ECONTENT IN AUSTRIA

CONTENT VILLAGE

JULY 2004

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INTRODUCTION

After accession to the European Union in 1995, Austria entered the European Monetary Union in 1999. The country (83 599 sq km) is strategically located at the crossroads of central Europe and has borders with the Czech Republic, Germany, Hungary, Italy, Liechtenstein, Slovakia, Slovenia and Switzerland.



Source: Europa

Due to a well-developed market economy and a high GDP per capita (€26 930 in 2002), Austria is a prosperous European country. However, the Austrian economy has grown slowly since 2000, with a decline in its GDP growth rate from 3.4% to 0.7% in 2003. Inflation has, nevertheless, remained relatively stable and low since 2000 and the unemployment rate of 4.4% in 2003 is one of the lowest in the European Union.

As regards the GDP (Gross Domestic Product) distribution in 2002, 65% was produced by services, 33% by industry and 2% by agriculture. With a small domestic market of 8.1 million people, Austria relies heavily on SME-produced exports to sustain growth. Austria's main trading partner is Germany which accounted for 31.9% of Austria exports and 32.6% of its imports in 2003.

Austria's outward FDI (Foreign Direct investment) is increasing, with a focus on Central and Eastern Europe, which accounted for 12% investment in 1990, and represented over 30% of Austrian investment in 2002. The main recipients are Austria's immediate neighbours: Slovenia, Croatia and Slovakia.

To meet increased competition from both former and new EU countries, Austria will need to optimise knowledge-based sectors of the economy, continue to deregulate the service sector and lower its tax burden. A key issue is to encourage much greater participation in the labour market by its ageing population.

INFRASTRUCTURE

Austria is a country open to new information and communication technologies and has powerful telecommunication infrastructure with more than 250 000 km of fibre-optic cables. Since the market liberalisation in 1998, the historic operator and other operators have invested more than €8 billion (GSM and UMTS licences included) in telecommunication infrastructure and services. Investments envisaged until 2010 are estimated at €4 billion which included €2 billion for the implementation of UMTS networks.

1 Fixed Telephony Market

1.1 Liberalisation from 1998

In order to comply with the European Union's desire to create a common market for European Telecommunications, Austria carried out the deregulation of its telecommunications market in 1998.

Major phases of the liberalisation of the fixed telephony market	
August 1997	Application of the law on telecommunications TKG
End 1997/ beg 1998	Granting of the first licences of fixed telephony to alternate operators
July 1999	Organisation of the unbundling of the local network
March 2000	Introduction of unlimited number portability and pre-selection
Autumn 2002	New provisions in the law on telecommunications

The control of free and fair competition in the national market has been given to the Telekom Control Commission, created in 1997. The Austrian Regulatory Authority for Telecommunications and Broadcasting (RTR Rundfunk und Telekom Regulierungs-GmbH) serves as its operative arm. According to the RTR definition, the regulation market has the following main objective: "The priority is to ensure that Austrian people and businesses are provided with cost-effective, high-quality, innovative telecommunications services". The RTR's role is also to allow new providers to benefit from the former monopoly's telecommunication network.

1.2 A highly competitive market

The telephone line penetration level in Austria is 48.07 per 100 inhabitants.

- The historic operator, Telekom Austria, is still the most important telecommunication leader in the country. After experiencing a strong decrease in its market share, it has consolidated its position in the field of fixed telephony (53% at the end of March 2004) and is playing a major role in the mobile telephony market (Mobilkom), in data transmission (Datakom) as well as in Internet services.
- Following the opting out of Telecom Italia which had taken shares in the historic Austrian operator from the first stage of privatisation in 1998, the capital of Telekom Austria is partitioned as follows: 52.8% floating capital and OIAG (representing the Republic of Austria) has the remainder.
- Other operators: In April 2003, 21 operators of fixed telephony were active in the market. One of the characteristics of the Austrian telecommunications market is the presence of numerous foreign players, principally German. The arrival of private operators has created strong competition and an important drop in prices. Tariffs for regional and national calls are amongst the lowest in Europe.

Operators	Market share in July 2003
Telekom Austria	53%
Tele 2	14%
UTA	12%
Telering	6%
e.tel	5%
Telekabel	3%
Autres opérateurs	12%

Source : Telekom Austria

2 Mobile Telephony Market

2.1 Market liberalisation from 1996

The Austrian mobile telephony market is regulated by the Regulation Authority, RTR, which allocates mobile telephony licences. Since 1996, the RTR has delivered many licences :

- 4 2nd generation mobile telephony licences (GSM900, DCS1800),
- 1 mobile telephony licence TETRA (Terrestrial Trunked Radio)
- 1 radio location licence (DATATRAK system).
- Most important - 6 3rd generation mobile telephony licences (UMTS- Universal Mobile Telecommunications System) were allocated in 2000 for an amount of €830 million which is much less than in other European countries, such as Great Britain or Germany. The investment necessary to implement the networks is estimated at €3.6 billion. At the end of 2005, coverage for each network should reach 50% of the Austrian population.

A new law on telecommunications, operational from 20 August 2003, modified the regulations of the electronic communication networks and services in accordance with the provisions laid down in the European directives.

2.2 Bets on new technologies

Penetration rate for mobile telephony is 82%, representing 6.8 million people. Among the young between 14 and 19 years of age, 95% have their own mobile telephone. Five operators share the market:

Operators	**Parent company**	**Market share in %** (on 01-06-04)	**Number of subscribers** (on 01-06-04)	**Commercial phase of UMTS**
Mobilkom Austria	Telekom Austria	42.16%	3 177 000	Launched in spring 2003
T-mobile	T-Mobile internationale	27.14%	2 045 000	Not started yet, propose WLAN service
One	E.on / Telenor / Tele Danmark / Orange	20.06%	1 512 000	Not started yet, Propose WLAN service
Tele.ring	Western Wireless International Corporation	10.24%	772 000	Not started yet
Drei « 3 »	Hutchison Whampa Limited	0.40%	30 000	Launched in spring 2003

Sources: RTR

If vocal mobile communication is a success in Austria, the third generation mobile telephony launched by the two operators, Mobilkom Austria and « 3 », and which offers services comparable to Internet, has not yet won over most of the Austrian public. In fact, the operators have not yet made enough applications and content available to attract the attention of the end user and to incite the latter to buy a multimedia portable telephone. The market still remains uncertain and the Spanish operator, Telefonica, preferred to withdraw from the Austrian market and sell its licence UMTS to Mobilkom.

At present, the operators are highlighting WLAN (Wireless Local Area Network) which could be complementary to UMTS. This radio technology employed in certain high traffic areas or hotspots provides a high speed connection at more competitive prices than UMTS. It is not a solution to replace the national networks of mobile telephony but is very advantageous in the central parts of the country. The city of Vienna alone has 136 hotspots, which is even more than the city of New York (115). The country has a total of 450 hotspots, mainly in public places, hotels, restaurants, etc. The main players in this market are Metronet and eWave.

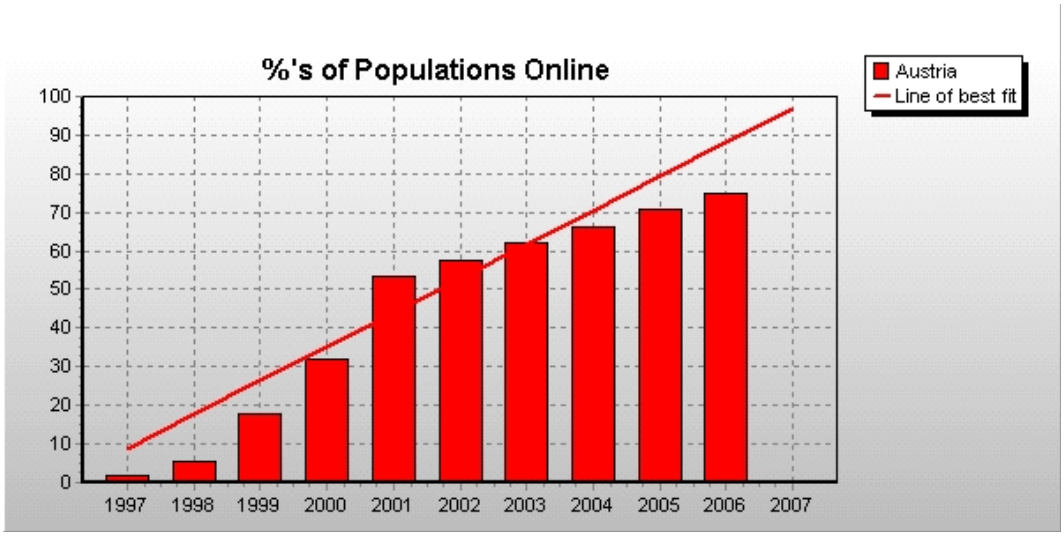
3 The information technologies market

- **IT equipment industry:** In the field of micro-computers and servers, Austria does not have its own particularity as it is the American Groups which dominate the market (HP/ Compaq; Fujitsu Siemes; IBM, etc.) The niche players, specific to the Austrian economy, are present at the level of industrial computers (Company Bernecker &Rainer), and the production of scanners (Company Vexcel; Company Riegl).
- **Software industry:** the number of companies present in the software field is estimated at 8 000. Besides their activity developing software, these companies, often very small, also exist as IT distributors and service providers. Software design remains in the hands of Austrian companies, as large foreign groups have not opted to develop software locally. The Austrian industry proves its strength in the field of multimedia applications, financial and media software as well as in SIG and ERP software.
- **Services:** Roughly 17 000 enterprises are present in this market, 82% of whom are very small companies with multiple activities (production/distribution/services). However, the few large players provide 90% of the turnover of the sector.

4 Internet in Austria

According to AIM, at the beginning 2004, 62% of Austrians of over 14 years of age had Internet access. Nevertheless, the Internet penetration rate in Austria seems to have peaked and has been

experiencing very slow growth over the last few years. 46% of Austrians, representing 3.13 million inhabitants are regular users, consulting the Internet several times a week, with two-thirds accessing the Internet every day.



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4.1 Internet Providers

Austria has around 600 Internet access providers with the majority being very small regional players. This market of Internet providers is witnessing an intensive price war which will eventually result in the market being concentrated and shared among roughly ten providers. The most important, who are active in both the professional and household markets nationally, include the following :

- Telekom Austria
- UTA Service
- INODE Service

4.2 Connection mode

Modem access is still dominant:; Austrians have a preference for the modem as a means of connecting to Internet.

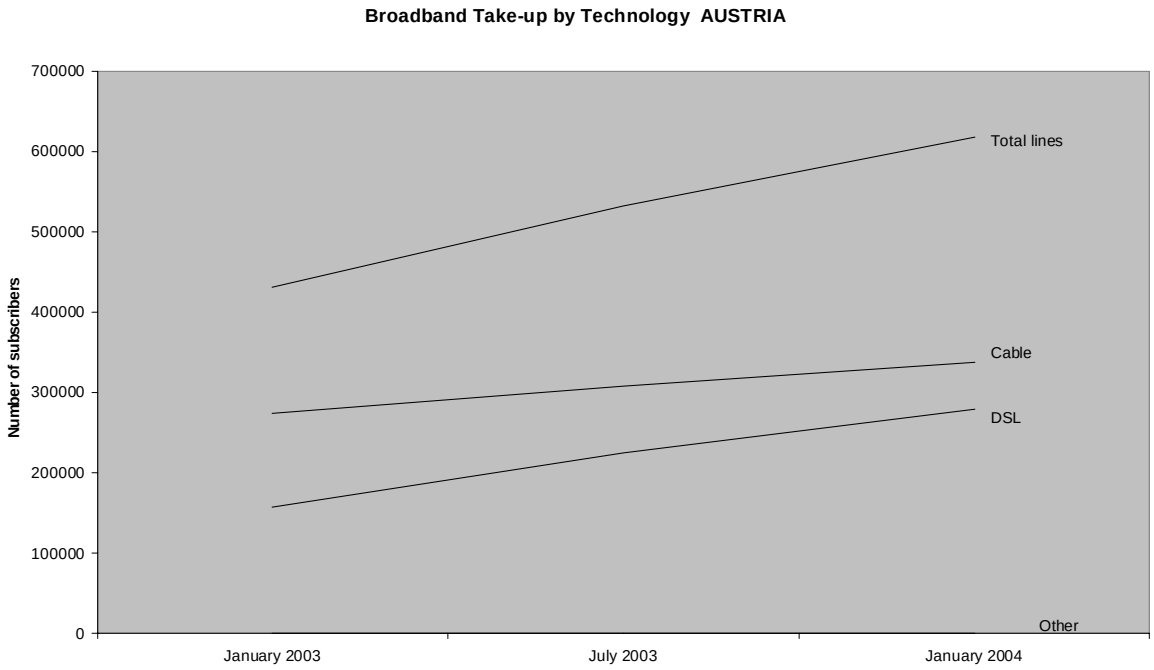
Way of access to Internet (end of 2003)	**Share of households with access**
Dial-up through a modem	35%
Dial-up through cable	20%
Dial-up through ISDN	12%
Dial-up through ADSL	16%

Source: AIM

Unlike other European countries, broadband Internet access technology was introduced very early in Austria. In 1997, users could access the Internet via cable and in 1999, via ADSL. Despite this early introduction of high-speed connection technologies, the analogue modem still remains the favourite connection in Austrian households and enterprises., Austria has been overtaken by other European countries in the field of the high-speed connections.

This is the reason why the government supports the broadband initiative launched in May 2003 by the telecommunications regulations authority and ISPA, the Austrian federation of Internet providers. The objective is to encourage the use of Internet using high-speed access. Immediate action to support this initiative is a subsidy of up to €50 for each new high-speed Internet subscription.

The following table presents the progress of broadband connections via DSL and Cable between January 2003 and January 2004:



Source: European Commission

Austrian users benefit from a great range of Internet accesses:

- 54% connect from their homes,
- 26% connect from their offices
- 20% connect from somewhere else (Cybercafés, friends' homes, schools, universities)

4.3 Individuals

4.3.1 Stagnation of the Internet penetration rate in households:

According to the ITU, Internet penetration in Austria was 46.5% in December 2003. This stagnation can be explained by the fact that the market for PC equipment is saturated. Already by the end of 2001, 61% of Austrian households were equipped with a PC and by the beginning of 2004, the figure had risen to 70%.

4.3.2 Evolution of the profile of the Austrian Internet user:

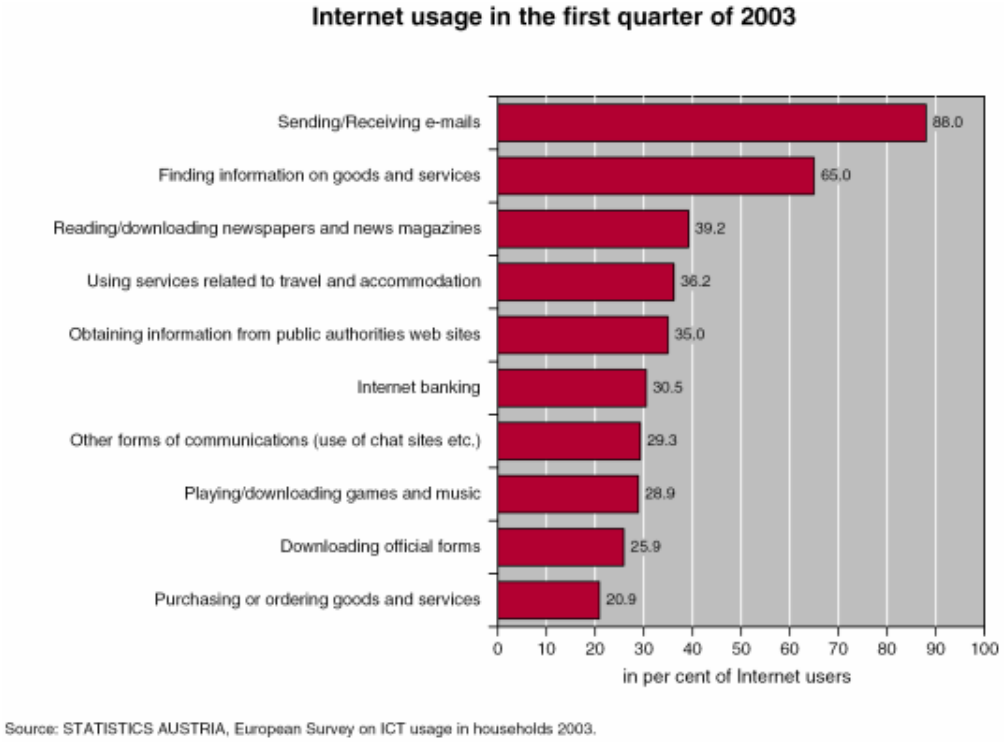
The main change in the Austrian Internet population is the growing number of women present and also of senior citizens. There were 31% of women connected in 1997 and 45% in 2003.

The Austrian Internet population is also characterised by a socio-demographic distribution: age, level of education and the means of livelihood are the main profile characteristics:

- 68% of 16-24 year olds, 53% of the 35-44 age group and 5% of 65-74 year olds use the Internet;
- 24% of the population with a minimum education level access the Internet, against 82% of students (with university education);
- 55% of the working population use the Internet, against 10% of the retired population.

4.3.3 Usage of internet:

The fact that home access is prevalent by Austrian users has a consequence on Internet access habits. The following diagram lists the most common activities of Austrian Internet users:



Source: STATISTICS AUSTRIA, European Survey on ICT usage in households 2003.

Sending or receiving e-mails is the main use of Internet for 88% of Austrians, and information research on goods and services for 65% of users.

The following use is quoted by a smaller proportion of Internet users: 39.5% use the Internet to download or read newspapers, 36.2% use the Internet for travel and accommodation services, 35% use it to consult public authority web sites and finally 30.5% use the Internet for banking purposes.

Less than 30% of Internet users mentioned particular activities, such as chat sites, playing or downloading games and music, downloading official forms, or purchasing goods or services.

4.4 Enterprises

4.4.1 Strong penetration rate:

One of the characteristics of the Austrian economy is its high percentage of small and medium size companies. Of roughly 300 000 Austrian companies, 99.6% are of very small size. More than 261 000 enterprises employ 10 people whilst only 1400 firms have more than 250 employees.

On average, 89% of Austrian companies have an Internet access and the penetration rate increases with the size of the company.

Internet penetration according to company size in 2003 (source: Eurostat)

- 10+ : 85%
- 10-49 : 82%
- 50-249 : 96%
- 250+ : 100%

The economic sectors which show the highest Internet use rate are the bank and financial services and companies from the IT and Telecom sectors.

With regard to the means of access to Internet in companies, the ISDN is still in the leading position but there has been strong growth in ADSL access (19%).

4.4.2 Use of Internet:

On 1 January 2003, 71% of Austrian companies had their own web site or their own home page. This figure reached 91% in the banking/insurance/hotel industry sectors but only 49% in construction.

Regarding their opinion toward the usefulness of Internet, 44% of enterprises think Internet will have a direct impact on their business. 63% of Austrian firms use Internet for marketing their products, and 31% for providing easy access to product catalogues and price lists.

Regular company activities on Internet in 2002	**%**
Downloading of administrative forms	66
e-banking	60
Purchases	41
Requests from authorities	40
Declarations to the national health system	23
Declarations to local government services	22
Tax Issues	18

Sources : AIM

However, it appears that companies use Internet mainly for administrative and banking applications.

DIGITAL CONTENT

Austria has to make an effort to develop e-content. The quality of Austrian sites is high but, according to Eurostat, Austria has a low percentage of web sites per inhabitant (July 2002: Austria 22.6% versus EU15 37.9%).

1 Internet and media

1.1 Online newspapers

Austria's online media is dominated by the traditional names.

For several years, the most popular web site has been Der Standard with the highest number of visits and it has represented a model for online media in Austria. Its Internet version was launched in February 1995. Not only is it identical to the paper version, it also provides free access to archives.

In February 2002, the newspaper launched another online version with the ActivePaper Daily solution developed by Olive Software. In one month, 1 000 users subscribed to the derStandardDigital for a trial session.

However, the Austrian broadcasting corporation (ORF), in following the trend with the creation of their web brand ORF-ON, took the lead from Der Standard as they provided a large variety of information and entertainment.

Last to join the trend was Neue Kronenzeitung with an entertainment-oriented web site. In a few months Krone Online became the most visited web site.

1.2 Digitisation policy

Cultural content digitisation in Austria is the responsibility of both federal ministries and regional authorities. The co-ordination for the digitisation programme, which is part of the Austrian eEurope initiative, the Austrian eFit programme, is ensured by:

- the Austrian Federal Ministry for Education, Science and Culture at the strategic and funding level,
- the Austrian National Library as the expert key institution in the digitisation project
- Salzburg Research as the independent research unit.

Digital Heritage in Austria is the national reference and information site for digitisation projects, programmes and initiatives. It is the central point of co-ordination for activities related to cultural and scientific heritage. The national Initiative for Digital Cultural Heritage is part of the eFit Austria programme launched by the Federal Ministry for Education, Science and Culture.

Digital Heritage reported the following data on the situation of cultural heritage in Austria in July 2004:

Institutions	**Projects**
24 Museums 15 Libraries 26 Archives 14 Research organisations 12 Governmental bodies 17 Others	6 regional/local 28 national 12 trans-national/-regional

The main plan for the 2004 Austrian Digital Heritage Initiative is:

- to conduct a survey on national and regional digitisation initiatives;
- to make available the best practice, recommendations and manuals on digitisation;
- to build an expert network;
- to develop the benchmark for Austrian initiatives, programmes and projects;
- to raise awareness for digitisation issues.

A symposium will be held at the University of Salzburg in September 2004 called “eCulture Horizons – from Digitisation to Creating Cultural Experience(s)”. This symposium will deal with a variety of subjects from digitising cultural heritage to adding value and creating cultural experiences.

At this meeting, the Salzburg Research Forschungsgesellschaft shows how the digitisation process is an essential first step that will bring access to and new experiences with cultural heritage and knowledge.

1.3 Archives

The Digital Image Archive is the responsibility of the Austrian National Library where more than 1.5 million image objects (historical portraits, images on architecture, topography and the history of Austria) are stored. The project’s main mission is to provide a basic model for the digital image archive.

The online newspaper archive Arbeiter-Zeitung.at is the first online database world-wide to offer access to a complete newspaper collection from 1945-1989. The Arbeiter-Zeitung, founded in 1889 by Victor Adler, represents an important document of Austrian contemporary history. Over 200 000 pages have been digitised and are now available online. Access is free.

The main objective was to allow economical access to the contents of historical newspapers via the Internet. The project was thus more focused on usability and economical efficiency than on the quality of the digitisation techniques of the material.

1.4 Museums & libraries online

From the Austrian Media Law requirement, the Austrian National Library is the only library in the country that receives a copy of:

- publications appearing in Austria,
- university theses,
- products of electronic media.

The web site gives access to comprehensive information on the ANL catalogues database, the library and also on collections and museums.

2 e-Commerce

2.1 B2C

2.1.1 The Offer:

The legal framework for the development of e-commerce mainly comprises the regulation on e-signatures. The Electronic Signature Act, passed by Parliament on 14 June 1999, came into force on 1 January 2000, making Austria the first Member State of the EU to implement the Directive on Electronic Signatures. The Act legally recognises electronic signatures as satisfying certain security requirements and provides some evident value to less secure electronic signatures. It is complemented by an Electronic Signature Ordinance (Order) that was published in the "Bundesgesetzblatt" (Official Journal) in 2000.

- **Most popular e-shops**: The number of e-shops varies form 600 to 2000 according to studies. The most popular e-commerce sites notably are Amazon.de, Lion.cc and ebay.de.
- **Most used portals:** MSN, Yahoo!, Microsoft, Telecom Austria and ORF. Universal Communications, Lycos, AOL Time Warner, Google and Altavista.

2.1.2 The Demand:

In 2002, 1.65 million Austrian users (25% of the Austrian Internet population) had already made purchases on the Internet.

The most purchased products online are books and magazines (50% of online purchases). They are followed by clothes and sports articles (29% of online purchases). Other frequently purchased items are: compact discs, trips and hotels. Online auction sales are on the increase. It is classic mail order sales which produce the majority of the electronic turnover in the commercial and service sectors.

The Austrians are conservative with regard to how they carry out payment as are those who take advantage of what sites have to offer. 53% of Austrian boutiques are paid on delivery of the goods, 40% accept credit cards and only 5% offer alternative payment services. In order to allay the Austrian consumers' main fear regarding online payment security, many Austrian banks created the EPS (E-Payment-Standard, a payment platform) which allows users to connect directly to the banking services of their own bank.

The Ministry of Justice has also developed a quality label (*Gütezeichen*) in order to increase consumers' confidence in online purchase. 82 shops have already been approved by the Austrian certification body and an additional 136 shops have already applied for the quality label.

If the user does happen to have problems purchasing on a web site, he may contact the *Internet Ombudsman,* an organism created in 1999 at the request of the Austrian Consumer Association and in co-operation with the Austrian Institute for Applied Telecommunication. The *Internet*

Ombudsman's main role is to increase online security by providing information about shopping on the Internet and the development of a quality standard.

The Internet Ombudsman's project also includes the introduction of a *Quality Label for Internet Shopping* with the aim of guaranteeing the quality of the transactions. The goal of this project will be to extend the Quality label to other European countries and to create a "network of Quality Label holders".

2.2 B2B

Within the framework of the «e-commerce in Europe» European survey, the Austrian statistics bureau carries out a yearly study on the trend of how much business is carried out through electronic transactions. In 2002, the e-commerce sales (sales on EDI and/or Internet) of Austrian firms with over 9 employees rose to €20 billion and over the same period the volume of purchases reached €19 billion.

Many Austrian firms purchase on the Internet (41%) but they do not tend to sell on the Internet (12%). Companies in the mechanical industry sector, one with a high rate of exports, make great use of Internet in their commercial strategies.

3 e-Banking

There was early adoption of using computers for banking services. Indeed, since 1989, Austrian users have had the opportunity to manage their banking accounts by computer.

Since July 2003, 1 million Austrian users regularly use the Internet for banking transactions. The main uses, depending on the range of services provided by the bank, range from simple transactions and bank transfers to online brokerage.

The quality of Austrian online financial services is known world-wide. In 2001, the American magazine, *Global Finance,* awarded the best online banks and the Austrian bank *Raiffeisen* received ten awards, among them, the "Best Corporate/Institutional Internet Bank in Europe".

Online banking services are the domain of traditional banks. Bank Austria is the country's leader followed by Erste Bank, Creditanstalt, Raiffeisen Zentralbank Österreich and Easybank. They all offer online services.

4 e-Government

E-government is top priority in Austria. The legal framework for the development of e-government in Austria comprises :

- constitutional law on access to information 1987
- data protection act 2000
- law on electronic government, operational from 1 March 2004.

The objectives of the European programme «e-Europe 2005» are also included in the programme. Chancellor Schlüssel personally chairs «the national e-government platform». According to the government programme, all administrative services to citizens and businesses should be able to be delivered electronically by the end of 2005 .

Austria is a federal state. Responsibilities and competencies are spread on different levels. At the national level, the Federal Chancellery is responsible for Austria's e-government strategy. The Chief Information Office is in charge of co-ordinating and supporting e-government initiatives and projects at the Federal level, as well as of liasing and co-ordinating with projects from the Länder and Communes. The CIO is also responsible for the implementation of the national e-government infrastructure, as well as of activities and projects that spread over more than one ministry. The major Federal Government Ministries involved in large-scale projects are: the Federal Ministry of Economic Affairs and Labour, the Federal Ministry of Education, Science and Culture, the Federal

Ministry of Finance, the Federal Ministry of Justice, and the Federal Ministry of Innovation and Technology.

According to the latest results of a European enquiry on the quality and use of electronic public services, Austria ranked 4th with regard to availability of online public services. When totalling the number of transactions that can be carried out completely online, Austria comes in second place, just behind Denmark.

The site HELP is an Internet portal designed to guide citizens through official procedures, preparing them for their use as efficiently as possible and without difficulty. This web site, created in 1997, covers a wide range of areas such as births, marriages and divorces, motor vehicles and driver's licences, personal identity documents, school entry applications, etc. In 2003 the site was awarded the "e-europe Award" in the category *A better life for European citizens*.

Two leading projects have also been launched so as to progress further in the implementation of e-government procedures: the Citizen Card and Elak.

- The Citizen Card will combine three main functions: it will serve as a social security card, a secure electronic signature and an "info-box" (customised information about the card owner).
- The second major project defined by the Austrian e-government policy in 2000 is Elak. Elak stands for *Electronischer Akt,* meaning electronic file. This project aims to transfer paper files to electronic files at the federal level. In a first phase, it has been implemented in the Ministry of Foreign Affairs, the Federal Chancellery and the Ministry of Defence.

Due to this e-government programme, interaction between the government and society is expanding. However more effort is still required, especially concerning citizens.

Internet usage (%)	Citizens	Enterprises
Obtaining information	14	65
Downloading official forms	11	73
Sending completed forms	5	43

5 e-Learning

eFit-Austria, the Austrian IT-Initiative of the Ministry for Education, Science and Culture, is a programme with about 21 million euro aimed at supporting and connecting all web-based activities on teaching, learning, scientific work and education. Pupils, students, teachers and educational institutions as a whole can participate in it. Typical topics of this initiative are:

- a campaign with platforms and courses for e-learning and obtaining Internet skills for teachers, and a project application procedure for university teachers and institutes;
- a support structure (funding, organisation, evaluation) for e-learning projects of educational institutions and student groups;
- an electronic learning portal (www.bildung.at) where community building and content providing is managed;
- an approach to reshape IT studies at Austrian universities has been established;
- as examples of private-public-partnerships there is intensive co-operation to provide internationally acknowledged IT-sector certificates like Network Academies, Networking operation systems, ERP-software and Internet-script languages for students.

This programme has already had very positive results. It will continue in the next few years changing the public education system in Austria so as to maintain a high performance public alternative to private e-learning services.

6 e-Health

An e-health initiative in Austria is illustrated by the launching of the health insurance smart card, also called “e-card”. The Federation of Austrian Social Security Institutions has already chosen a supplier that will be in charge of implementing this card. The introduction of the card is planned for the end of 2005.

ECONTENT PROJECTS WITH PARTICIPANTS FROM AUSTRIA

1 eContent Preparatory Actions

- **BRIDGES:**
  Business Route for Investors to Determine Gifted Entrepreneurs and Start-ups
- **CHECKCHANCES:**
  The IPO Adviser for Internet Entrepreneurs and DotCom Businesses
- **DEBUT:**
  Data Exploitation and Best Utilisation Trail
- **E-CT:**
  Electronic Calls for Tender
- **ENTED:**
  European Network for Technological Development
- **NEC:**
  New Economy Capital

2 eContent Projects (1st Call)

- **EULIS:**
  European Land Information Service
- ENV-E-CITY:
  Environmentally Viable Electronic City
- MULITRAIN:
  An Integrated Platform for Multimedia Skilled Workforce Enhancement by Providing Focused Training in Digital Content
- **ePATENT: Multilingual Access to European Patent Databases**

3 eContent Projects (2nd Call)

- **@RETE:**
  Remind Event for Tourists in Europe

- **E-NEC:**
  New European Capital
- **EuroTTEC:**
  European Training Tools for e-Content Start-ups and SMEs' Expansion
- **EUSODA:**
  EUropean SOcial DAtabase
- **GEORAMA:**
  GEO-navigational poRtAl inforMAtion and servicess
- **SME-Net:**
  Pan-European Network for the intelligent provision of content and interactive services to SMEs
- **TNT - European Trusted Network service for on-line access and Trade to cultural data content**

4 eContent Projects (3rd Call)

- **EUROROADS: Pan-Europe Road Data Solution**
- **MINDS: Mobile Information and new Data Services for 3G**

CONCLUSION

Due to large investments in telecommunications infrastructure and to regulations guaranteeing tough competition in the marketplace, the transition of Austria from dependence on traditional industries to greater reliance on ICTs and the high-tech sector has been a success. The Austrian ICT industry is becoming an increasingly important component of the country's economy.

As mobile phone use is popular in Austria (6.8 million mobile owners for a total population of 8.1 million), mobility in Internet access has great potential in Austria. Efforts, however, still have to be made in the implementation of broadband access for both individuals, households and companies. A further challenge is the development of e-content.

SOURCES

1 Europe

Permanent Representation of Austria to the European Union

http://www.bmaa.gv.at/view.php3?f_id=93&LNG=en&version=

European Commission Representation in Austria

http://europa.eu.int/austria

European Commission Directorate for Information society

http://europa.eu.int/information_society/index_en.htm

European Info Centre

http://www.eubusiness.at/index.php?cccpage=ueber_uns_english

Eurostat

http://europa.eu.int/comm/eurostat

2 Government and official institutions

Austrian Federal Chancellery

http://www.austria.gv.at/DesktopDefault.aspx?alias=english&init

Chief Information office

http://www.cio.gv.at/egovernment/

BMVIT - Bundesministerium für Verkehr, Innovation und Technology

Austrian Federal Ministry of Transport , Innovation and Technology.

http://www.bmvit.gv.at/

Austrian Regulatory Authority for Telecommunications and Broadcasting (*RTR Rundfunk und Telekom Regulierungs-GmbH*)

http://www.rtr.at/web.nsf

Ministry of Economy and Labour

http://www.bmwa.gv.at/BMWA/default.htm

Different activities and initiatives of BMWA in the field of digital content:

http://www.econtent.at/eContent/en/index.shtml

Ministry of Education, Science and Culture

http://www.bmbwk.gv.at/

Austrian Economic Chamber

http://www.austriantrade.org/chamberinfo.htm

Statistik Austria

http://www.statistik.at/

Austrian Council for Research and Technology Development

http://www.rat-fte.at/en.php

Austrian Regulatory Authority for Telecommunications and Broadcasting

http://www.tkc.at/

The European E-commerce trustmark

http://www.guetezeichen.at/

Ombudsman

www.ombudsmann.at

Austrian Consumer Association

www.vki.at

Austrian Institute for Applied Telecommunications

www.oiat.at

3 Programmes

Broadband initiative

http://www.rtr.at/web.nsf/lookuid/B7837176F013379AC1256E5500662781/$file/BreitbandStatus_Summary_e.pdf

Help

http://help.gov.at

Elak

www.elak.at/

Citizen card programme

http://www.buergerkarte.at

Bildung

www.bildung.at

4 Telecom Operators

4.1 Fixed telephony

Telekom Austria

http://www.telekom.at/Content.Node2/de/index_frameset.php

UTA United Telekom Austria

http://www.uta.at/

Telering

http://www.telering.at/

Tele2

http://www.tele2.at

UPC Telekabel

http://www.upc.at/

4.2 Mobile telephony

Mobilkom Austria

http://www.mobilkomaustria.com/fset

T-Mobile

http://www.t-mobile.at

One

http://www.one.at/

Telering

http://www.telering.at/

Drei “3”

http://www.drei.at/

5 Hotspots

MetroNet

http://www.t-mobile.at/dienste_services/datenuebertragung/WLAN/

eWave

http://www.ewave.at/

6 Internet providers

AON

http://www.aon.at

INODE

http://www6.inode.at

7 E-shop

Lion

http://shop.lion.cc/literatur.php?PO_ID=1100&template=start.html&bereich=START1

Ebay.de

www.ebay.de

Amazon

www.amazon.de

8 Specialised Press

Report at

www.report.at

Itmedia

www.itmedia.at

Computerwelt

www.Computerwelt.at

9 Professional Salons

Exponet

www.exponet.at

Ifabo

www.ifabo.at/

10 Digitisation

Digital Heritage

www.digital-heritage.at

JOANNEUM RESEARCH - Institute of Information Systems & Information Management

www.joanneum.at

Albertina

http://www.albertina.at

Salzburg Research

http://www.salzburgresearch.at

Cultural Service Centre (CSC) Austria

http://www.cscaustria.at/index.php

11 Libraries

Austrian National Library

www.onb.ac.at/index_eng.htm