# THE GERMAN MARKET FOR ELECTRONIC INFORMATION SERVICES 1997 WITH SPECIAL EMPHASIS ON ITS RELEVANCE FOR EUROPEAN MARKET DEVELOPMENT

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According to the programme you expect information and analyses about the theme "assessing the situation of the markets for Electronic Information Services in 17 countries of the European Economic Area in 1997 (with prognoses for 1998)". Unfortunately the data collection for these figures is still going on because the contracts between the European Commission and the National Institutes in the diverse countries of the European Economic Area for the so-called Member States' Study II or MSSTUDY II have been delayed by nine months. What I could present are European-wide figures about Electronic Information Services in 1994 and EIS-figures about Germany in 1997 (with prognoses for 1998).

My suggestion therefore is that we make the best out of this situation changing my theme to

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20 minutes are not much to describe the German EIS-market comprehensively let alone the EIS-markets in the different countries of the European Economic area. Therefore I restrict myself to eight hypotheses discussing only two of them fully and prior to these analyses to two methodological and definitorial remarks.

Since 1989 the European Commission has supported market research about the development of Electronic Information Services, at first in the so-called "EC Host Surveys", later in the "MSSTUDIES". In 1994 the methodology was thoroughly revised so with the results of MSSTUDY I we arrived at truly international comparable data for the business year 1994. With the results of the MSSTUDY II soon come in we will also arrive at true comparability over time for the time span 1994 – 1997.

This comparability could be important for, e.g., an intra-European benchmarking and as a discussion platform for a pan-European learning process between the national information policy makers and the players on the markets.

Until 1995 Electronic Services were largely identical with Electronic Information Services for professional uses or for business, scientific and administrative uses. But since 1995 with the commercialisation of the Internet and the coming up of the online consumer services the situation has drastically changed in the sense that the coverage of the MSSTUDY had to be widened to include the Electronic Information Services for private users as well as Electronic Services outside the area of information, especially electronic advertising services and electronic commerce – at least in the sense that we had to assess the impact of these new services on the provider of professional EIS-services.

### My first hypothesis is a question:

(1) Is the German market for Electronic Information Services representative for the EIS-markets in the European Economic area?

The answer to this question is Yes and No: Yes in terms of inevitability, high growth rates, structural change and deep impact; No as a forerunner.

As you see from the table Development of the German EIS-Markets for Professional Uses, the German economy expedited 2.2 billion DM or 1.1 billion EURO for Electronic Information Services in 1997. That was by far not as much as the real big markets like automobile and telecommunication but it was 50 % more than the revenues of the German soup industry.

This was also 240 % more than in 1991 and 88 % more than in 1994. This was also high growth irrespective of business cycles and structural changes, as the next table shows: Total Growth Rates of the German Market for Business Uses 1990 – 1997.

Development of the German EIS-Markets for Professional Uses 1991 - 1997 (in million DEM)

	1997	1991	1992	1993	1994	1995	1996
I. Online Realtime							) <u> </u>
Realtime financial	650.0	397.5	411.0	425.0	484.3	536.6	576.4
2. Realtime newswire	286.2	210.0	216.0	227.9	247.5	257.4	271.8
	936.2	607.5	627.0	652.9	731.8	794.0	848.2
II. Online Retrospective							
3. Credit information	263.2	103.0	129.0	156.0	176.5	207.8	233.1
Other business,  legal information	99.0	46.9	56.1	61.1	75.9	83.55	92.8
5. STM (scientific, technical, medical information)	61.3	44.2	47.7	53.6	53.5	59.5	60.1
6. Consumer near Services	243.0	8.0	10.0	20.0	27.0	57.5	130.0
7. Audiotex	70.0	-	8.0	16.0	29.0	50.0	80.0
8. via Internet	30.0		-	-	-	-	-
9. Other (via mailboxes, etc.)	2.5	1.1	1.3	1.45	2.0	2.3	2.5
	769.0	203.5	252.0	308.5	363.9	460.6	598.5
Online Total	1,705.0	811.0	879.0	961.4	1,95.7	1,254.6	1,446.7
III. Offline							
10. CD-ROM	388.3	53.0	106.0	136.3	162.7	204.5	249.9
11. Other (diskettes, etc.)	62.3	45.0	55.0	61.0	71.2	75.2	60.7
12. Commercialised archives (more and more online via Internet)	19.2	2.5	3.5	7.0	8.1	9.5	15.8
Offline Total	469.8	100.5	164.5	204.7	242.0	289.2	326.4
TOTAL	2,175.0	912.0	1,043.5	1,160.1	1,337.7	1,543.8	1,773.1

Total Growth Rate of the German EIS-Market for Business Uses 1990 - 1997 (in %)

Year	%
1990	10.3
1991	14.7
1992	14.4
1993	11.2
1994	13.3
1995	15.4
1996	14.9
1997	22.7

At least since 1989 the markets for Electronic Information Services live in a boom that is seemingly "everlasting" in the short run. Even in the relatively worst years 1990 and 1993 the growth rate exceeded the 10 % threshold. One explanation for this "growth without comparison" are the huge market potentials which are nearly untapped in some subsectors of the German economy even now (e.g. small and medium sized industries, large parts of the service sectors).

But not only high growth but also rapid and even turbulent structural change seems inevitable as the table Structural Changes on the EIS-Markets for Professional Uses shows. It confirms the thesis that different phases of EIS-market developments do exist:

- In the first phase the newswire services of the newswire agencies started the EIS-markets
  only to be replaced later as the dominant force by real-time financial services like stock
  quotes. In 1989 the real-time services combined still hold a market share of 76 %.
- In the third phase online retrospective had its take-off though this take-off was below
  expectations. Nevertheless online retrospective increased its market share every year
  since 1989 at the cost of online real-time, and in 1997 it held a market share of 35.4 %.
- In the early 90s CD-ROM came with a vengeance doubling its revenues in 1990 and 1991 so in some years it had to be remembered to the public and even to the experts that the EIS-markets were still an online market with a market share of 80 % and more.
- In the late 90s the overall expectation is that CD-ROM will be dead at least in the middle run, and online retrospective at last is really coming especially in the areas of business information and news and far more inside than outside the Internet.

Are these German experiences representative for the experience of the different markets of the European Union and the European Economic area? Yes, though of course the more closely you look at the figures the more exceptions you have to make. For example, in comparison to the European average, Germany has a high CD-ROM market share probably due to high telecommunication costs and psychological reservations to go online. The STM market share is also relatively high (though decreasing) as a consequence of public investitions and subsidies of billions of DM in this market niche.

Though "hard" quantitative facts do not exist about the impact of Electronic Information Services upon the economy there is a German and an European consensus that this impact is far bigger than the revenue figures may suggest: Thanks to EIS the enterprises are today much more efficient in the area of information and knowledge management. Electronic Information Services have accelerated the process of Europeanisation and globalisation of the markets making it more possible than ever for small and medium-sized enterprises to be successfully competitive beyond their domestic markets. EIS lead the way to other Electronic Services, especially Electronic commerce, and made this other Electronic Services possible.

No, Germany is not a model country for Europe in the sense that it is not a forerunner. Unfortunately now I can only present market figures of 1994.

## Structural Changes on the EIS-Markets for Business Uses 1989, 1996 and 1997

Market Share in %

	1997	1989	1996
I. Online Realtime	43.0	76.0	47.8
1. Realtime financial	29.9	49.2	32.5
2. Newswire-Services	13.2	26.8	15.3
II. Online Retrospective	35.4	17.8	33.8
3. Credit information	12.1	6.9	13.1
Other business information;  legal information	4.6	9.71)	5.2
5. STM (scientific, technical, medical information)	2.8	=	3.4
6. Videotex; consumernear services	11.2	1.0	7.3
7. Audiotex	3.2	-	4.5
8. Internet	1.4	<b>=</b> (	-
<ol><li>Other information (e.g. statistical, mailbox-information)</li></ol>	-	-	:=
Online Total	78.4	93.8	81.6
III. Offline			
10. CD-ROM	17.9	2.1	14.1
11. Others (diskettes, etc.)	2.9	4.2	3.4
12. Commercialised Archives	0.9	-	0.9
Offline Total	21.6	6.2	18.4

<sup>1)</sup> Including STM-Information

Source: Messe Frankfurt-Studie MSSTUDY II.

As you see from the EIS-Indicators of the European Economic Area:

- With a market share of 28.4 % the economy of the United Kingdom expedited far more for Electronic Information Services than the German economy (with a market share of 14.4 %).
- This picture becomes even clearer if we arrive at the figures not of the total market but on the revenues of the different European information industries including exports but excluding imports. Here the UK held a market share of 63.5 % while the market share of Germany dwindled down to 5.7 %. True, this huge market share of the UK is largely the consequence of the successes of one company, of the real-time financial information provider Reuters. But even without Reuters the British information industry would be more export-oriented than the other European information industries. And in all countries with two exceptions, the UK and The Netherlands, imports exceeded exports in 1994.
- Of course, we should have adjusted the different countries for their different sizes, and
  in MSSTUDY I we did exactly this computing the ratio revenues in comparison to
  inhabitants and revenues to gross domestic products. As a result a ranking emerged with
  the Scandinavian countries and the UK as EIS-markets far above the European average.
  France and The Netherlands were still above average, while the German-speaking
  countries, Belgium and Italy went below average and the Southern Mediterranean
  countries Spain, Portugal and Greece but also Ireland had ratios far below average.

The reasons for the British success may be unique so it is impossible to imitate this example: financial capital of the world, English as the "lingua franca" of the EIS-services, the success of Reuters, the help of the "American cousins" who have nearly all their European headquarters in London... But with the examples of the Scandinavian countries an intra-European learning process may be started: an excellent telecommunication infrastructure; an information policy who addressed the people with the consequences of very high levels of PC-literacy; the libraries as motors for qualifications and usage... You may also learn something from the "German example" though this experiences are not so positive: a highly differentiated print information system for the business world seeming not to be inferior in the first years of the EIS-services; a partly misguided information policy; psychological reservations on the side of small and medium sized enterprises, including print publishers and content providers...

Has this intra-European picture changed since 1994? Waiting for the results of MSSTUDY II my best guess is: not very drastically. For example, if you have a look on Internet usage, the Scandinavian countries still lead.

My second hypothesis runs as follows:

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Since 1995 Germany may have become a little bit more like a forerunner especially in

- the acceleration of growth rates and
- the explosion of the consumer services.

While Internet and Multimedia are still waiting in the trenches this will drastically change in coming years.

Until 1997 the growth rates on the German EIS-markets hovered (with some exceptions) around 15 %. But in 1997 this growth rate accelerated to 22.7 % the highest growth rate ever achieved in Germany.

On the same time I conducted the EIS-markets in Austria which had higher growth rates than Germany in previous years. But in 1997 the growth rate of the Austrian EIS-market went down to only 7.8 %.

What are the reason for this different developments? My assumptions are that the so-called online consumer services which started really in 1995 concentrated their efforts on certain key account markets like Germany, UK and France, pushing up the growth rate there, and that the successes in the present key account markets will be repeated in the other European countries in coming years.

These assumptions are not contradicted by the results in the table Growth Rates of the German EIS-Markets for Professional Uses 1990 – 1997.

As we see the extraordinary high growth rates of the total EIS-markets was largely secured by the explosion of usage in two submarkets: CD-ROM with a growth rate of 55.3 % and consumer-near services with a growth rate of 86.9 %. While Austria had a similar growth rate and market share as Germany in the area of CD-ROM, consumer-near services were far smaller in terms of market shares.

Let us note in passing that CD-ROM may be dead in the long run but presently it is still the "cash-cow" to finance the investitions on the Internet – at least in Germany and Austria.

In 1997 consumer-near services held already a market share of 11.2 % and with this we mean the revenues which the online consumer services concentrated in the business world while they concentrated their "real" efforts on private households.

Growth Rates of the German EIS-Markets for Business Uses 1990 - 1997 In %

	1997	1990	1991	1992	1993	1994	1995	1996
I. Online Realtime								
Realtime financial	12.8	5.9	5.7	3.4	3.4	10.0	13.5	7.4
2. Newswire-Services	5.3	0.8	8.0	2.9	5.5	6.6	4.0	5.6
	10.4	4.1	6.5	3.2	4.1	8.8	8.5	6.8
II. Online Retrospective			1					
3. Credit information	12.9	36.0	51.5	25.2	20.9	13.1	17.7	12.2
4. Other business	6.7	11.42)	16.72)	19.6	8.9	24.2	10.0	11.1
information; legal information								1
5. STM (scientific, technical,	2.0	_	_	7.9	12.4	- 0.2	11.2	1.0
medical information)				**************************************			11.2	-
6. Consumer near services	86.9	7.1	6.7	25.0	100.0	35.0	113.0	126.1
7. Audiotex	-12.5	-	-	-	100.0	81.3	72.4	60.0
9. Other information (e.g. statistical, mailboxinformation)	-	14.3	37.5	18.2	11.5	37.9	15.0	8.7
	28,5	21.1	31.3	23.8	22.4	18.0	26.6	29.9
Online Total	17.9	7.2	11.9	8.4	9.4	14.0	14.5	15.3
III. Offline								
9. CD-ROM	55.3	100.0	76.7	100.0	28.6	19.4	25.7	22.2
10. Others (diskettes, etc.)	2.6	33.3	12.5	22.2	10.9	16.7	5.6	- 19.3
11. Commercialised Archives	21.5	_	-	40.0	100.0	15.7	17.3	66.3
Offline Total	43.9	55.6	43.6	63.7	24.2	20.4	22.2	12.9
TOTAL	22.7	10.3	14.7	14.4	11.2	14.7	15.4	14.9

Including Public Institutions
 Including STM-Information

Source: Messe Frankfurt-Studie

Does already an EIS-market for private uses exist which is comparable to the professional EIS-market? Yes, this is indeed the case.

See these results in the table The Total Markets for Electronic Information Services for Business and Private Uses 1996 and 1997.

According to these results the German private households expedited 1.6 billion DM or 800 million Euro on Electronic Information Services in 1997 pushing up the total expenditure of the German EIS-markets to 3.8 billion DM or 1.9 million EUROS and securing already a market share of 42.2 %.

Taking into account the different growth rates - 69.9 % in the consumer sector, 22.7 % in the professional sector - the professional EIS-sector will be overtaken by the EIS consumer sector in the year 2000 at the latest.

Here Germany is indeed a forerunner phenomenon from which pan-European lessons may be derived. I have three of them.

Firstly, also on European level the structure of the EIS-markets will drastically change because the consumer sector is an offline, not online market, and Audiotex plays also a remarkably larger role here.

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The Total Markets for Electronic Information Services for Business and Private Uses 1996 - 1997

In Million DM, Growth in %, Market Share in %

#### A. Total

	Reve	nue	Growth rate	Market Shares		
	1997	1996		1997	1996	
I. Online						
1. Audiotex	340.0	300.0	13.3	9.0	11.1	
2. Further Online Services	2,055.1	1,581.7		54.6	58.4	
Online Total	2,395.1	1,881.7	27.3	63.6	69.5	
II. Offline	1,369,8	826.4	65.8	36.4	30.5	
Offline Total	3,764.9	2,708.1	39.2	100.0	100.0	

### **B.** Consumer Services

	Rev	enue	Growth rate	Market Shares		
	1997	1996		1997	1996	
I. Online						
1. Audiotex	270.0	220.0	22.7	21.1	23.5	
2. Further Online Services	419.0	215.0	54.9	24.0	23.7	
Online Total	689.0	435.0	58.4	45.2	46.5	
II. Offline	900.0	500.0	80.0	54.8	53.5	
Offline Total	1,589.0	935.0	69.9	100.0	100.0	

Sources: Messe Frankfurt MSSTUDY II

But still more important then changes in market structure is, secondly, the concentration question. See the results in the table Total Revenues, Growth Rates and Market Shares of the General Host Market: Total and Business Uses 1997.

Total Revenues, Growth Rates and Market Shares of the General Host Market: Total and Business Uses 1997

Revenues in million DM, Growth in %, Market Share in %

		Total		Business Users			
	in Mio. DM	Growth Rate in %	Market Share in %	in Mio. DM Growth Rate in %		Market Share in %	
1. T-Online	340	70.0	56.5	204	56.9	84.0	
America Online     Bertelsmann	168	250.0	27.9	17	112.5	7.0	
3. CompuServe	84	29.2	14.0	17	30.8	7.0	
4. Other Hosts	10	150.0	1.7	5	80.0	2.1	
Total	602	105.5	100	243	86.9	100	

I have introduced a new term for the so-called "Online Consumer Services" because these services have made huge inroads also in the professional world. Therefore "General Hosts" may be a better term because it shows that business and private uses are (or at least could be) their target groups.

According to the results in the table T-Online, the host of Deutsche Telekom, was still the largest general host with a market share of 56.5 %. On the other hand AOL Bertelsmann and CompuServe which form de facto one company, have already secured a market share of 43.9 % in very few years, and in the area of consumer services Bertelsmann has already beaten T-Online with a market share of 56.5 % (for comparison: T-Online 42.9 %).

No question AOL Bertelsmann is on its way to dominance on the German EIS-market and may even reach European dominance taking into account the huge financial resources of the second biggest media conglomerate of the world, Bertelsmann's firm basis in the US-content industry and its alliance with AOL Inc., which hold a market share of 70 % on the online consumer market in the U.S.

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Will AOL Bertelsmann grow into a "Mega Hollywood" combining American know how in multimedia production and marketing know how of an European insider and sharing the world of interactive entertainment services with two or three American media conglomerates, like Time-Life and Walt Disney? This would provide the European and international policy with a new challenge.

Thirdly, if CD-ROM and consumer-near services are largely responsible for the growth on the German EIS-market Internet and Multimedia could not take responsibility.

This is indeed the case as the Indicators to Independent Internet Providers 1997 show.

In 1997 the independent Internet providers had the highest growth rate of all professional EIS-submarkets (300 %). But they secured only a revenue of 15 million EURO and therefore held only a market share of 1.37 %.

Multimedia is still an offline business and therefore it played only a minor role on the professional EIS-markets in 1997.

But there is no doubts that Internet and Multimedia will become big businesses also on the professional markets if not now, then in coming years. Therefore the growth rate may further accelerate and in terms of growth rates in Germany and in other European EISmarkets the best has still to come.

Unfortunately my time is running out so I will only read my further hypotheses which in principle would deserve further discussion:

- (3) On the professional EIS-market German EIS-providers have secured more than 7 % of their revenues in the new markets of E-commerce and online advertising.
- (4) Contrary to the Europeanisation and globalisation of markets the exports of the German information industry have absolutely decreased.
- (5) Rapid structural change took place from financial information to credit data, enterprise profiles and business news.
- (6) The service sector outside financial institutions has overtaken the banks and other financial institutions as the most important user group.
- (7) One of the big but yet untold success stories of the German EIS-markets is the nearly total turnaround of the German STM-providers from public to private clients.

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