EUROBAROMETER 50.1

MEASURING INFORMATION SOCIETY

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The questionnaire, the name of the institutes associated with the research and the technical specifications appear as an annex.

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INTRODUCTION

This survey, carried out in the autumn 1998, within the framework of the EUROBAROMETER 50.1, is the third, after those of 1995 and of winter 1996/1997, to analyse the opinions of the citizens of the European Union, on systems of access for the services of the Information Society. We are able to assess the overall popularity of the services of the Information Society when we have information of this nature.

The overall **aims** of this research programme are both to measure the social and economic impact of new information technology and to analyse the profile of the potential users of the Information Society.

Within the framework of these objectives the survey studied thirteen mass market as well as twelve online or network supported services with social value.

The **13 technological systems** covered by the study are:

- Satellite Dishes,
- Decoders for Digital Television.
- Teletext,
- Vidéotext
- Video tape recorders,
- Lap tops or P.C.,
- CD-CROM readers,
- Faxes,
- Fax-modems,
- Mobile telephones,
- The Internet,
- Pagers
- Cable television.

For each system we examined both the levels of utilisation and the levels of interest, in the home and at work. The possible purchase intentions in the next six months of these products have also been measured.

The **12** accessible **services,** from a computer via networks of communication or of television, or via Teletext which have been evaluated are:

- European museums (cultural heritage);
- Political contacts or debates (electronic democracy);
- Distance learning;
- Seeking the opinion of a doctor
- Communal administrative services (local government / central government services);
- Preparations for potential holidays;
- Press and publications (electronic newspapers / books);
- Products for sale or hire (electronic trade);
- Search for employment;
- Consumers'' rights;
- Management of bank account, the stock exchange prices;
- Contracts for financial services.

The study identifies the level of interest or lack of interest in each one of these services as well as the willingness to pay for access to these services, (an amount equivalent to Euros 10 per month). The study also evaluates the reasons why certain services do not interest European citizens.

The **methodology** used is identical to that in force at the time of the previous survey of the winter 1996/1997.

Identical questionnaires were used for fifteen thousand interviews. These interviews were conducted face-to-face. This led to a sample representation of the population in each Member State of the European Union, aged from 15 years and upwards.

I. SYSTEMS OF ACCESS TO THE SERVICES OF THE INFORMATION SOCIETY

From the data, we can initially analyse certain trends in the attitudes of the European populace, towards the Information society. The overall data allows us to produce a preliminary analysis, which shows the different products in use, the dynamism or potential dynamism of the market and of the potential barriers to the growth of certain products.

The table is formatted with the most popular items / countries at the top of the scale and the least popular at the bottom of the scale.

The Dynamism of the market is assessed through the statements of interest, which were stated amongst non-users as well as the purchase intentions of users.

Barriers to usage, at this stage, those non-users who expressed a lack of interest.

We have then completed a comparison between national levels of usage and the European Average. Each item of technology has been reviewed Member State by Member State in order to identify the specific characteristics of national behaviour, this is then compared the overall average, and conclusions are drawn.

A. Systems of Access throughout the European Union

1. Table of Results

USAGE OF CERTAIN ACCESS SYSTEMS	AT HOME	AT WORK
1. Video tape recorder	74.7	9.2
2. Teletext	55.5	4.1
3. P.C.	30.8	40.5
4. Mobile telephone	30.2	23.9
5. Cable TV	28.4	3.0
6. CD-CROM Reader	20,8	24.7
7. Satellite Dish	17.4	1.9
8. Digital TV decoder	12.5	1.3
9. Fax-modem	9.3	17.8
10. Fax	7.5	33.3
11. Connection to the Internet	8.3	13.3
12. Minitel/vidéotexte	5.3	6.0
13. Bleeper	2.8	4.8

The above table shows utilisation rates, in order of popularity, of various technologies used both within the home and at work.

The above order has been formulated using the figures based on 'at home' usage. From these figures, we can best assess the social impact of the Information Society.

Put simply, one can consider that there are winners and losers among the items mentioned.

The Favourites are the four most popular items of equipment. These items are used by more than 30% of the total population. The top two products / services are the video tape recorder (74.7%) and Teletext (55.5%). These products are connected with the use of television and are not recent additions onto the market. The P.C. (30.8%) and the mobile telephone (30.2%) have a far more recent history within the home. It is interesting to note that the utilisation rate of these items is practically identical, thus meaning that they could be used by the same sector of the populace and purchased in tandem.

The least popular products, notably the two last additions of the table, (minitel) videotext without television (5.3%) and the Bleeper (2.8%). Their introduction onto the market is not recent and their penetration rate remains low.

Another conclusion, which can be drawn from the evidence, is that there are three potential 'groupings' of equipment. Some are mainly used within the home; some mainly at work or some used in both areas.

The items which are mainly used within the home are the Video, Teletext, Cable T.V, Satellite TV and / or a Digital Decoder for Digital TV / PAY-TV. These products are entirely connected with the use of a television.

The items, which are mainly used within the workplace, are linked to the fax, whether or not they are connected to a computer. One can note, however, that in the home the penetration of the modem-fax is higher than that of those faxes, which are not connected, this is reversed within the workplace.

Those items, which are used in both areas, the family and the workplace, are the Microcomputer or PC, the mobile Telephone, the CD-ROM drive and Connection to the Internet and to the World Wide Web.

The PC, the CD-ROM drive and the Connection to the Internet preserve an utilisation rate, which is much higher within the workplace, while the mobile telephone is used more out of the work environment (30.2% Vs 23.9%).

1. Dynamism of the market

INTEREST AND INTENTION TO PURCHASE ITEM	INTEREST AMONG NON-USERS		INTENTION TO PURCHASE WITHIN THE NEXT 6 MONTHS
	AT HOME	WORK	
1. Video tape recorder	6.9	5.6	3.9
2. Teletext	9.6	5.6	1.9
3. P.C.	18.1	8.6	7.3
4. Mobile telephone	16.5	10.3	7.4
5. Cable T.V.	13.7	5.4	1.9
6. CD-CROM reader	18.6	10.9	3.6
7. Satellite Dish	19.7	5.7	3.7
8. Decoder / Digital TV	18.9	5.2	2.6
9. Fax-modem	14.8	10.6	2.4
10. Fax	13.3	7.7	1.8
11. Connection to the Internet	21.2	12.7	4.2
12. Minitel/videotext	9.1	5.5	0.3
13. Bleeper	7.8	5.8	0.6

This table enables us to interpret the potential purchasing power and general interest levels of the European market towards the above products.

The above table has maintained the system of ranking, established within the previous analysis, on the basis of utilisation rates within the home.

It is no surprise to see that the two items, which were first on this previous classification, the video tape recorder and Teletext, already strongly introduced into use, record only a low interest rate among those remaining non-users. It can however be cited that purchase intentions, without reference to private or professional usage, remain high for the video tape recorder with 3.9% of those questioned intending to purchase a new video within the next 6 months.

There are 5 products / services listed above, which seem to share very similar levels of consumer interest and or usage levels, (between 21% and 18%) These items are Connection to the Internet, the Satellite Dish, the Decoder for Digital T.V., the CD-CROM Reader and the P.C. These are all technologies, which are connected with either television usage or with computer usage.

The mobile Telephone (16.5%), the Fax-Modem (14.8%) and the Fax without computer (13.3%), follow the above products, in close succession.

The least used products in the table, (Minitel) / Videotext and the Bleeper, are in the same position as in the first table. They remain on the borders of 10% of declared interest.

When we look at purchase intentions within six months, we can see that levels of intention to purchase mobile telephones (7.4%) and PC's (7.3%) are very similar. These items are closely followed by a connection to the Internet (4.2%); the Video recorder (3.9%), the TV Satellite dish (3.7%) and the CD-ROM drive (3.6%).

The Decoder for Digital T.V. programmes (2.6%) and the Fax-Modem (2.4%) finish up the group of the systems, which cross the barrier of 2% purchase intention levels.

One can note that the differences between a statement of interest and an intention to purchase are the lowest for the mobile Telephone (16.5% Vs 7.4%) and the PC (18.1% Vs 7.3%).

The opposite can be said of the following items, Connection to the Internet (21.2% Vs 4.2%), the Satellite dish (19.7% Vs 3.7%), the Digital TV decoder (18.9% Vs 2.6%) and the CD-ROM drive (18.6% Vs 3.6%). Thus for these items the interest in the products is far greater than the desire to purchase within the next six months.

1. HURDLES

NON-USE AND NON-INTEREST	AT HOME	WORK
1. Video tape recorder	17.7	78.5
2. Teletext	33.2	83.8
3. P.C.	49.9	45.7
4. Mobile telephone	52.0	59.6
5. Cable T.V.	56.6	84.6
6. CD-CROM reader	58.3	57.5
7. Satellite TV Dish	61.6	86.1
8. Decoder for Digital TV	67.0	86.7
9. Fax-modem	72.8	64.6
10. Fax	76.8	53.3
11. Connection to the Internet	68.0	66.9
12. Minitel/videotext	79.9	80.6
13. Bleeper	86.8	82.5

In the above table we can see those who responded, who did not own or use and had no interest in owning or using, the products listed above.

The above indications show that the phenomenon of non-use is more significant within the working environment. This can lead to more dramatic conclusions when we come to evaluate the growth of Information systems within Europe as a whole.

It is probable that the reasons for not wishing to know, or not knowing about a product are similar to the failure of some people to learn about or want to know about the information society as a whole. This issue will be discussed later on in the examination.

It is noted that of the thirteen studied systems, all, except for the video tape recorder and Teletext, are not used and are not of interest for 50% or more of those questioned, within the framework of the population.

B. Review of the access systems within the Member States

We have therefore, analysed the uses, ownership and interest, or lack of interest, expressed in the products listed above, on a Europe-wide basis. This section will now evaluate the individual results recorded in each Member States.

By evaluating the results on a country by country basis, it makes it possible to come to possible conclusions about the reasoning behind differences between Member States. Possible reasoning may be because of differences in economic status, infrastructure, work possibilities, culture and in the divergence of services on offer.

The analysis remains centred on the uses of equipment within the home. To try to facilitate easy interpretation of the results, we have separated the data into three categories.

- systems connected with television,
- systems connected to the PC,
- systems related to other technologies.

The regroupings of countries by profile with respect to these categories make it possible to establish an idea as to the geographical distribution of different products across Member States.

1. Usage of Systems connected with a TV, at home, in the Separate Member States.

MEMBER STATE	**SATALITE SYSTEM**	**DIGITAL DECODER / PAY TV**	**TELETEXT**	**Videotape recorder**	**CABLE TELEVISION**
B	2.5	12.0	59.2	71.6	87.2
DK	23.7	10.9	82.7	79.7	51.3
Western D	32.8	8.0	63.0	72.7	59.0
Total D	33.7	7.4	64.1	71.4	59.0
Eastern D	37.1	4.8	68.2	66.6	59.1
GR.	1.8	11.0	5.6	50.2	2.7
E	9.3	12.8	53.7	73.0	5.4
F	11.8	21.3	14.5	75.8	12.4
IRL	15.9	17.7	61.1	81.4	45.7
I	7.1	8.4	69.3	72.0	1.6
L	16.2	5.7	56.7	76.4	85.2
NL	5.2	5.5	83.1	78.4	93.1
A	47.8	7.4	69.8	73.4	41.4
P	9.7	2.6	23.7	53.8	14.3
END	14.8	4.1	68.3	69.9	34.0
S	25.1	17.3	81.0	79.9	47.0
THE U.K.	20.0	19.4	67.4	89.1	14.6
EU 15	**17.4**	**12.5**	**55.5**	**74.7**	**28.4**

- **Satellite Dish**

There is an average usage of Satellite dishes of 17.4% throughout the European Union. The scale goes from the highest usage, which is 47.8% in Austria to the lowest, which is 1.8% in Greece.

The countries, which use the Satellite system the most in Europe, are Austria (47.8%), Germany (33.7%), Sweden (25.1%), Denmark (23.7%) and the United Kingdom (20%).

The countries closest to the European average for Satellite usage, are Luxembourg (16.1%), Ireland (15.9%), Finland (15.9%) and France (11.8%).

Lastly, the utilisation rate falls to less than 10% of the population in the six following countries: Portugal (9.7%), Spain (9.3%), Italy (7.1%), the Netherlands (5.2%), Belgium (2.5%) and Greece (1.8%).

- **Decoder for Digital TV programmes**

The average usage of a decoder within the European Union stands at 12.5%. The difference however is not as stark as with Satellite systems. The highest rate of usage is in France (21.3%) and lowest is in Portugal (2.6%).

Digital TV is most popular within France (21.3%), the United Kingdom (19.4%), Ireland (17.7%) and Sweden (17.3%).

Four other countries approach the European average rate: Spain (12.8%), Belgium (12%), Greece (11%) and Denmark (10.9%).

The countries where the percentage of users is less than 10% are Italy (8.4%), Austria (7.4%), Germany (7.4%), Luxembourg (5.7%), the Netherlands (5.5%) and Finland (4.1%).

- **Teletext on a T.V. screen**

Teletext is, after the video tape recorder, the second most widespread European access system with an overall penetration of 55.5% of the market.

Three countries have higher usage than 80%: the Netherlands (83.1%), Denmark (82.7%) and Sweden (81%).

The majority of other states have utilisation rates ranging between 60% and 70% notably, Austria (69.8%), Italy (69.3%), Finland (68.3%), the United Kingdom (67.4%) Germany (64.1%) and Ireland (61.1%).

Belgium (59.2%), Luxembourg (56.7%) and Spain (53.7%) are close to the European average.

Portugal (23.7%) and Greece (5.6%) are the countries with the lowest usage levels of Teletext.

- **Video tape recorder**

Among the systems evaluated in this study, the Video tape recorder is the most popular of all categories, with an overall average percentage usage rate of 74.7%. The result of such high levels of usage are that there is a national penetration level of no lower than 50.0% in any of the European Union Member States.

The United Kingdom (89.1%) and Ireland (81.4%) are the Member States, which have the highest levels of use above the average level within the Union.

The majority of other countries approach this level, while Portugal (53.8%) and Greece (50.2%) are some of the lowest level countries, despite the fact that a large proportion of the populace own a video recorder.

- **Cable television**

The figures concerning the use of cable television reveal considerable disparities between Member States. This could probably be explained by the differences in access.

The overall European average is 28.4%. The highest level is 93.1% of users in the Netherlands and the lowest is 1.6% in Italy.

The largest users, in addition to the Netherlanders, are the Belgians (87.2%) and the Luxembourgers (85.2%).

Five Member States are located in a section ranging between 30% and 60%, in decreasing order, Germany (59%), Denmark (51.3%), Sweden (47%), Ireland (45.7%) and Finland (34%).

Those countries which are the smallest subscribers to cable television are the citizens of the United Kingdom (14.6%), Portugal (14.3%), Spain (5.4%), Greece (2.7%) and Italy (1.6%).

General remarks

The greatest differences between Member States, with regard to those items which are connected to a television, are seen with the levels of usage of a Satellite dish, of the Decoder for Digital TV / Pay TV and of Cable television.

The video recorder experiences the highest penetration rate and the least sensitive divergences between countries. It has a less favourable position in Greece and in Portugal. This may be due to the economic context at least as much as other behavioural factors.

2. The Computer and systems connected with a Computer Used on a private basis in the Member States

	PC	CD CDROM	FAX ON MODEM	INTERNET CONNECTION
B	33.0	19,1	10.1	8.2
DK	56.7	44.8	24.5	24.6
Western D	31.9	23.7	11.2	7.7
Total D	30.5	22.9	10.2	7.1
Eastern D	25.3	19,7	6.3	4.9
GR.	12.2	7.0	2.4	2.9
E	28.4	17.9	4.6	5.0
F	22.8	17.1	5.5	3.9
IRL	26.3	16.6	9.0	8.4
I	26.6	16.8	7.0	6.1
L	42.5	34.5	15.0	14.0
NL	58.8	39.5	24.7	19.6
A	30.8	24.3	9.6	6.8
P	18.4	10.9	4.2	3.4
END	38.6	27.3	17.7	17.2
S	59.8	49.5	34.3	39.6
THE U.K.	35.2	19.7	9.3	10.7
EU 15	**30.8**	**20,8**	**9.3**	**8.3**

- ### Microcomputer or PCs

There was an average level of 30.8% of all the Europeans who stated that they used a PC in their own home.

This figure exceeds 50% for the citizens of three Member States: Sweden (59.8%), the Netherlands (58.8%) and Denmark (56.7%).

The level ranges between 30% and 42.5% in the following countries: Luxembourg (42.5%), Finland (38.6%), the United Kingdom (35.2%), Belgium (33%), Austria (30.8%), and Germany (30.5%).

A third group of countries are below the European average whilst keeping an overall market penetration rate above 20%. These countries are Spain (28.4%), Italy (26.6%), Ireland (26.3%) and France (22.8%).

- ### CD-CROM reader

The overall penetration rate of the CD-CROM is 20.8% throughout the European Union.

This rate is almost double within two Member States: Sweden (49.5%) and Denmark (44.8%). The Netherlands (39.5%), Luxembourg (34.5%) and Finland (27.3%) also show figures significantly higher than the average.

The nearest countries to the European average are Austria (24.3%), Germany (22.9%), the United Kingdom (19.7%), Belgium (19.1%), Spain (17.9), France (17.1%), Italy (16.8%) and Ireland (16.6%).

Portugal (10.9%) and Greece (7%) are the countries with the lowest number of CD ROM Readers, and are the farthest away from the overall European average.

- **Fax-modem**

Almost 10% (9.3%) of Europeans stated that they use a fax connected to a computer in their own home.

The Swedes (34.3%), the Netherlanders (24.7%) and the Danes (24.5%) are the largest users of this system.

They are followed by a group of seven countries reaching, or also exceeding the average: Finland (17.7%), Luxembourg (15%), Germany (10.2%), Belgium (10.1%), Austria (9.6%), the United Kingdom (9.3%) and Ireland (9%).

The Countries, which seem to have the lowest usage rates for the modem-fax, are those of Italy (7%), France (5.5%), Spain (4.6%), Portugal (4.2%) and Greece (2.4%).

- **Connection to Internet and to the World Wide Web**

There is an average level, of 8.3% of Europeans, who have access to the Internet / have a connection to the Internet.

There are massive divergences by country; they go from 39.6% to 2.9%. The country in which the World Wide Web was the most widely used was Sweden, with 39.6% of those interviewed being users.

The Danes (24.6%), the Netherlanders (19.6%), the Finns (17.2%), the Luxembourgers (14%) and the British (10.7%) follow them.

In some Member States, less than 10% of the survey respondents used the Internet at home. These countries were Ireland (8.4%), Belgium (8.2%), Germany (7.1%), Austria (6.8%), Spain (5%), France (3.9%), Portugal (3.4%) and Greece (2.9%).

General remarks

The North South dichotomy is clearly demonstrated in the above results. This dichotomy is highlighted to a much greater degree on computer related items, than on those products which are related to a Television.

Sweden, Denmark and the Netherlands have the highest usage rates for the Internet and computer related equipment, out of the four studied systems, which were examined.

France, Italy, Spain, Portugal and Greece are among the smallest users of Internet and computer related equipment.

Those countries with the highest usage levels of the computer are also those countries with the highest levels of usage on computer related equipment. The overall ratio of equipment to usage is much lower within the Southern European states.

3. The systems not connected to Television or with the Computer used within the home in the Member States

	MOBILE TELEPHONE	FAX	MINITEL/ VIDEOTEXT	BLEEPER
B	25.8	12.5	0.9	2.5
DK	43.1	10.3	1.0	2.7
Western D	19.4	10.9	4.0	2.4
Total D	19.4	10.3	3.4	2.1
Eastern D	19.7	7.8	0.9	0.7
GR.	29.3	2.6	0.4	0.2
E	26.3	3.6	1.0	1.3
F	25.5	6.0	22.5	3.3
IRL	28.3	5.3	1.8	2.4
I	44.2	5.9	2.2	0.8
L	36.9	13.8	3.4	4.1
NL	24.2	13.2	1.5	6.3
A	35.7	12.4	3.2	5.0
P	29.9	2.2	2.3	3.3
END	64.4	5.6	2.8	2.3
S	60.3	10.6	3.2	5.8
THE UK	32.2	7.3	1.7	5.4
EU 15	**30.2**	**7.7**	**5.3**	**2.8**

- ### Mobile telephones

Almost a third (30.2%) of Europeans (on average) have a mobile telephone for their own personal use.

The Finns (64.4%) and the Swedes (60.3%) are the biggest mobile phone users and owners in Europe.

They are followed by the Italians (44.2%), the Danes (43.1%), the Luxembourgers (36.9%) and the Austrians (35.7%).

The citizens of countries whose adoption rates border the European average are the United Kingdom (32.2%), Portugal (29.9%), Greece (29.3%), Ireland (28.3%), Spain (26.3%), Belgium (25.8%), France (25.5%) and the Netherlands (24.2%).

Germany (19.4%) records the lowest rate of users, and yet it is still fairly close to the European average level.

- **Faxes functioning without the use of a computer**

The average level of fax usage within the European Union is 7.7%.

The Member States, which have a rate of usage higher than 10% are Luxembourg (13.8%), the Netherlands (13.2%), Belgium (12.5%), Austria (12.4%), Sweden (10.6%) and Germany (10.3%).

The other countries in the survey have a level of usage which is much lower than the average within the European Union. These countries are the United Kingdom (7.3%), France (6%), Italy (5.9%), Finland (5.6%), Ireland (5.3%), Spain (3.6%), Greece (2.6%) and Portugal (2.2%).

- **Minitel or videotext without television**

The average usage for Europe is 5.3%. Only in France (22.5%) are there significant adoption rates of this technique.

For the other countries rates are established from 0.4% for Greece to 3.4% for Germany and Luxembourg.

- **Bleeper**

This technology has an average private usage rate, of 2.8% of Europeans.

The countries with the highest usage rates are the Netherlands (6.3%), Sweden (5.8%), the United Kingdom (5.4%), Austria (5%), Luxembourg (4.1%) and France (3%).

Within the other markets the penetration rate is established between 0.2% for Greece and 2.5% for Belgium.

General remarks

Mobile telephone usage within Europe far outweighs the usage of the Bleeper, despite being a rather similar product. However, as is with the Bleeper, the North-South dichotomy is not as noticeable or is even reversed.

The universality of the service, its ease of access and facility as well as its relatively low cost perhaps explains the homogeneity of its success.

Outside France, the case of which is atypical, the videotext does not seem to be popular and its popularity or lack or popularity is not linked to computer usage levels.

II. THE SERVICES ACCESSIBLE BY THE COMMUNICATION NETWORKS

This step comprises an evaluation of the nature of the services offered as well as the willingness to pay for a right of access. It will also provide analysis as to why there may be a lack of interest in certain products.

The interest in the services is a list of services, comprised in the format of a table.

The reasons as to why people are not interested in a product will be examined.

A. The services of the information society throughout the European Union

1. Interest and provision to pay for the services of the information society in the European Union

	INTEREST	WILLING TO PAY
1. Documents municipal authorities	47.8	9.4
2. Travel/Organisation	42.3	9.5
3. Medicine/Diagnosis	41.9	12.9
4. Employment/Research	41.5	8.8
5. Training	33.9	18.2
6. Goods/Services	33.8	7.0
7. Consumer's rights	33.4	6.8
8. Economic / financial management	33.3	7.5
9. Press/access	29.1	7.8
10. Museums	21.6	6.6
11. Contracts/financial services	14.0	2.9
12. Policy/contacts	10.9	2.5

The attached table shows the classification by importance of degree of interest, for each service proposed in the survey. It was established that ten Euros per month would be the index upon which the right of access question would be posed.

- **Good citizenship**

1. Documents / municipal authorities

The possibility of consulting the administrative services and of obtaining documents comes first in the list of choices of (47.8%) with a fifth of people agreeing to pay for this service.

Is this interest connected directly to the perception of constraints inherent in the process of obtaining such information or in exerted pressure on leisure time?

- **Leisure**

1. Travel/Organisation

The preparation of a trip was the second most popular choice for the Internet use, (42.3%) agreed that they would use the Internet for such a task. 9.5% agreed to pay for a right of access.

Perhaps this is due to the overall importance of holidays within the European Union

7. Press/access

The possibility of getting information by reading press, publications and documents on the screen interests slightly fewer than one third of Europeans (29.1%). 7.8% are willing to pay for this service.

It order to clarify the above figures we may need to compare the above figures with the actual overall newspaper readership levels of the respondents.

8. Museums

To find out about / look at the collections of European museums is an attractive service for more than one person out of every five (21.6%). 6.6% of the population stated that they were ready to pay for a right of access.

- **Health**

3. Medicine/Diagnosis

It is no great surprise to discover that to obtain the opinion of a doctor on a health problem using the Internet was a very popular choice. This matter obtained one of the highest interest levels of the people surveyed (41.9%). The reality of this interest is stressed by the fact that more than 12% of the population were willing to pay for this service.

- **Work**

4. Employment/Research

41.5% of those surveyed said that they would use the Internet to search for a new job. More than 8% of the population surveyed was ready to pay for this service.

This percentage of interest is actually higher in real terms if we consider that the working population is only a proportion of the people surveyed. Thus if the survey were to focus the figure would be much greater.

5. Training

33.9% of all respondents said that they would complete and or look for training opportunities on the Internet. The proportions that were willing to pay for this service were the highest amongst all of the services, at 18.2%.

The above figures may be a little misleading as 'training' can also include personal development training courses, rather than just career advancement.

This may account for the high proportion of those who were interested in the service.

- **Consumption**

6. Goods/Services

The completion of transactions on the Internet involving Electronic trade (research, purchase, lease) in cultural leisure or information technology products was also a popular choice, with 33.8% of the sample, stating that they would conduct such transactions over the Internet. Nearly one person in ten stated that they were willing to pay for such a right of access.

7. Consumers' rights

The figures are extremely close to the above, with 33.4% of responses declaring that they would use the Internet for such a service. Those willing to pay for such a service was also very similar to the above.

- **Finance**

7. Economic / financial management

More than a third of respondents were keen on the idea of conducting bank transactions and managing their finances / consulting stock exchange prices over the Internet (33.3%). 7.5% of the European respondents were willing to pay for this service.

7. Contracts/financial services

The percentage of those surveyed who were interested or who would complete contractual obligations over the Internet for financial services did not exceed 14%, and only 2.9% of those questioned would be willing to pay for this opportunity.

- **Democracy**

12. Policy/contacts

Only 10.9% of those questioned citizens stated that they would be keen to utilise the Internet in order to take part in political debates or obtain answers from politicians on questions of concern. Only 2.5% of the European population who were surveyed were willing to pay for this service.

2. Reasons for the lack of interest in services over the Internet throughout the European Union

Answers in order of Frequency	%
1. No need to do such tasks within the home	55.0
2. Too expensive	24.2
3. No need to do such tasks within job	22.7
4. Insufficient equipment	21.5
5. Too complicated	18.2
6. Lack of knowledge about the subject area	13.7
7. Lack of interest in new technologies	13.0
8. Lack of time to use	9.7
9. Fear of security when conducting financial Transactions over the Internet	9.1
10. Other reasons	8.0
11. Lack of time to learn how to use	7.2
12. No prior knowledge about service / product	6.5
13. Service did not exist in country	2.5
14. Partner uninterested in services	2.1
N.S.P./does not know	6.6

The table shows a ranking of the frequently quoted reasons, which were given as to why there was a lack of interest in particular services on the Internet.

There are several principle factors which seem to account for this lack of interest: the fact that they do not need such a service, the cost or potential costs incurred, the lack of equipment available to them, certain technological aspects, the lack of information available on the subject, the lack of availability of the service.

- **Needs**

I do not need to use such a service at home	55.0%
I do not need to use such a service within my professional life	22.7%

- **Cost**

The services are too expensive	24.2%

- **Equipment**

I do not have the necessary material	21.5%

- **Technology**

The equipment is too complicated	18.2%
Lack of overall interest in new technology	13%
I do not have the time to learn how to use such equipment	7%
Lack of confidence in conducting financial transactions Over the Internet	9.1%

- **Information**

I do not know enough about such services	13.7%
I did not know anything at all about such services	6.5%
I do not think that such services exist in our country	2.5%

(One can probably raise also here the percentage of those who stated that they did not know which is 6.6%).

- **Availability**

I do not have the time to use such a service	10%

General remarks

We can see from the above that when there is an absence of need or desire for the product, combined with a high cost and a lack of fundamental equipment, there will be no demand for the product or service.

B. The services of the information society in the Member States

1. Interest and provision in paying

This survey assessed the level of interest expressed for each service described within the framework of the survey.

Nationality does not seem to have a dramatic impact upon certain answers. Profiles seem to remain the same whatever the nationality of those questioned. It appears nevertheless interesting to measure just how much the national environment, can induce certain behaviour or priorities.

For the purpose of evaluation, we selected five types of services and evaluated how each Member State answered to each of these services.

We chose to assess the five factors listed below, and they are listed in order of popularity.

- access to the communal administrative documents,
- on line training facilities
- the possibility of obtaining information about leasing or purchasing goods or services,
- management of bank account,
- Obtaining information of the collections within European museums.

- **Interest in obtaining local or national government information about local or national policy initiatives / policy decisions / local services etc.**

B	INTEREST	WILLING TO PAY
B	49.7	9.3
DK	55.1	11.1
Western D	44.6	9.1
Total D	44.7	8.7
Eastern D	45.0	7.4
GR.	47.3	21.2
E	40.2	8.5
F	57.6	7.6
IRL	40.3	4.6
I	54.3	15.5
L	46.2	10.5
NL	58.6	8.3
A	39.2	13.9
P	44.5	7.0
END	62.2	13.7
S	58.8	10.7
THE U.K.	36.9	4.1
EU 15	**47.8**	**9.4**

A large number of citizens were interested in obtaining such information over the Internet (47.8%).

The relatively large number of people, who were willing to pay for such a service, shows the extent of this level of interest. Seven Member States are listed as being above the average level of those who were willing to pay for such a service, with results ranging between 11% and 21%. These countries were Denmark, Greece, Italy, Luxembourg, Austria, Finland and Sweden.

One potential reason for this is the fact that obtaining such information is both time consuming and often extremely difficult, often involving many visits to different places, thus by obtaining information in this way, the time and energy taken to complete such a task, is considerably reduced.

It is interesting that in Italy (54% - 16%) and Greece (47% - 21%) there was the highest proportion of interest in this matter, and the highest proportion of those who were willing to pay for this service.

Percentages remained very low in the United Kingdom (4%), in Ireland (5%), in Portugal (7%) and in France (8%).

Perhaps the ease of accessing documents or the low or free cost of obtaining such communal administrative documents could account for this difference in opinion.

- **To follow on line / interactive training facilities, from a computer or a television set**

	INTEREST	WILLING TO PAY
B	33.3	19,8
DK	44.5	30.9
Western D	27.0	17.3
Total D	27.3	16.5
Eastern D	28.4	13.7
GR.	26.8	16.4
E	33.6	15.6
F	38.3	21.1
IRL	37.2	16.9
I	33.9	17.4
L	30.9	18.2
NL	44.0	23.4
A	31.9	20,4
P	29.5	8.5
END	47.3	21.5
S	52.9	37.0
THE U.K.	33.6	16.3
EU 15	**33.9**	**18.2**

The average level of interest in obtaining training facilities on the Internet attracted 33.9% of those questioned. Nine member states shared very similar levels of interest going from 26.8% for Greece to 33.9% for Italy.

Motivation levels for such a course were slightly higher in France (38.3%) and in Ireland (37.2%).

We can see a northern group displaying a great deal of interest in obtaining training on the Internet. The Swedes (52.9%), the Finns (47.3%), the Danes (44.5%) and the Netherlanders (44%) all had similar levels of interest in such a service.

Those people who were willing to pay for access to this service is particularly high since it amounts, on average through the European Union, to 18.2% of those who were interested in such a survey.

This figure goes up to 37% in Sweden and 31% in Denmark.

In most other Member States, the number is near the average level, however, the figure is only 8.5% in Portugal.

We do not know what training was sought, however we can conclude that there is significant demand for obtaining training over the Internet, in all of the Member States.

- **To obtain information on, purchase or rent products such as videos, music, CD's, books, computer software or computer hardware**

	INTEREST	WILLING TO PAY
B	31.9	5.7
DK	39.2	10.3
Western D	30.2	5.8
Total D	29.8	5.5
Eastern D	28.3	4.1
GR.	27.6	10.3
E	30.1	5.9
F	36.2	6.2
IRL	41.9	7.3
I	32.9	7.3
L	36.2	8.9
NL	48.2	9.7
A	32.9	12.0
P	30.7	5.8
END	44.7	7.2
S	49.5	9.1
THE U.K.	34.9	7.9
EU 15	**33.8**	**7.0**

A third (33.8%) of all Europeans questioned were interested in completing or finding out about such transactions.

Several countries had similar proportions; they were France and Luxembourg (36.2%), the United Kingdom (34.9%), Austria, Italy (32.9%), Belgium (31.9%), Portugal (30.7%), Spain (30.1%) and Germany (29.8%).

As was with the previous question, countries of the Northern European states had the highest levels of interest in this subject they were: Sweden (49.5%), the Netherlands (48.2%), Finland (44.7%), and Denmark (39.2%). Ireland was a new addition to this group at (41.9%).

Greece had a slightly lower level of interest than other countries (27.6%) but, on the other hand, the percentage of people in this Member State who agreed to pay was one of the highest ones within the European Union with 10% compared to the average of 7%.

This willingness to pay was also expressed by a high proportion of Austrians (12%) and of Danes (10%). Other nationalities approach the average without particularly significant divergences.

One can note that the vast array of different products or services listed above, are quite specific and also very varied. Consequently, the collected indications are indicative of tendencies rather than revealing specific, potential market opportunities.

- **To use the Internet to manage bank account or other transactions or to consult the stock exchange or other economic information prices.**

	INTEREST	WILLINGNESS TO PAY
B	35.0	8.7
DK	47.3	13.9
Western D	27.5	7.5
Total D	27.0	6.8
Eastern D	24.8	4.0
GR.	29.0	13.7
E	28.4	4.2
F	42.1	8.0
IRL	29.4	4.1
I	32.3	6.8
L	32.9	9.2
NL	48.3	11.3
A	30.0	12.9
P	31.6	3.0
END	56.3	16.3
S	49.2	17.3
THE U.K.	30.2	6.2
EU 15	**33.3**	**7.5**

This service is likely to interest one European in three (33.3%).

This percentage falls slightly below 30% in Ireland (29.4%), Greece (29%), Spain (28.4%) and Germany (27%). It is equal to or slightly higher than 30% in Belgium (35%), Luxembourg (32.9%), Italy (32.3%), and Portugal (31.6%), in the United Kingdom (30.2%) and in Austria (30%).

The Northern European nations once again expressed a large amount of interest in such services, Finland (56.3%), Sweden (49.2%), the Netherlands (48.3%) and Denmark (47.3%) and, in this case, France which approaches the North with a score of 42.1%.

Overall, 7.5% are willing to pay a right of access to manage their bank account or to facilitate the management of their portfolio by computer.

This percentage jumps ahead in Sweden (17%), in Finland (16%), in Denmark (14%), in Greece (14%) and in Austria (13%).

We can argue that distortions may, in certain cases, have occurred because there may have been confusion as to the actual meaning of financial transactions in this question. The differences of the overall costs of banking within European countries also explains variances amongst the Member States.

To see the exhibitions and collections of European Museums, whilst travelling at your own pace, according to your own interests.

	INTEREST	WILLING TO PAY
B	15.1	5.3
DK	20.0	8.2
Western D	14.7	4.3
Total D	14.7	4.2
Eastern D	14.8	3.7
GR.	22.3	8.8
E	23.4	6.6
F	27.2	8.3
IRL	18.9	2.9
I	31.0	11.2
L	15.4	6.2
NL	24.9	6.6
A	16.5	7.1
P	24.6	4.5
END	23.4	4.1
S	27.2	8.4
THE U.K.	15.1	3.9
EU 15	**21.6**	**6.6**

The European average level of interest is at 21.6%, and the divergences between nationalities go from Germany at 14.7% to double that level in Italy at 31%.

The seemed to be a pretty even split amongst the countries of the North and South who were most interested in this service: Italy (31%), Sweden (27.2%), France (27.2%), the Netherlands (24.9%), Portugal (24.6%) and Finland (23.4%).

The same geographical mix is observed in the group in which interest rates are closest to the average: Spain (23.4%), Greece (22.3%), Denmark (20%) and Ireland (18.9%).

The group whose levels of interest were, just below the European average were Austria (16.5%), Luxembourg (15.4%), Belgium (15.1%), the United Kingdom (15.1%) and Germany (14.7%).

The most willing countries to pay for such a service were the Italians (11.2%), the Greeks (8.8%), the Swedes (8.4%) and the French (8.3%).

The least interested in paying for these services are the Irish (2.9%), the British (3.9%), the Finns (4.1%) and the Germans (4.2%).

It is probable that some of the noted disparities are connected with the differences between national cultural infrastructures: such as the number of museums, the wealth of the collections, geographical centralisation of such museums, conditions of access over the Internet etc.

III. DEMOGRAPHIC FACTORS AND THE INFORMATION SOCIETY

A. Use of systems of access according to sociodemographic criteria

We have now analysed the behaviour of citizens with respect to the systems of access to the information society. In this chapter, we will assess on a European scale and then at the level of the Member States individually, how sociodemographic factors can induce attitude variations in relation to the average.

The criteria retained for these evaluations are sex, age, profession and income level of the respondents.

The studied systems are, in decreasing order of average use; the video tape recorder, Teletext, the PC, the mobile telephone, Cable TV, the CD-CROM reader, the Satellite dish, decoder for digital TV, fax on a modem, fax and a connection to the Internet.

Minitel/videotext and the Bleeper were not retained for this exercise owing to the weakness of their penetration rate in the previous section.

1. Sociodemographic variable: SEX

	EU 15	SEX	
		Men	**Women**
1. Video tape recorder	**74.7**	78.0	71.7
2. Teletext	**55.5**	58.8	52.4
3. P.C.	**30.8**	34.7	27.1
4. Mobile telephone	**30.2**	34.5	26.2
5. Cable TV	**28.4**	28.5	28.3
6. CD-CROM reader	**20,8**	25.1	16.8
7. Satellite Dish	**17.4**	19,5	15.4
8. Digital TV decoder	**12.5**	14.2	11.0
9. Fax on modem	**9.3**	12.1	6.7
10. Fax	**7.5**	9.4	5.7
11. INTERNET connection	**8.3**	10.6	6.1

For all the systems reviewed, the male utilisation rate proves higher than that of women, either distinctly (for example PC, Men, 35%, Women, 27%), or marginally in the case of Cable TV (Men 28.5%, Women 28.3%).

We can see the smallest levels of divergence when looking at the figures associated with systems connected to television. For example, there is only a difference of 6 points for the video tape recorder and Teletext, of 5 points for the Satellite Dish and of 3 points for a digital decoder.

This distance increases on the computer since here female use is 8 points lower than men.

This divergence is also apparent on systems connected to the PC: - 8 points difference on CD-ROM drive usage, 5 points difference on connection to the Internet and for the fax on a modem.

Among those systems, which are unconnected to a computer, for example the ‘independent’ fax, the difference in women’s use in relation to men is of 3 points. It is 9 points for the mobile telephone.

2. Sociodemographic variable: AGE

	EU 15	AGE			
		15 24	**25-39**	**40 54**	**55 +**
1. Video tape recorder	**74.7**	82.5	84.4	83.2	56.3
2. Teletext	**55.5**	58.7	62.7	62.1	42.8
3. P.C.	**30.8**	44.9	40.1	37.8	10.4
4. Mobile telephone	**30.2**	35.5	40.4	35.8	14.6
5. Cable TV	**28.4**	27.4	30.6	30.4	25.5
6. CD-CROM reader	**20.8**	30.6	27.9	24.9	6.8
7. Satellite Dish	**17.4**	18.0	18.6	19.6	14.3
8. Digital TV decoder	**12.5**	15.7	14.6	14.3	7.6
9. Fax on modem	**9.3**	13.2	12.9	10.9	3.0
10. Fax	**7.5**	7.6	9.1	10.6	3.8
11. INTERNET connection	**8.3**	11.8	11.8	9.6	2.4

For all of the first three age groups there seems to be certain homogeneity of utilisation rates. However, we can see a significant difference when we approach the 55-year old age group, which is considerably lower than the European average.

As with the previous question on sex differentiation, it is in the group of systems connected with television that divergences between the youngest respondents and those aged within the 25=39 bracket remain the least visible. Certain materials are relatively similar in their result, video tape recorder, Teletext, Cable TV, Satellite Dish and digital decoder.

10.4% of the 55-year-old citizens and above, use a computer whilst the average for the other age groups is established around 40%.

Despite the homogeneity pointed out between these groups, there remain certain differences connected with users' age and with the systems that they use.

The 15-24 age group is, without surprise, the largest of PC users at 44.9%. The 25-39 year olds scored 40.1% and the 40-54-age group 37.8%. There are similar figures when we look at the CDS-ROM drive, with respectively 30.6%, 27.9% and 24.9%.

3. Sociodemographic variable: PROFESSION

	EU 15	PROFESSION			
		Self-employed	Senior Management	Mid Manager/employee	Manual Worker / Self Employed
1. Video tape recorder	**74.7**	76.6	87.8	84.4	83.6
2. Teletext	**55.5**	58.1	67.4	62.2	61.6
3. P.C.	**30.8**	38	56.8	40.1	30.2
4. Mobile telephone	**30.2**	51.2	46.3	42.4	31.9
5. T.V. by cable	**28.4**	18.5	36	29.3	32.7
6. CD-CROM reader	**20.8**	28.1	44.1	27.4	19.2
7. Satellite Dish	**17.4**	18.6	22.5	18.1	20.6
8. Digital TV decoder	**12.5**	16.7	17.6	14.9	13.6
9. Fax on modem	**9.3**	13.8	24.1	12.4	7.1
10. Fax	**7.5**	20,1	18.2	7.9	4.4
11. INTERNET connection	**8.3**	11.6	21.8	11.5	6.2

	EU 15	PROFESSION			
		Housewife / Househusband	Unemployed	Pensioner	Student
1. Video tape recorder	**74.7**	69.7	74.5	54.2	82.5
2. Teletext	**55.5**	51.2	53.4	41.1	59.3
3. P.C.	**30.8**	21.3	24.7	8.3	60.8
4. Mobile telephone	**30.2**	20.5	24.6	12.7	33.0
5. T.V. by cable	**28.4**	25.3	29.0	25.7	30.9
6. CD-CROM reader	**20.8**	12.4	14.4	4.9	42.4
7. Satellite Dish	**17.4**	14.5	16.9	13.2	16.5
8. Digital TV decoder	**12.5**	8.5	10.6	7.8	15.3
9. Fax on modem	**9.3**	4.8	6.0	1.7	19.5
10. Fax	**7.5**	5.2	4.5	2.2	9.2
11. INTERNET connection	**8.3**	4.5	3.5	1.4	18.5

The usage of certain systems is still lower than the European average amongst those who stay at home, who are unemployed, or are pensioners. However, within these groups, the levels are increased when approaching systems connected with a television; video recorder, Teletext, and Satellite Dish.

For the majority of the other media, the unemployed utilise Information technology, more than those who are househusbands / wives. This is with the exception of those who use fax machines and have a connection to the Internet, where both categories seem fairly close to each other.

Students are amongst some of the leading users of information technology, with percentages of use reaching more than twice the European average for the PC, the CD-CROM reader, the fax connected to a modem and with a connection to the Internet. They do however, use less Satellite Dishes.

All the active categories generally show use higher than the average. Exceptions are the fax with a modem, the fax and connection to the Internet, which manual workers do not seem to use. Cable TV usage by the self-employed is significantly lower than the average level, 18.5% compared to the average of 28.4%.

It is logical to conclude that a part of behaviour within the home is influenced by professional behaviour and or status. Senior Managers are the largest users of all the information systems except for the mobile telephone and except for the fax, where self-employed people gain the first place with respectively 51.2% Vs 30.2% and 20.1% Vs 7.5%. The same self-employed people are in second place for the CD-CROM reader and the fax with a modem.

It is interesting to note the position of manual workers in the European average for technology such as the PC, the mobile telephone and the CD-CROM reader.

Lastly, the obvious observation that the video tape recorder and Teletext are the two systems which have the most unanimous usage amongst the categories.

4. Sociodemographic variable: INCOME LEVEL

	EU 15	INCOMES			
		-	-?	+	++
1. Video tape recorder	**74.7**	54.6	73.7	81.9	88.4
2. Teletext	**55.5**	38.7	54.5	56.5	65.7
3. P.C.	**30.8**	14.8	22.9	34.2	53.1
4. Telephone	**30.2**	14.6	24.4	35.1	46.8
5. TV by cable	**28.4**	31.1	32	26.7	36.2,
6. CD-CROM reader	**20,8**	8.7	14.8	23.8	40.1
7. Satellite Dish	**17.4**	12.9	18.7	19,0	21.9
8. Decoder paying TV	**12.5**	6.1	11.1	13.1	17.9
9. Fax on modem	**9.3**	3.8	7.1	10.1	20.0
10. Fax	**7.5**	3.0	4.6	8.3	15.5
11. INTERNET connection	**8.3**	3.5	6.1	8.1	18.1

As always, divergences are smaller on the video tape recorder and Teletext, yet income is a clear indicator as to why people are willing to pay for a product or have a product at home.

The most widely used system appears to be cable television for which the categories of lower incomes post a use rate higher than the average.

The cluster which is the least wealthy shows a usage rate which is below half the European average level, for the PC, the mobile telephone, the CD-CROM reader, the decoder for pay TV, the fax on modem, the fax and connection to Internet.

The most secured show equal figures or higher than the double of the average for the CD-CROM reader, the fax on modem, the fax and connection to Internet.

B. Provision to pay for service access, according to sociodemographic criteria

To allow a more focussed evaluation of the active purchasing potential of the various sociodemographic groups, we will now focus our analysis on the ability and or willingness of certain groups to pay for service access.

The list of the studied services remains the same:

- Access to local / national government information
- On line training facilities / courses
- The possibility to purchase, rent or buy goods or services over the Internet
- To manage your bank account / financial affairs
- To view European museums collections.

The variables used remain constant: sex, age, professional status and income.

The question that was posed to the respondents is printed below:

I will quote to you several examples of services which you could reach by using one of these communication networks, for example Internet from a computer, Teletext from a television, etc. (etc)

And could you indicate those for which you would be willing to pay, in addition to communication expenses, a subscription/right of access equivalent to Euros 10 in national currency per month?

1. Sociodemographic variable: SEX

	EU 15	**SEX**	
		Men	**Women**
Local / National Governmental information	**9.4**	10.4	8.5
Training	**18.2**	18.2	18.3
Goods/Services	**7.8**	8.3	5.7
Management of Bank Account / financial affairs	**7.5**	9.1	6.1
Museum visits	**6.6**	7.0	6.2

We can see that the willingness to pay is almost an identical level between women and men, on the issues of training and conducting museum visits over the Internet.

On the other hand, men are more willing to pay for the management of financial affairs, and or a bank account over the Internet with 9.1% Vs 6.1% of Women. Men also seem more willing to pay to obtain communal administrative documents / local and national governmental information, 10.4% Vs 8.5%.

We could suggest that this difference be explained because of the traditional division of tasks within the household

We can also see a clear male / female divide, when approaching the issue of conducting leases / contractual obligations over the Internet, with male interest standing at 8.3% and female 5.7%.

2. Sociodemographic variable: AGE

	EU 15	AGE			
		15-24	25-39	40-54	55+
Administration National or local Governmental documents	**9.4**	11.0	11.9	10.1	5.9
Training	**18.2**	24.6	25.4	19.5	7.8
Goods/Services	**7.8**	16.1	7.9	5.8	2.5
Banking management and economic	**7.5**	7.9	10.5	8.4	4
Museums	**6.6**	7.1	7.8	7.3	4.8

We can see from the above that the 55-year-olds and above group are much less willing to pay for service access than Europeans of other age groups. The services, which they are most willing to pay for, are training, 7.8% obtaining administrative documents, 5.9% and visiting museums, and 4.8%.

The three other age groups show a similar level which is willing to pay to view on line museums or governmental documentation / local government information.

People across all age groups, especially within the groups between the 15-39 age brackets, are willing to pay for training courses over the Internet with the 15–24 bracket showing a 24.6% level and the 25-39, 25.4%. This figure is slightly lower in the senior age bracket of the 40-54 with 19.5% expressing a willingness to pay for such a service.

Young people are less interested in paying to manage a bank account over the Internet. However, within the majority of service they express an interest in paying for services which is far greater than the EU average, 16.1% Vs 7%. This interest is displayed when we see the figures willing to pay to buy services over the Internet.

Obviously the nature of goods or services that are on offer can certainly influence whether or not young people are interested in paying for rights of access.

3. Sociodemographic variable: PROFESSION

	EU 15	PROFESSION			
		Self-employed	Senior Manager	Manager/ Employee	Manual worker / Self Employed
Administration Communal/Documents	**9.4**	14.9	12.2	10.8	8.8
Training	**18.2**	20,8	27.9	26.8	18.4
Goods/Services	**7.8**	6.7	9.0	6.6	7.5
Banking management And economic	**7.5**	12.6	13.2	9.6	7.0
Museums	**6.6**	6.9	12.2	8.7	5.1

	EU 15	PROFESSION			
		Housewife / Househusb and	Unemployed	Pensioner	Student
Administration Communal/Documents	**9.4**	7.6	9.4	5.8	12.9
Training	**18.2**	14.1	18.6	6.5	29.1
Goods/Services	**7.8**	4.0	7.8	2.7	18.9
Banking management And economic	**7.5**	6.3	5.0	3.8	7.8
Museums	**6.6**	4.6	6.8	4.4	10.4

As we can see from the above, students are the most willing to pay for services; they score the highest score out of all groups in the categories with regard to receiving training and to search and buy goods over the Internet. They were the second most popular group who would be willing to pay for civil documentation (local or national government information). They were also the second most willing group who would pay to look around Museum collections.

Students are nearer to the European average when approaching the issue of financial management, with 7.8% Vs 7.5% of all interviewed stating that they were willing to pay for such a service.

Pensioners are the least interested out of all the groups in paying for proposed services. The areas in which they were most interested were in the obtaining of administrative documents 5.8% (9.4% average), to visit museums 4.4% Vs 6.6%. The area in which pensioners are most interested, is in receiving training over the Internet, but the figure still remains low in comparison to the European average, 6.5% Vs 18.2%.

When looking at the results as a whole, across all socio-economic categories, receiving on line training facilities at home is the proposed service, which has the largest number of people who are willing to pay for such a service.

Obtaining administrative documents, already mentioned above, comes in second place followed by the management of a bank account. The European average of 7.5%, is drawn upwards in this section by those who are willing to pay amongst the self-employed / manual workers 12.6%, Senior Managers, 13.2% and, to a lesser extent managers and employees 9.6%.

When questioned whether people would pay to buy or rent goods or services over the Internet, five groups scored above the European average of 7%; students 18.9%, Directors /

professionals 13.2%, self-employed persons, 12.6%, managers and employees, 9.6% and the unemployed 7.8%.

Variable Sociodemographic: INCOMES

	EU 15	INCOMES			
		-	-?	+	++
Administration Communal/Documents	**9.4**	5.5	9.4	10.9	12.7
Training	**18.2**	12.7	17.5	22.4	26.5
Goods/Services	**7.8**	4.7	5.9	8.3	12.9
Banking management And economic	**7.5**	5.1	5.9	8.3	12.9
Museums	**6.6**	3.9	5.7	7.0	10.0

We can see from the above, the clear relationship between willingness to pay for services and also the income bracket that the respondent is in. For all the proposed services the provision to be paid progresses upwards, through the four incomes bracket selected.

Thus income seems the one factor which determines behaviour more than any other.

IV. THE DEVELOPMENT OF BEHAVIOUR IN THE EUROPEAN UNION

Although the interval between this study (autumn 1998) and the previous one (1996-1997 winter) is a relatively short one, the rapid development of the information society during this period, means that we should evaluate whether there have been dramatic changes in European behaviour during the period.

The criteria selected to make this measure on the scale of the European Union are:

- The use of the ‘access systems’ within the home environment.
- The interest in obtaining access systems amongst non-users,
- The willingness to pay for access to services

1. Use of the systems of access on a private basis in the European Union

	Winter 1996/1997	Autumn 1998	Variation
1. Video recorder	73.6	74.7	+1.1
2. Teletext	49.2	55.5	+6.3
3. P.C.	27.8	30.8	+3.0
4. Mobile telephone	17.0	30.2	+13.2
5. Cable TV	26.0	28.4	+2.4
6. CD-CROM	14.7	20,8	+6.1
7. Satellite Dish	16.4	17.4	+1.0
8. Digital decoder (TV)	12.9	12.5	-? 0.4
9. Fax modem	6.0	9.3	+3.3
10. Fax	7.3	7.5	+0.2
11. Connection to the Internet	4.4	8.3	+3.9
12. Minitel/ Videotext	6.5	5.3	-? 1.2
13. Bleeper	2.3	2.8	+0.5

In a period which is less than two years, we can see how systems of access / information systems usage have increased dramatically within Europe over such a short time scale.

As we can see there has been a reduction in the number of users of Mintel / videotext, fax, Bleeper and digital TV decoders. However despite this, all other forms of technology which were included in the Survey, recorded significant rises in the number of users.

The greatest jumps can be seen with those systems which are connected to a computer with +3.9 points for connection to the Internet (which almost doubles in a year), +3.3 for the fax on modem (which is a growth of 55%) and +6.1 points for the CD-CROM reader.

The PC itself experienced more modest growth of 3 points, with 11.1% of gain of users' market share.

The mobile telephone has increased its market share to 13.2 points, which is a jump of 77.6%, this may be due to increased competition, brought about by the liberalisation of the telecoms market.

1. Interest in the systems of access among the non-users on a private basis

	Winter 1996/1997	Autumn 1998	Variation
1. Video tape recorder	7.1	6.9	- 0.2
2. Teletext	13.3	9.6	- 3.7
3. P.C.	27.8	18.1	- 9.7
4. Mobile telephone	21.0	16.5	- 4.5
5. Cable T.V.	19,0	13.7	- 5.3
6. CD-CROM	24.2	18.6	- 5.6
7. Satellite Dish	23.2	19,7	- 3.5
8. Digital TV decoder	21.5	18.9	- 2.7
9. Fax modem	19,3	14.8	- 4.5
10. Fax	18.1	13.3	- 4.8
11. Connection to the Internet	23.8	21.2	- 2.6
12. Minitel / Videotext	13.3	9.1	- 4.2
13. Bleeper	11.1	7.8	- 3.3

We can argue that the variation from Winter 96-Autumn 98, may be due to the overall slight saturation of the market, or it may be due to the beginning of a decrease in the general elasticity of the demand curve with regard to technological improvements.

Despite this connection to the Internet has had a massive projection of 88.6%, it is also one of the technologies which with - 11% (- 2.6 points) records one of the weakest interest rates amongst non-users.

As the market for the PC becomes more competitive and more saturated, the market may well slow down after an initial massive rise. This may well explain the above figures. The fall of interest amongst non-users is, with 35%, the highest one recorded from one study to another (- 9.7 points).

3. Provision to be paid for access to the services in the European Union

	1996-1997 winter	Autumn 1998	Variation
Documents / local / central government information	11.8	9.4	- 2.4
Travel/Organisation	10.2	9.6	- 0.6
Medicine/Diagnosis	17.8	12.9	- 4.9
Employment/Research	10.4	8.8	- 1.6
Training	19.7	18.2	- 1.5
Goods/Services	7.5	7.0	- 0.5
Consumer's rights		6.8	
Economic / financial management	9.5	7.5	- 2.0
Press/access	8.5	7.8	- 0.7
Museums	7.9	6.6	- 1.3
Financial contracts/service		2.9	
Policy/contacts	3.3	2.5	- 0.8

We can see from the above that there is a general reduction in interest in paying for the Internet services over the period. The most significant reduction is on the medicine / diagnosis area, with a reduction in 28% of those willing to pay (-4.9 points).

There can be no real explanation of this reduction, as it is unlikely to be rooted in economic status or within spending power. We can argue that as the service becomes more widely available and more people know about such a service, the service becomes demystified and thus, people are more aware as to the actual concrete services which are on offer with this service and as a result, are more sceptical about the service on offer.

In conclusion, the volatility of this market should induce a prudent response when approaching such a market.