internal Commission files were made available, e.g., EURODICAUTOM – the European Commission terminology databank. These bases were made available via ECHO, the Commission's own (experimental) database host in Luxembourg – a service which basically was operated as part of the Commission's education and awareness actions.

3.3 Education actions

3.3.1 Introduction

Realising that Euronet was 'merely' the vehicle for information access, the Commission decided to "invent" a new acronym for awareness actions. This was referred to as DIANE – Direct Information Access Network for Europe, and as a centralised outfit to cater for education and awareness actions, the Commission established a team centrally located in Luxembourg. This team, called the Euronet-DIANE Launch Team, was then given the operational responsibility for educating hosts and users as well as for creating awareness. The underlying line of thinking for this was simply, that even though a network and some databases existed, this was no guarantee, whatsoever that usage would take place, and politically it would be almost a disaster if the network was not used – or if the Italians would only use Italian services – or vice-versa. Education, training and lots of awareness were needed!

The Euronet-DIANE Launch Team – a small group of seven people formed in 1979 had a very simple mandate: Increase usage! – and do this through the education of hosts and users and implement lots of awareness.

3.3.2 Education of hosts

One may ask oneself why it should be necessary to educate hosts? Was this really necessary? Did they not themselves know what to do in order to run an information service? The simple answer is: Not really! One has to bear in mind that even though information retrieval via data-networks at that time was some 5-8 years old, very few people involved in it had much practical experience. To many of the players in the market, information service - where service is deliberately underlined - was untouched ground. This can clearly be seen through some of the items we handled in the Launch team, items such as:

- what should a welcome message to a service look like?
- how do I make a user contract?
- what sort of documentation should I provide my users?
- how do I market service? and to whom?
- do I need a help-desk and how do I staff it?
- etc.

All relatively simple questions, and questions one would assume had been asked and answered even before you started to operate a service.

If one would consider any other kind of service to be established, one would normally have had a clear plan for operation made even before thinking of launching a service. The truth was, however, different! Many hosts were launched as parts of a national information policy programmes in the Member States – or perhaps just because the technical facilities existed – and only in a few cases, a host was established due to market intelligence analysis.

As a general forum for discussing with hosts and in order to find out what should be done by the Launch Team, EHO, the European Host Operators Group was established and through regular, quarterly meetings points of common interest was raised and discussed. Based on recommendations for EHO, the Launch Team then created activities and training courses.

3.3.3 Education of users

Educating users was a completely different, and in many ways, simpler task – at least concerning existing users. Basically, the only users one could get in touch with were existing users of online retrieval services. To be able to discuss developments with these, the Euronet User Forum was established, and like the hosts, these users were consulted in quarterly meetings in Luxembourg.

It would be unfair to say that meetings with the User Forum not were constructive – on the contrary. A great many important items were discussed, and in many ways the User Forum contributed very constructively to the development of the European Information Services Market, especially concerning improving the service levels of the operators. Numerous were the ideas created by the User Forum and taken to EHO, and the fact that over time hosts improved greatly is, of course, thanks to input from the User Forum.

But it looking at it retrospectively, one has to realise that we were speaking there to the elite of users in Europe – the people who were already convinced about the benefits of using information services. Further, in many ways these experienced users thought that this was still – and would be for many more years to come – too complex even to dream about that the end-user – the people needing the information – would ever be able to retrieve this information themselves. The general feeling was that real information access could only beneficially be done via intermediaries. Therefore, the main problem that we were faced with in the Launch Team - attracting potential users to the services – was not really a subject that received a great deal of attention at the User Forum. This had to be catered for in other ways, notably through awareness actions.

3.4 Awareness actions

Awareness – informing potential users that information services existed and there were benefits to be achieved in using them in satisfying their information needs, was in fact the main task of the Euronet DIANE Launch Team. To this end professional advertising agencies were used, and many different means were applied. The most significant ones actually laid the ground for many of the activities to come in the future, ideas which were created and initiated by the Launch Team and continued afterwards, in other programmes and in synergy with national activities. The most important ones were:

- development of directories of databases;
- exhibitions and seminars;
- establishment of national centres.

3.4.1 Directories

Already in the initial phase of Euronet, a first directory was created, the so-called enquiry service. This was a “host” containing very condensed information about the few hosts and services available, structured in a very simple database, operated by British Telecom. The “on-line version” was supplemented by “Fact Sheets” – in six languages – issued regularly. Later on this enquiry service database “transformed” into the DIANE-GUIDE, operated on ECHO – as well as more “fancy and glossy” books were produced in large quantities and several languages, and distributed across Europe. Interesting enough perhaps is to notice that even in the nineties this “project” was continued, on ECHO, now named the I’M-GUIDE – Information Market Guide.

3.4.2 Exhibitions and seminars

Not as a big surprise to anybody I would guess, is of course that the “thing had to be shown”. The International Online Information Meeting, IOLIM, had been established, and of course the Launch Team had to be there – as had many of the hosts – and this as early as beginning of the eighties.

Of course things were rather primitive! Looking back I see myself standing in a very, very cold exhibition area at the Cunard Hotel, Hammersmith, London at the start of December 1980, equipped with a Texas Silent 700 with acoustic coupler, using local access to Euronet. The local switch could hardly cope with the amount of traffic created by the 10-15 European hosts being present, a fact that led to all of us rushing in very early, 7 a.m. just to get a line – bitterly freezing all day! But we were there and we showed it and we created a certain impact, and perhaps more importantly, a “habit” that this was the place to go! – a “habit” which in many ways still exists, but where today’s activities are much more professional.

One thing that those early “pioneer-days” did was to open our eyes to that fact that one could not just describe the concept – it had to be demonstrated to potential users in order to make them realise what it was – a lesson which led to more direct actions towards end-users.

In the years 1982-83, the Launch Team initiated the first real drive towards these end users – the so-called “Road-Show”. Together with primarily Chambers of Commerce, we arranged some 50 seminars in major European cities, where we, using the mailing lists of the Chambers, got in touch with “end-users”. The kernel element in the “Road-Show” was a 25 minute long, professionally produced film – “The invisible ingredient” in which a real-life case-story about an information need and how it was satisfied successfully using on-line information services - was documented. This was then supplemented by speeches, demonstrations and printed materials and perhaps the most important thing: fact sheets about “what to do next in order to get started”.

Also this idea – of attracting end users and basing “the message” on case-stories, was continued later on, now in combination with the creation of a network of national awareness centres.

3.4.3 The Euronet-DIANE Centres

Perhaps one of the most important initiatives of the Commission was the establishment of the DIANE centres. Realising that there is no way that a central team in Luxembourg could reach throughout all countries, the Commission, in collaboration with national authorities, established the DIANE centres.

Working closely together with the central team in Luxembourg, the DIANE centres played an important role in market development in the Member States. They worked as general help and reference centres and as such, they represented points of contacts, where existing and potential users could obtain information about “what is this” – and perhaps more importantly, help to get started coupled with lots of practical advice.

Interesting enough these centres continued their lives throughout later programmes of the Commission – later called National Awareness Partners– and they even served as a model for other Commission programmes where national referral was needed.

4. Conclusion

Now – more than 20 years after the things were initiated, and looking upon what has happened concerning the Information Services Market in Europe, it is pertinent to ask the question about whether the Commission initiatives really had any value and whether the millions of Euros that have been spent – European Taxpayers’ money – were worthwhile to spend???

Although I cannot prove it as one would normally do in a cost-benefit analysis, my clear feeling is - Yes!

But this simple answer needs more details, and in elaborating these, please allow me to answer some typical questions.

4.1 Did it help that the Commission invested in Euronet??

Clearly one can say that the Commission just paid the PTTs to do a thing they would have done anyhow! This is definitely true, but the fact is also, that Euronet brought speed into national developments of X25-networks, which definitely lead to those appearing some 5-7 years before they otherwise would have appeared. Also, through the Euronet consortium, the PTTs got acquainted to working together in a different manner – in a multilingual society – a fact which in many ways broke the “barriers” between them and which so to say, forced them to think more European-wide!

4.2 Did it help to have ECHO?

It surely did! ECHO was an important test-bed for Commission activities, not only by providing access to Commission databases, but also as a vehicle for demonstrating research-oriented projects related to information services, e.g., Natural Language Access, Voice Recognition, Automatic Indexing, Document Delivery Services and the famous CCL (Common Command Language), all of which could be implemented on ECHO and as such demonstrate how things worked in practice. Especially though CCL and the many courses held about CCL in all Member States – combined with training packages and an “off-line” training system on a floppy - many, many first time users got cheap access to information and got the opportunity to get “hands-on” experience.

Further, some of ECHO’s databases did hold important information. The above mentioned DIANE Guide/I’M-GUIDE proved to be an important source of information about what was available in Europe and has been used as reference database at many educational establishments.

4.3 Awareness campaigns and seminars – did they contribute to anything?

This is, of course, extremely difficult to measure. The main difficulties seemed to be to reach the potential user and to find the convincing message to communicate to them. On-line information retrieval was considered as being a technically complex subject, and even though we desperately tried to get away from the technicalities, and to focus on the value of information, it was not received like that. Experience showed that even when we did direct mailshots to management, the mail in fact ended up at the desks of the computer managers, and they – for good reasons – did not have a high degree in these “external services” but were, it seems, pre-occupied with the internal Management Information Systems.

It is fair to say, that the real break-through in reaching management – the people needing the information – came when we did the “Road-Shows”. Working with Chambers of Commerce enabled us to attract the right people, and once we had them in the room and showed them the film “The Invisible Ingredient” – perhaps one of the best films ever produced on the subject? – they were convinced, and armed with the practical information about “How to get started”, they possessed the right tools to put pressure on the technical staff to get them to arrange the infrastructure, i.e., modem, dial-up lines and network subscription.

This is clearly demonstrated by the fact that, in the months following the “Road-show, the number of user IDs to Euronet grew steeply from those cities visited by the “Road-show”!

This to us was proof that we were on the right track: We had a simple message, it was well explained in a true case-story, we could show it live during the seminars, and people left the seminars with clear descriptions about what to do to get started!

Therefore, it must be recognised, that in many ways a lot of the “ground-work” for future marketing of information services was laid in the campaigns by the Launch Team and ECHO.

4.5 The DIANE Centres

The excellent collaboration between the Commission/The Launch Team and the DIANE Centres definitely created much awareness and interest, and is probably the main reason why many “newcomers” were attracted to the services.

This collaboration in a very pragmatic way contributed to make a “bridge” between European information policy and national information policies, since it was, in practice, the first attempt to do so! Further, it solved one of the inherited problems - bridging the language barrier! Here you had someone, who (almost) locally and in your own

language could answer the basic questions, a thing which would never have been possible having a centrally-based team – despite this team’s attempt to cover all languages. This is, in my opinion, why these centres were continued and “copied” over the years. They worked!

5. Final conclusion

Yes, the Commission activities have contributed greatly to the development of the European Information Services Market!

- They speeded-up national data-network developments substantially
- They were an excellent test-bed for development of new services
- They contributed greatly to the harmonisation of services
- They laid the ground for the future marketing of information services.