



INTERREG III B NORTHERN PERIPHERY PROGRAMME • INTERREG III B NORTHERN PERIPHERY PROGRAMME

Project Name:

**Broadband in Rural and Remote areas -
BIRRA**

Final report

Region:

Finland (Lapland and Kainuu)

Sweden (Västernorrland)

Scotland (Western Isles)

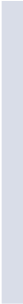
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Analysing of technologies and costs

Summary

In the task, information was collected about the status of broadband infrastructures in the project area, national construction policies, and about the stake holders' attitudes and ideas of improving it. Also, some descriptive information was collected about the geographical and demographic situation of the studied areas.

Information and objectives

The objective of the study was to analyse the overall satisfaction towards broadband infrastructures in the project area, and to evaluate how well broadband will be taken care in the future. Especially, the role of national policies and differences between the studied countries were considered the key factors in the future of broadband.

Implementation

A similar questionnaire was run in all project regions. The data collection template was created in the Regional Council of Lapland, and, after accepting it in the project group, each region took care of collecting data in its own area. All data was then returned to the Regional Council of Lapland, where a summary report was written about the whole study.

Results

The status of broadband varies between the countries and regions, and there are also differences in the satisfaction towards the current situation. The coverage and quality of broadband seems to be best in the regions where the government involvement is strongest, and weakest in the regions where the national policy relies in market forces. Currently there is, however not, a suitable and generally implementable strategy for improving the situation in the weakest regions, because all national governments are not similarly committed to invest in peripheral regions. Also, there are some juridical hindrances that protect private property, and prohibit improving regional services at the same time. In each country, the further work should be done case by case by clarifying the role of government, regional authorities and private operators, and by making the necessary changes in national laws if needed.

Transnationality

The work package is transnational, as the same kind of study has been made in all project countries, and exchange of ideas, information and data has been already in the planning phase of the study, and while carrying out the study.

Dissemination and transfer of experience

The results of the study have been delivered to all project partners. Also, two conferences have been organised during the project, one in Finland in March 2006, and one in Iceland in June 2006. Within these conferences, there were special sessions about this work package issue. In Finland, there were also writings in newspapers about this work package, and a tv film group made a news for a national television about the conference in Finland. In the conference in Iceland there also was a member from the European Commission present, and the discussions about this issue were very informative and helpful. In Finland, also a working group near the Finnish government has been informed about the study. In the group there are representative from all the biggest teleoperators, other kinds of ICT and media companies and ministries, especially from the ministry of Transport and Communications.

Conclusions

Telecommunications infrastructures are very heterogeneous in the Northern Periphery countries, and their quality and coverage are not quite satisfactory in the area. Despite of wide public funded broadband construction projects there still are areas where no broadband is available at all. Also the technologies are weak in wide areas, and peripheric regions can not reach even the capacity levels that their own national governments have set for their own country. For example in Finland the general objective is 7-8 M, but in Lapland only 2 M is available in most of the areas, and in many villages no broadband is available at all. The situation is unequal both for the peripheric regions themselves, and for the private people who can't have the broadband even if they wanted. It looks like the national governments have the key role in improving the situation in these regions, but changes are slow, and awareness can not be raised easily. Also, as the project ends, some key persons who have been working in the project, will be left out of work, and no one is responsible for continuing the work with national authorities after that. The project organisation was good in producing the necessary information about the broadband, but it does not have the official status that is needed when making changes in national laws and basic infrastructures.

Regional eAdoption Strategies and Initiatives

Information campaign about WP3 for companies in Västernorrland

Small- and medium-sized enterprises (SME) operating in the transport, property and tourism sectors received a brochure in which they were offered a free review of how they can use ICT and broadband in their activities.

Two companies made contact as a result of the brochure.

One company made contact after seeing an advertisement about the project in a magazine.

83 visits to companies

A total of 81 companies were visited, one of them twice. These visits were arranged by telephone, using the lists of companies compiled as part of the project and, in a number of cases, after recommendations from the municipalities' business enterprise units.

Telephone contact with approximately 250 companies

There were various reasons why the telephone contacts did not always result in visits. A common reason is that the company is winding down or is conducting its activities on a very small scale.

Another category that refused visits comprises a number of older business-owners engaged in activities directed towards a customer, often in the transport business, and who have outsourced all administrative work to a book-keeping agency or similar. Another category consists of companies that use broadband and ICT on a large scale, but have great expertise of their own or are part of a larger enterprise with its own ICT expertise.

Another large group consists of companies that make relatively large use of broadband and ICT, but that have been unable to allocate time to a review during this period because of major changes in their own activities.

71 of 81 companies have broadband

Seventy of the 83 companies visited have a broadband connection, ADSL (56), Fiber (15), ISDN (2) and Radio link (1). One of the companies has both ADSL and Fiber. The companies that have ISDN plan to switch to another form, as they acquired ISDN at a relatively early stage and experience the subscription as both expensive and outdated.

Internet banks

Seventy-two of the companies use Internet banks, and they are satisfied users. Most business owners give this as the most common and positive use that makes their business run smoother. There is no difference in the perception of this between different banks.

Websites

Forty-eight of the companies have active websites, five companies have inactive websites, and 30 of the companies do not have websites. The transport sector contains most of the companies that do not have, or have inactive, websites. These companies generally have one or a small number of customers with whom they have long-term relations. They have no need to market themselves via a website. They generally have so few employees that a website is not appropriate for internal information. The majority of these companies have consciously chosen not to have a website because they feel a website would not add anything to the business activity. Some of the companies that have inactive websites feel they have purchased a service from which they receive no direct benefit, and plan to terminate the agreements with their website providers.

All companies in the Property Agency sector have active websites. The property agencies use ICT and broadband a lot. Most of the exposure to the market and communication with the customers is based on the Internet and e-mail. An increasing share of the business activities in the sector is conducted via the Internet.

Most of the companies in Tourism, Hotel and Conference Facilities have active websites, and 20 of the 21 were visited. The twenty-first company, which has a broadband connection, only uses it for an Internet bank. However, it also provides its guests with access to a broadband connection.

Most of the companies (15 of 19) that have guests in the form of overnight accommodation or conference guests, have built up networks that provide the guests with access to a broadband connection. These companies state that guests demand this, and that the companies must comply in order to remain competitive. At the same time, companies that do not offer the service state that their guests do not demand it. Some of the telephone contacts with tourist companies showed that they are not at all interested in broadband and the Internet. A couple of other companies said they were increasingly using it, but feel that they have sufficient expertise in the field and were therefore not interested in any visit.

Seven of the eleven businesses in the group “Other Businesses” have active websites. All the companies that do not have websites have made a conscious choice not to have their own websites.

Searching for information

Sixty-five of the companies use the Internet to a significant extent when searching for information. A website that many use is www.hitta.se. All sectors use this site. Searching for spare parts and searching for goods and prices are other areas for which many companies use the Internet. Purchasing via the Internet is less common, but the Net is

used to explore the market and to compare prices. Many of the companies use different search engines to find, for example, spare parts.

E-mail

E-mail is very important for 60 of the visited companies. E-mail is greatly used for communication with customers, and some of the businesses have started to use e-mail as a central tool in marketing communication. E-mail is important for internal communication in many of the companies.

Broadband and/or Internet for other work activities

Thirty-four of the companies used broadband and/or the Internet for other work activities.

Only a few companies use the Internet to submit tax returns and VAT reports.

None of the companies use electronic invoice distribution, stating that none of their customers demand this. Many of the companies have customers that use electronic systems for managing supplier invoices.

A small number of companies use their broadband connection for back-ups. One company sends back-up copies every week to a server in the US.

A small number of companies manage their software and all data storage via broadband.

One or two companies use broadband for telephony. One company working in an international market has reduced its telephone costs by using SKYPE. A couple of companies with personnel in several locations also use SKYPE for internal communication.

In one of the companies working with property management, all employees are equipped with hand computers on which work orders are placed and verified.

Most companies make their purchases locally or regionally, but purchasing via the Internet is increasing. In addition, the Internet is important for searching for information about products and prices.

The transport companies use the Internet for a number of different functions. Companies that supply chemicals to different industries have systems by which they can see the quantities of chemical products the industries have in their tanks. A number of companies use GPS in their vehicles and thereby have complete control over the locations of the different vehicles. One company uses GPS for reporting distances driven, which then form the basis of invoicing. Systems are being developed that send orders directly to computers in the vehicles with the ability to report back via the Internet. Fuel computers in the vehicles are becoming more common, possibly providing a way to cut costs and reduce environmental impact. A few companies draw attention to repair manuals via the Internet.

Action taken

The telephone interviews show that greater use of the Internet and computer support has made many of the companies more profitable.

In most cases, this greater profitability is the result of reduced costs. Costs have been reduced through more efficient administration, more efficient information searches, improved logistics, simpler internal and external contacts, better follow-up and awareness of costs, and cheaper purchases.

Internet use has also resulted in extended customer service for some companies.

For a number of companies, the Internet has created more efficient customer contacts and more efficient marketing. This particularly applies to the Estate Agents, the Property Management companies, and Tourism. For many of the companies, more efficient marketing has also reduced the costs of the market contacts.

Parallel with this, the interviews also show that more of the small companies' large clients are now requiring that the companies use ICT in ways that can communicate with the clients' own systems, often via the Web.

The interviews clearly show the potential for greater profitability and greater competitiveness through greater use of the Internet and efficient ICT support. At the same time, they also show the great variation between companies and between sectors. Only a few companies have a complete ICT strategy based on an analysis of their own needs and opportunities.

The interviews also show a very wide variation in the awareness of the opportunities afforded by the Internet and ICT support for companies, and also in the practical use of different tools.

In order to provide efficient support to businesses, an ICT strategy for a company needs to be combined with measures to enhance skills.

Support in designing an ICT strategy

Support in designing an ICT strategy for a company is based on an analysis of its own needs. The basic focus should be: How can the use of ICT and the Internet help your business become more profitable?

1. How can you reduce your costs?

- More efficient administration
- Improved logistics
- Cheaper purchases
- More efficient information searches
- Better communication, internal and external

- Greater cost awareness

2. How can you increase your customer service?

- Greater accessibility
- More efficient customer communication
- Improved product information
- Developed products
- Greater choice

3. How can you improve your marketing?

- Efficient exposure on the market
- Cheaper mailing
- Dialogue with the customers
- Easier to find

4. ICT security?

At present, when businesses wish to discuss these types of questions, they are usually forced to turn to ICT companies interested in selling their own products to the businesses. It is then the products that direct the process, rather than the needs of the business activity in question.

Support to SME in designing an ICT strategy as above would probably be an efficient way of strengthening the business community in the region.

Skills enhancement

There is a great need for skills enhancement in order to make best use of the opportunities afforded by the Internet and ICT. The needs vary among the different businesses. The following is a list of several interesting skills areas:

Websites

- the ability for companies to update their own websites themselves
 - make it easier to be found in searches
 - click advertising
- Customer information via mail
- Information searching
- Utilise the company's own administration system
- Calculations, pre-calculations and follow-up calculations
- Monitor costs
- Back-up
- Internet for contacts with public authorities
- Awareness of the Open Source programme
- Telephony via broadband

It is recommended that further measures to improve the SME awareness of ICT should focus on the above areas.

Problem Detection Study **A study about obstacles for using ICT in SMEs**

Background

The Lisbon strategy and the e-Europe action plan have placed particular emphasis on ICTs and the accelerated development of the information society as a means of achieving the goal of making Europe the most dynamic and competitive knowledge-based economy by 2010. If this goal is to be achieved then it seems self-evident that e-adoption - the take-up of ICTs by businesses, the public sector and citizens, must be near the top of that agenda. In particular, unless enterprises and citizens are online, and have a reason to be online, then little real progress will be made.

National Swedish surveys have shown that businesses, especially micro- and SME:s, are not making use of the opportunities created by ICT for the strategic development of their enterprises.

If the provision of broadband (or other ICT-infrastructure) availability is to make a tangible impact on regional development, it is necessary that individual companies really take advantage of the opportunities offered by ICT. Only if ICT is used as a strategic tool in the development of new goods and services, can the provision of broadband availability make a clear impact on regional development. An efficient ICT infrastructure is a necessary, but not sufficient, condition for regional development.

In the framework of the Birra-project surveys have been conducted in all partner regions (in Finland, Scotland, Iceland and Sweden), in order to pinpoint the obstacles for SMEs using ICT-tools.

Purpose and objectives

In this work-package we have focused on the current situation to find strategic tools for the future. What are the enterprise attitudes to ICT-tools and what are the barriers for increased e-adoption?

These are questions that have to be answered to know how to act to achieve acceleration of ICT take-up, both by smaller enterprises and by communities.

The purpose of the study has also been to evaluate the use of ICT in companies in the region, and to compare differences between the regions, when finding out the main obstacles for usage of ICT.

Method

Interview Institute of Scandinavia AB conducted a focus group to find out what the main obstacles were against using Internet and the IT-technology. Eight company

representatives gathered for a one-day workshop and construed a gross list of possible obstacles.

Based on that information, we constructed a questionnaire according to the PDS-method. The master questionnaire was constructed in English. The PDS part of the questionnaire was limited to 6-7 minutes, then there were some general questions, a section where the local governments could include a few questions and finally there was a part with background questions.

The questionnaire was used as a base, with all partner-regions making their own questions and formulating them in line with the special regional conditions.

In the preliminary stages of the project the goal was to run surveys with similar questionnaires in all partner-regions but with different methods and target groups. At the end of the project we now find that all surveys have been conducted using different methods, but some business sectors are the same and also some of the questions.

Concerning time schedule the data collection was meant to be carried out in the same period in the different regions, between 8th of June and 7th of September 2005. In Västernorrland it was conducted from the middle of August to the middle of September.

In Finland between 19th Jan – 28th Feb 2006. In Scotland the interviews were carried out between August 2005 and February 2006 and in Iceland the survey was conducted in four parts, with three in Oct - Nov 2005 and the fourth in Jan - Feb 2006.

Västernorrland, Sweden

The survey in Västernorrland has been conducted as a telephone survey as it is the most cost-effective method. The interviewers have called the participants between 9 a.m. to 17 p.m. on weekdays. Telephone interviews are computer assisted (CATI).

The PDS-method (Problem Detection Study) is, as its name suggests, a Swedish method to detect different problems and find ways to solve them. This PDS study has its focus on finding the obstacles for companies using Internet. By doing this in all four regions we could also benchmark these findings and find different solutions in all areas.

The PDS-method is done so that the respondents will be asked how big a problem it is to use Internet in different situations. We have asked about 39 different problems that can occur concerning the use of Internet and other IT-solutions. As a result we can see how extensive the different problems are.

Interviews were fulfilled for five different business sectors and totally 351 companies. Those are tourism 67, transport 80, real estate 47, manufacturing 77 and service companies 80.

We carried out telephone interviews with the person in charge of ICT-strategies in the company. In most cases this was the managing directors, in larger companies it was IT managers and IT-directors.

The interviews have been distributed into different cells in order to perform an analysis in sub-groups. We will need around 50 persons in each cell to make a fairly accurate prediction. There has been a limited target group in certain areas and regions.

The response rate was a bit hampered by the fact that the interviews were conducted during the summer holiday in Sweden.

As the target group is a rather busy target, we need to keep the interviews rather short (less than 10 minutes).

We may also repeat the study after one year or when the project is finished in order to measure if the companies have noticed the effects of the project and if the environment for Internet has improved.

Finland

414 companies were interviewed of which 71 welfare/ care services and 343 tourist industries. The companies represented three different regions Kainuu, Rovaniemi and Lapland.

Of all respondents 71 % have a broadband connection, 23 % use modem/ISDN and 6 % do not have access to Internet at all. Among those having access the present usage was 1. Acquiring information. 2. Advertising. 3. Sales. 4. Purchasing and 5. Customer service. In one question regarding customer service via Internet there was some interesting discrepancies in answers.

	Welfare	Tourism
Browse your products/ services	76	92
Order your products/ services	46	67
Pay for your products while purchasing	27	19
Give feedback to your company	67	86
Obtain customer service	59	80

When it comes to obstacles and barriers for businesses not using ICT there was no single top-ranked answer. The answers varied according to time, information, competence and reliability.

Scotland, Hebrides

The survey in the Hebrides was conducted as a postal survey. 476 questionnaires were sent out of which 236 responded. The sample was a mixture of different companies in the Western Isles.

Of the respondents 15% are reluctant to using Internet and for 21% it is not available, while 7% have answered that they're not sure if it is available. For those with access, the current Internet access was 47% dial-up connection, 21% ISDN, 30% ADSL and 2% other solutions.

Barriers and obstacles for not using ICT were:

- Costs
- Getting the ICT-strategy right.
- Identifying requirements.
- Availability of management time.
- Keeping up with the technological development.

In supporting SMEs with their ICT-development, there is a clear and great demand for impartial expert advice, hands-on expert assistance and information on relevant technology and how to apply it.

Iceland

Most parts of the survey were conducted in Oct - Nov 2005. They were sent out as an on-line survey to a predefined list. Reminders were sent first electronically and then by phone.

A total of 107 companies, mostly farmers in Skagafjordur (88), Isafjordur (13) and 6 tourist-companies answered the questionnaire. The numbers of tourist companies are too few for any conclusions and remarks.

Of the respondents 91 have access to Internet, but as many as one out of four think that they could manage without computers. Almost 50% have an ISDN-connection, 20% modem and 7% XDSL.

Present usage of Internet:

- 44% are using Skype. A very high figure compared with other regions in the project.
- 25% have a web-site.
- Of these 60% have an on-line catalogue with products and services.
- 50% are buying products and services over Internet.
- 25% offers ICT-education for their employees.

Results and conclusions

Each partner has in their own way conducted their "own" survey, however much is similar to the other partners'. Many of the questions recur, however in different formulations. This naturally makes comparison difficult. The common results are primarily found within areas such as Internet connection, some use and what companies feel are obstacles to the use of IT-support. The last being the original purpose of the survey, in order to find guidelines for future measures.

The following conclusions can be seen as the most important found in the survey and can be used as guidelines for future measures:

1. Building ICT-infrastructure is not sufficient. The Broadband is not self-marketing. Information and marketing efforts must progress hand in hand with expansion.
2. Public sector must be the promoter. The initiative should come from the public sector where different incentives for change and development can be created.
3. SMEs are the main target groups. These lie in arrears of the larger companies in use of IT and have much to win in the use of new tools.
4. Hands-on assistance is needed. For many of the companies, information is not enough, practical help is required with simple new tools which give a quick return on investment. The introduction of electronic invoices has shown itself to be such a tool and can also work as an ice-breaker for other IT-tools.
5. Long term activities 3-5 years are crucial. A long-term and consistent effort is necessary in order to completely make use of those possibilities the new IT-technique allows.

Learn from best practices and models in other countries

Summary

Within WP 4 we did set up a service (data-base) for collecting “best-practise” stories, the URL to the service is <http://194.105.228.14/drupal/>. We as well as educating the users of how to use the service we managed to collect very practical and useful cases from all the project regions. The service will continue to run and is a platform for the partners within the NPP regions to share information in the future. It is hoped that the service will continue to grow and assist players within the region to learn from each other about ICT initiatives that have been successful from the rural development perspective.

Information and objectives

The overall objective of this work-package is to create a process and provide a tool for collecting “success” stories from the participant’s countries/partners for sharing, i.e. learn from best practices and models in other countries.

Implementation

We had planned to use a service called EducaNext service to collect the “best practise” examples. During the course of the project we decided to change to a Drupal service (an open-source software). The Drupal software is easier to use since and at this point in time we understood that we didn’t need all the functionality that the EducaNext service offered.

All the players were trained in a short session to use the service.

All the participating countries were asked to collect 4 examples of “best-practise” cases to share in five domains. Information to collect (minimum) was:

- Timing of story
- Geographic setting
- Type and use of ICT
- Main contributors
- Main beneficiaries
- Background

The 5 domains were

eBusiness

- To improve access to information for all
- To improve innovation within an organisation
- To improve awareness raising
- To improve territorial identity and structure
- To improve regional economic development
- To improve regional social cohesion

eGovernment

- To improve access to information for all
- To support innovation within an organisation
- To raise awareness
- To improve territorial identity and structure
- To improve regional economic development
- To improve regional social cohesion

eLearning

- To improve skills and competencies
- To improve access to learning opportunities

eWork

- To improve skills and competencies
- To improve ICT training
- To improve work structures and processes
- To improve the quality of working life and working environment
- To support networking
- To improve the effectiveness of human and knowledge resources
- To improve the effectiveness of B2B and B2C tools

eCare

- To improve access to information for all

- To improve the quality of life for vulnerable groups
- To improve access to nursing care for ALL citizen
- To increase the flexibility of the health care system

Results

We have collected twelve “best-practise” cases.

eBusiness

- 6 cases
- Skjalfandi – eCommunity (Iceland)
- Raise awareness for eBusniess in Vasternorland (Sweden)
- Nature Craft Kainuu (Finland)
- E-invoices for increased efficiency and competitiveness (Sweden)
- business@jamtland” Pilot Project Plan (Sweden)
- WorldFengur (Iceland)

eCare (eHealth)

- 1 case
- Radiology case in Northern Finland (Finland)

eLearning

- 2 cases
- Development of distant learning by using ICT in Lapland (Finland)
- Distributed Learning in the Western Isles (Scotland)

eGovernment

- 1 case
- Sunnan3 – Development of e-community for the South region in Iceland (Iceland)

eWork

- 3 cases
- Bringing jobs to a skilled workforce in a remote area of Scotland (Scotland)
- Wireless Broadband to remote areas of Kainuu (Finland)
- Remote and Flexible Working in the Outer Hebrides (Scotland)

Transnationality

The collection of cases is very transnational, all the partners in the project have described a successful initiative/case in their region and the “best-practises” cases spans different

types of services in 5 different domains. The platform is in English and the language used to describe each initiative is English, although there are also attachments that are accessible in different languages. The information is not only text, but also video, posters and power-point presentations.

Dissemination and transfer of experience

The platform has only been disseminated in one conference in Finland, Feb. 2006, but there is a link to the service from the BIRRA home website.

Conclusions

We collected twelve “best-practise” stories and the service will be open for NPP participants for the near future. It is hoped that we can build on this good start and continue to share “best-practise” examples of ICT initiatives that have been successful. It is always difficult to start services like this one, because you need the critical mass of information so the intended user-group will be interested. This is a good start and I hope that in the future the service will continue to grow and become self-sustaining.

NPP eLadder

Summary

eLadder is a measurement tool that can be used by partners to measure the sophistication of their region in 5 key e-areas – work, business, learning, government and health.

The measurement tool which was developed through BIRRA is a multi layer e-ladder model which encompasses target outcomes, regional settings, assessment of services, and provision for continuous evaluation. For each of the 5 key areas (eLearning, eWork, eHealth, eGov, eBusiness) the ‘readiness’ or building blocks to implement the services is assessed, and the e-maturity of services is evaluated. Maturity is assessed by looking at the e-sophistication of the service, the coverage of the region by the service and the use and impact of the service.

Partner regions are able to apply the BIRRA e-Ladder measurement tool to services in their region and from this, be in a position to put together a local ‘Development Plan’ or ‘roadmap’ detailing actions they will take to maximise the provision and update of broadband technology and services in their rural and remote areas.

Each region is now responsible for the development of an action plan outlining how their area will move up the e-ladder. It can also be used as a stand-alone tool by a variety of public agencies wishing to look at their e-strategies and services. The e-ladder model

provides a template for the development of this action plan and can be used on an ongoing basis as a framework to enable partners to see how their region is progressing.

Information and Objectives

eLadder work was led by Comhairle nan Eilean Siar and Western Isles Enterprise. Both organisations are public agencies based in the Western Isles of Scotland. Comhairle nan Eilean Siar is the local authority for the Western Isles, while Western Isles Enterprise is the local economic development agency for the area.

The aims and objectives of this task were to:

- Develop an e-ladder model for use within NPP partner areas using best practice within the EU area.
- Develop suitable indicators from best practice generated through other BIRRA Work Packages and throughout the EU.
- Define the application of indicators, create matrix to enable scoring/ranking of partner areas and initial ranking of areas.
- Create a menu of actions/initiatives aimed to enable partner areas to develop their own tailored action plans and progress up e-ladder; prioritise actions for partner areas.
- Develop a framework to guide each partner in monitoring progress in their area, drawing on best practice monitoring models within the EU.

Implementation

This section outlines the steps which were taken to achieve these objectives.

At the inception of BIRRA, project partners worked together to identify the key areas they wished to focus on in terms of e-service delivery and measurement, and through this process advance the delivery of services to the economic and social benefit of their respective regions. The domains which were chosen were:

- eLearning
- eHealth
- eGovernment
- eWork
- eBusiness.

Definitions of each of these e-domains were developed.

A workshop event involving all partners was held in Scotland in August 2005. Partners held initial discussions on the e-services they wished to measure and potential approaches to this, taking into account a variety of good practice examples from across the EU.

Through looking at these examples, partners identified complementary work being carried out by Cap Gemini consultants for the EU. Following an initial meeting in the Western Isles in Autumn 2005, partners worked with Cap Gemini to expand this existing

model to cover a range of services, take on a number of different layers and to develop according to the requirements of the remote and rural areas participating in BIRRA.

Cap Gemini developed the model through discussions and meetings with regional partners and stakeholders in Iceland, Sweden, and Finland. This meant that all partners were fully involved in defining and refining the measurement model. The availability or e-sophistication layer is based on the EU availability model used in the Capgemini studies, but it is adapted: one-way and two way interaction, the levels 2 & 3 of the EU model, are taken together in a one 'interaction' level and a new 'integration' level is introduced.

It was recognised that it would not be possible during the project to measure all services in each of the e-domains. However, it was hoped that there might be shared priorities across partner regions. Partners developed an on-line survey to identify which services in each of the e-domains were seen as priorities to measure. The completion of this was not restricted to project partners but was widened out to include regional experts in healthcare, education, government, and end users or clients of the proposed services to ensure a user centric approach.

The model is based on 4 stages of sophistication in e-services:

- Stage 1 - Information
- Stage 2 - Interaction
- Stage 3 - Transaction
- Stage 4 - Integration

In order to assist partners to assess the stage their services were at, a handbook was developed outlining the various stages that could exist for different types of services.

Voting	
Definition of the public service	
<ul style="list-style-type: none"> • Register for voting • Casting a vote 	
Research definition	
Standard procedure to register and casting a vote for regional voting.	
Stage 0	The service provider or the administrative responsible level does not have a publicly accessible website or this website managed by the service provider or by the administrative responsible level does not qualify for any of the criteria for the stages 1 to 4.
Stage 1	Information, general: The information necessary to start the procedure to.
Stage 2	Electronic forms (registration): The publicly accessible website managed by the service provider or by the administrative responsible level offers the possibility of an electronic intake with an official electronic form to start the procedure to obtain unemployment benefits.
Stage 3	Casting your vote & authentication & results: The publicly accessible website managed by the service provider or by the administrative responsible level offers the possibility to completely treat the public service online.
Stage 4	Publishing results (system integration):

The model was tested during workshops in:

- Finland (Kemi-Tornio University , *eLearning readiness*; Kajaani, *evaluated Kainuu region on eLearning, eBusiness and eGovernment*; Rovaniemi *evaluated Lapland region eLearning, eBusiness and eGovernment*)
- Western Isles (*workshop on eLearning, eGovernment and eBusiness*)
- Iceland (*workshops on the service maturity model layer*)
- Sweden

Testing was limited to specific services in each region but allowed refinement of the operation of the model. The workshops were not just attended by those directly participating in the but were attended by stakeholders from other organisations in their region. Partners were also required to discuss the development of the model with others in their region on an ongoing basis.

Partners also carried out the data collection and other research required to complete the information required on the regional context and levels of broadband connectivity.

The e-ladder measurement tool was presented at the final BIRRA conference in Iceland in July 2006. Following final comments it was completed and distributed to all partners along with the e-ladder handbook and explanation of levels in e-services.

Results

Introduction

This section provides an overview of the BIRRA eLadder model and how it operates. The BIRRA eLadder provides a framework for users to assess their 'e-programmes': programmes or projects that aim to use ICT or broadband to assist in the development of remote and rural areas.

The eLadder can be used for self-assessment by regions or to compare themselves against other areas. It can be used on the level of one regional or local programme or as a comparator methodology among comparable programmes or projects.

Self-assessment in this context refers to the systematic and regular review of the strategy, objectives, processes, outputs and outcomes of a programme/project. The process allows an organisation to discern clearly its strengths and areas in which improvements can be made, and culminates in planned improvement.

In the development phase of the model, using it should produce two results:

- Testing of measurement indicators and developing further insight to refine the model
- The programme management and public agencies involved will learn from each other what worked and what did not work in the set up and running of the eServices/projects being analysed.

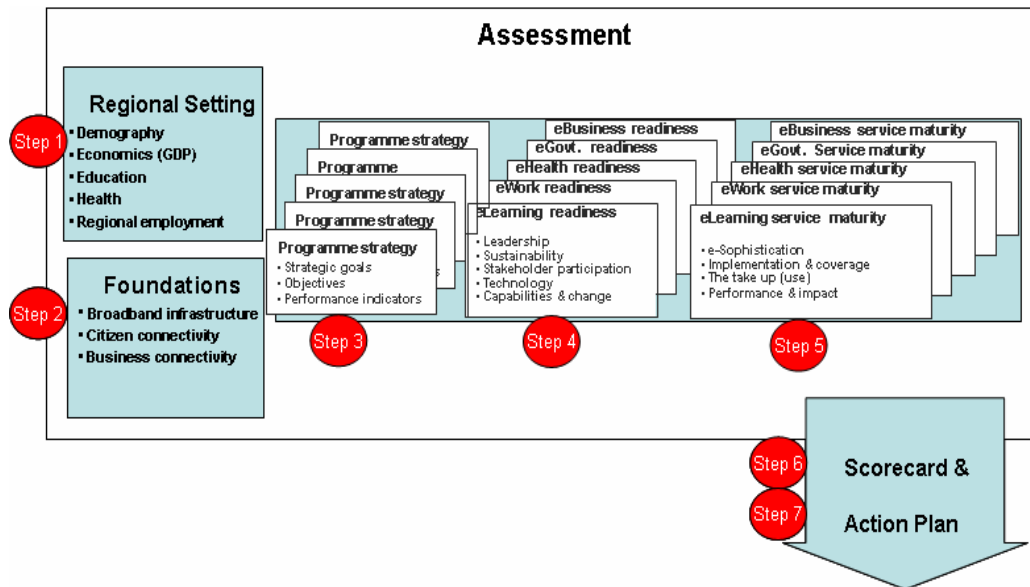
The focus of the model is on:

- 'why what' (strategy, objectives)
- 'what is needed to make it happen' (foundations, settings and enablers)
- 'what are the results' (service evaluation)
- 'what should change to ensure you reach the top level?' (transformation plan)

The model is presented in an excel workbook. However, there is scope to develop the presentation of the model further, for example, through the development of an on-line version.

Operation of the E-ladder.

The diagram below shows the logic behind the model and the architecture of the Excel workbook.



Step 1 is the Regional Settings Layer. This allows organisations to capture those features of its region (demography, GDP, employment level, business environment, etc.) that characterises the area and influence the strategy for the e-programmes/projects and the choice of e-services that could be developed.

Step 2 is the Foundations Layer which measures to what extent the region is connected to broadband. To enable e-programmes/projects broadband should be available and used.

Organisations should have clear strategies, goals and objectives for each of their e-programmes. In the Programme Strategy Layers the strategic goals, objectives and performance indicators are mapped. There is a programmes strategy layer for each of the five e-domains.

Implementing e-programmes in the domains of e-Work, e-Learning, e-Health, e-Government and e-Business requires specific 'building blocks' (strategy, people etc.). These building blocks are assessed in the E-Readiness Layer. Again, there is an e-readiness layer for each e-domain.

The outputs of the e-programmes and projects will be e-services. There are various levels of maturity and sophistication possible in each of these services. This is tested in the Eservice Maturity Layers.

The outcomes of completing the BIRRA eLadder are:

A Scorecard, which provides a graphical overview of the readiness and maturity in each of the domains.

An Action Plan, which provides a rudimentary template for the design of a plan based on the outcomes of the model.

The model also permits the different layers to be used separately: regional e-learning stakeholders can assess the readiness of their programme and the sophistication of specific e-learning or other services.

The model is not an impact measurement model: it assesses if objectives and related indicators are defined, if there is a system to measure them and to what extent the objectives are attained. Therefore the model can be complementary to other models.

Step 1: Regional Settings Layer

The Regional Settings layer contains indicators relating to the demography, social and economic situation of the region, the political structure. This data should be gathered from a range of primary research sources.

Completing this exercise should give organisations an insight the position and challenges of their region, and will support the interpretation of the results of the e-ladder when

compared to other regions. When different regions have completed the exercise, the indicators for each of the regions can be compared with the regional average and Eurostat data (Regional statistical yearbook).

The chart below gives an example of part of the Regional Settings layer.

Demography		<i>Moment/period of measurement</i>
Population	<input type="text"/> #	<input type="text"/>
Population growth (per year)	<input type="text"/> % point	<input type="text"/>
Birth rate (/1000 - per year)	<input type="text"/> #	<input type="text"/>
Dead rate (/1000 - per year)	<input type="text"/> #	<input type="text"/>
Net migration rate (/1000 per year)	<input type="text"/> #	<input type="text"/>
Life expectancy at birth	<input type="text"/> Years	<input type="text"/>
Population density (km²)	<input type="text"/> #	<input type="text"/>
Gender (Male/Female)		
male	<input type="text"/> % of tot. pop.	<input type="text"/>
female	<input type="text"/> % of tot. pop.	
Age structure (Please specify)		
16-24	<input type="text"/> % of tot. pop.	<input type="text"/>
25-44	<input type="text"/> % of tot. pop.	
45-64	<input type="text"/> % of tot. pop.	
over 65	<input type="text"/> % of tot. pop.	
Medium age	<input type="text"/> #	
Highest level of education attained		
No formal education	<input type="text"/> % of tot. pop.	<input type="text"/>
Primary or lower secondary	<input type="text"/> % of tot. pop.	
Upper secondary	<input type="text"/> % of tot. pop.	
Tertiary (University, Masters, PhD)	<input type="text"/> % of tot. pop.	
Refusal	<input type="text"/> % of tot. pop.	
Income - Bands		
<1000€	<input type="text"/> % of households	<input type="text"/>
1000-2000€	<input type="text"/> % of households	
2100-3000€	<input type="text"/> % of households	
3100-4000€	<input type="text"/> % of households	
4100-5000€	<input type="text"/> % of households	
5100-7000€	<input type="text"/> % of households	
7100-10000€	<input type="text"/> % of households	
>10000€	<input type="text"/> % of households	

Foundation Layer

The Foundation layer assesses broadband connectivity, with participants being required to input information on coverage, connectivity and public investment. The indicators in the layer have been selected according to the following criteria:

The indicators are relevant for measuring broadband coverage and connectivity.

These indicators can be compared to existing criteria in the UNDERSTAND project and European Commission Information Society Benchmark system.

Data should be available, no extra surveys are necessary (e.g. providers data)

The use or take up of broadband is not taken into account and extra surveys would be required for this. Broadband is taken to mean all types of connections - *DSL, cable, wireless – other than telephone dial in - >2Mbps.

Strategy Layer

The long term strategic goals of the programme or project are set out and performance indicators are defined. The example of a strategic layer pictured below has been partially filled in for an e-Learning programme.

Programme Strategy

Name: Extension of Higher Education opportunities

Strategic goals

Objectives

Performance indicators

	Flexibility of delivery	Extend Market	Social Inclusion	Enhancing skills
	Develop online materials	<-	Development of outreach centre	<-
	Develop a Virtual Learning Environment	<-	24x7 access	<-
	Develop online presence	<-	Enhance eLearning awarness	<-
	Produce CDs	<-	Provide relevant programmes	<-
	Nr. of people making online courses	<-		
	% of courses available online	<-		
	Nr. of courses available on Virtual Learning Environment	<-		
	Range of CD Rom materials across courses	<-		

Readiness Layer

The Readiness Layer assesses to what extent the 'building blocks' to support the successful implementation of the e-programmes/projects are in place.

There are five criteria: Leadership and Strategy, Management and Organisations, Technology, Customer Focus, and Change and Process Change. Within each category sits 3/4 questions which should be scored, based the perceptions of those completing the model. The outcome will be an overall readiness percentage and a clearer view on areas for improvement in programme management.

The figure below gives an example of the readiness layer for an eWork programme.

eWork Readiness							
Name Programme: <input type="text"/>							
						OVERALL 0%	
Question	Criteria	Score					
		0%					
1.1	Leadership & Strategy	0%	0%	25%	50%	75%	100%
Is the strategy for this project/programme defined? With clear priorities and objectives?		No strategy defined	Strategy defined but not documented	Documented strategy exists	Ownership of strategy is clear. Strategy widely communicated. Strategy clearly identifies objectives	The strategy is regularly used, linked to priority service outcomes, & key staff are highly aware	
1.2		0%	0%	25%	50%	75%	100%
What links or impact does the project/programme have on the regional/national eWork strategy?	There is no obvious link with the regional/national strategy	There is an indirect link with the regional national strategy	Their are evident links with the regional national strategy	The project/programme supports the existing regional/national strategy	The project/programme has an impact on a renewed regional/national strategy		
1.3		0%	0%	25%	50%	75%	100%
Is the project/programme clearly communicated to the stakeholders? Do they understand the eWork agenda? Do they have any involvement in the project/programme?	No clear communication. Key stakeholders are uninvolved and resist eWork ideas	Key stakeholders are aware of the project/programme although remain non-participative	Majority of the stakeholders are involved in the project programme	All key stakeholders are engaged and are committed to the project/programme	Key stakeholders pro-actively support the project/programme and have a thorough understanding of the eGovernment strategy		
		0%					
2.1	Management & Organisation	0%	0%	25%	50%	75%	100%
Do you have a funding strategy? Is the long term funding guaranteed?		There is no clear funding strategy.	There is understanding of a range of funding sources and opportunities	Funding sources and opportunities have been identified and prioritised	The funding strategy identifies sources and opportunities, aligned to the needs of the project/programme	There is comprehensive funding strategy, linked to value delivery, which incorporates innovative use of sources and financial models	
2.2		0%	0%	25%	50%	75%	100%
How do you manage the resources of the project/programme?		There is no clear commitment or understanding of the level of resource required	There are sufficient and appropriate resources available	Roles and responsibilities are understood	Roles and responsibilities are clearly understood and documented	Roles and responsibilities are fully understood and documented. Resource restraints have been considered and planned for	
2.3		0%	0%	25%	50%	75%	100%
What have been your actions around skills required vs. skills available?	No skills analysis has been undertaken	There is awareness of skills gaps, but no detailed understanding	Comprehensive gap analysis has identified and prioritised deficient skills	A strategy is being developed to address the skills gap	A comprehensive strategy is in place which identifies tools, techniques, channels, and providers		
2.4		0%	0%	25%	50%	75%	100%
Do you have an adequate project/programme management system for the eWork project/programme?	There is no project/programme governance or programme structure in place.	There is a project/programme plan but the project/programme structure is unclear with no obvious linkages between the streams	The project/programme is governed by a clear project/programme structure (board). There are clear documented linkages between project streams.	The project/programme plan and structure are regularly reviewed with all project streams aware of their key deliverables and timescales	There is clear direction from the programme structure. The critical path and dependencies are documented and well understood. All streams are fully		

		0%					
3.1	Technology	0%	0%	25%	50%	75%	100%
Do you have a infrastructure strategy? Does it take advantage of the existing national infrastructure projects ?			Infrastructure strategy has not been considered	Development of an infrastructure strategy is underway	A strategy has been developed independently by the initiative	The infrastructure strategy takes into account National e-Gov guidelines	The infrastructure strategy incorporates learning and best practice from National e-Gov projects
3.2		0%	0%	25%	50%	75%	100%
How are your technology standards defined? Align with national guidelines?			No technology standards are defined	Technology standards are in development	Technology standards have been defined within the initiative	Standards are being developed to align National guidelines	Standards compliant with National guidelines have been developed and published
3.3		0%	0%	25%	50%	75%	100%
What is your approach to security? Is your approach consistent with national standards			There is no consideration of security	The relevance of security and its impact in the initiative is understood	A security policy or guidelines are in development	A security policy is being developed to align with existing National standards	There is a published security policy which conforms with National standards
3.4	0%						
What is your approach to identity management? Is aligned with the national identity management system?		There is no consideration of identity management	The development of and identity management system is ongoing	A identity management system had been developed	A identity management system has been developed aligned with the National identity management system (e.g. mutually recognised eID)	A identity management system aligned with the national identity management system is implemented and used.	
3.5	0%						
Describe the capabilities of your applications e.g. do the application support operational / management needs? Integrate with other applications?		The initiative has not developed applications	Application(s) support defined operational need	Application(s) support specific operational & managerial needs but generally do not integrate with other applications	Application(s) support operational needs as well as integrate with other applications	Business and Technology people are actively consulted in the design of applications which support operational needs and integrate with other applications	
		0%					
4.1	Customer focus	0%	0%	25%	50%	75%	100%
Is customer centric thinking is embedded in the project/programme?			The term 'customer' is not sufficiently understood or considered	'Customer' is discussed and considered as part of the service design	'Customer' is defined as citizen, business, PSctr staff, and relative needs are understood	Customer needs are formally and insightfully built into the service design process	'Customer' is consistently at the forefront of thinking, & their feedback is used to evolve the service
4.2		0%	0%	25%	50%	75%	100%
How have the services developed within the project been linked to the customer needs?			There is no real understanding of which products or services are required	Products and services have been defined but no linked to customer needs	The products and services have been defined and mapped to the customer segments	The services have been defined and mapped and enabling processes and channels have been identified	A defined set of services has been marketed and tested with a range of customers throughout the value chain
4.3	0%	0%	25%	50%	75%	100%	
Do you believe these are the right channels for your customers? What plans do you have in place to migrate the customers to the desired channels?		The relevancy of channels has not been considered	Customer use of existing channels and desire for alternative channels is understood	A business case has been developed for migrating customers to different channels	Technology enabled channel mix ensures timely and relevant access of services to all customers.	Technology enabled channel mix provides access to services and is analysed for delivery of benefits	
		0%					
5.1	Change & process change	0%	0%	25%	50%	75%	100%
What analysis has been completed on how your way of working will / has change as a result of the project/programme? What have you done with the findings?			The impact on ways of working has not been considered	It is clear how the initiatives will impact ways of working	Future ways of working have been defined and the gap with the current state identified	Documentation of future way of working is underway	Documentation on new ways of working is in place. Required changes to behaviours, habits and mindset are understood
5.2		0%	0%	25%	50%	75%	100%
Will the current processes be impacted by the project? How will you / have you addressed this change?			Processes have not been analysed	Current processes have been analysed	Future end to end processes have been defined and the gap with the current state identified	Documentation of future processes is underway	The end to end future processes are defined and documented; there is a migration path from current to future processes
5.3	0%	0%	25%	50%	75%	100%	
How have you managed change so far? What are the future plans?		Change is managed on ad-hoc basis	There are clear roles and responsibilities for change management	There is a change management plan which identifies key change activities	Change champions are focusing on engaging and mobilising people and building a commitment to change	Change management is integral to how the initiative operates and tools and support for change are seen as critical outputs	

E-Service maturity layer

The maturity layer is about the evaluation of the outcomes of the e-programmes. The layer contains 2 concepts:

- Sophistication of the e-service
- Support of the (e-)service

The outcome of the programme/project is defined as an electronic service, where no e-services are defined as outcomes, only the support concept can be used.

In order to measure the services for each of the partner regions a four-stage framework has been defined:

- **Stage 1 - Information:** Information concerning the public service and the delivery process is available on the official website of the service provider. (e.g. information concerning a social service, the conditions, the delivery process etc. are available)
- **Stage 2 - Interaction:** the service provider offers the possibility of an electronic transaction concerning the service. (e.g. the procedure to obtain the social service can be started via an e-transaction)
- **Stage 3 - Transaction:** the service provider offers the possibility to completely handle the public service online. (e.g. the demand and delivery of the social allowance can be undertaken completely online).
- **Stage 4 - Integration:**
 - The delivery of the public service is interconnected with associated public services (e.g. the delivery of a social service is linked to other social rights; the services are delivered as a package)
 - The service providers are using shared back-office services (HR Management, Payroll, IT management, CRM, Asset Management, Finance)

Besides these 4 stages, a stage 0 was introduced to capture two possible outcomes:

- Total absence of any publicly accessible website managed by the service provider.
- The public service provider has a publicly accessible website, but this one does not offer any relevant information, interaction, or transaction possibilities at all concerning the service.

The figure below demonstrates the scoring framework. For certain services, particular stages may not be relevant. For example, the transaction level may not be relevant or can be unrealistic due to the actual state of the technological development.

Service to evaluate:

Question	Criteria	Score	0%				25%				50%				75%						
1 What is the level of e-sophistication of the service ?	Sophistication	0%	Level 0				Level 1: Information				Level 2: Interaction				Level 3: Transaction						
			0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	90	90
2.1 To what extent is the service implemented ?	Support Deployment Implementation and coverage	0%	The service does not exist or is in a pilot phase				The service is implemented/covers 1/4 of relevant areas				The service is implemented/covers 1/2 of relevant areas				The service is implemented/covers 3/4 of relevant areas						
	Subtotal		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	90	90
2.2 To what extent is the service used?	Support Take up Use of the service	0%	No evidence - no measurement of use				The service is used by less than 1/4 of the potential target group				The service is used by between 1/4 and 1/2 of the potential target group				The service is used by between 1/2 and 3/4 of the potential target group						
	Subtotal		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	90	90
2.3 To what extent is there an evaluation system of the service in place?	Performance measurement Input, process, output, outcome	0%	Performance indicators are not defined (input, process, output, outcome)				Performance indicators are defined but there is no evidence on measurement				Performance indicators are defined and measured				Performance indicators are measured and communicated						
	Subtotal		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	90	90
2.4 To what extent are the objectives attained ?	Impacts Objectives / outcomes	0%	The attainment of the objectives is not measured or is nil				The attainment of the objectives is very low (less than 25%)				The attainment of the objectives is rather low (25% - 50%)				The attainment of the objectives is rather high (50% - 75%)						
	Subtotal		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	90	90
Total score		0%																			
		0-33%	Important to consider																		
		34-66%	Some warning signs																		
		67-100%	Good status																		

As is shown in the example above, the **Sophistication Scoring** of services is based on a percentage system. Another important element of the scoring are the **Support Scores**. These cover deployment, take up, performance measurement and benefits/impacts. Each of these criteria is scored in a similar manner to service sophistication.

To complete this element the service to be evaluated is entered and defined in terms of the different stages of sophistication that exist. Sophistication and support scores are then entered into the spreadsheet. Following this, the total score for the service will be displayed.

Completing the BIRRA eLadder model results in a graph providing an overview of the eReadiness and the eService maturity within each of the domains:

Action Plan

The BIRRA eLadder model contains a template for the design of an action plan based on the results of the assessment. For each domain the readiness and maturity level is mentioned. Actions can be defined, responsibilities appointed and due dates filled in.

Domain	Score	Actions	Responsible	Due date
eWork readiness	0%			
eLearning readiness	0%			
eGovernment readiness	0%			
eHealth readiness	0%			
eBusiness readiness	0%			
eWork service maturity	0%			
eLearning service maturity	0%			
eGovernment service maturity	0%			
eLearning service maturity	0%			
eBusiness service maturity	0%			

Work Package Transnationality

As shown by the description of the implementation of the work package, there was a high level of transnationality in the approach taken. Partners worked together to identify the key areas for service measurement with a clear focus on domains that would enhance local service provision and to share good practice in models being used in other areas.

During the development of the model, all partners were involved in testing different elements and ensuring that the assumptions underpinning the model were relevant to each area and understood by all partners. Due to the different structures of public sector service delivery in some of the regions, changes had to be made to the e-ladder tool criteria.

Dissemination and transfer of experience

The Outer Hebrides participated in a range of events and dissemination opportunities to share the eLadder model with complementary projects within the EU. Examples included:

- Presentations to the EC in Brussels in conjunction with other measurement initiatives.
- Presentation as part of the eGEP conference in Vienna (major EC sponsored eGov measurement research and development project.)
- Presentation at IDC conference in Rome
- Presentation to regional representatives and partners in Iceland
- Presentation at NPP conference in Inverness (featured project case study)
- Presentation at The Impact of eGovernment in Europe conference - 13 Sept 2006 Helsinki, see http://www.egov-goodpractice.org/event_details.php?&eventid=125

The BIRRA eLadder is now recommended as a best practice case study on the EC eGovernment Good Practice Framework Database.

A number of European regions now propose to use the BIRRA e-Ladder model in their own administrations (see enclosed comments in powerpoint presentation).

Conclusions

The e-ladder and indicators allow partners to measure the scope and depth of broadband uptake and services in the priority areas of eLearning, eWork, eGovernment, eBusiness and eHealth.

The measurement framework has enabled partners to see what stage they are at in the sophistication of their eservices and identify key actions they need to take to progress their area up the e-ladder. At the completion of the project, each partner is now in a position to put in place the Development Plan for their region.

The development of the model is now in a phase where it can and should be implemented and used as a complete package. Self-evaluation capabilities are important but for the success of bench-learning exercises the support of third party facilitators will be needed.

The implementation will run more smoothly if it builds on existing collaboration and networks among public administrations. Ownership is important: only people and programmes with self interest in the learning process should participate. There must be a clear mandate and leadership buy-in for participation in bench-learning

Dissemination

Summary

The overall objective of the project was to develop information and communication technology and information society services for NPP areas. The purpose of the project was to analyze and compare the provision of broadband and associated services across the different regions.

There were four main goals in the project:

1. Analysing technologies and costs
2. Regional eAdoption Strategies and Initiatives
3. Learning from best practices and models in other countries
4. Development plan (one step on NPP Ladders)

The primary target groups (beneficiaries) were SMEs / businesses including microbusiness, residents, 3rd sector community groups and R&D units. Secondary target groups were public-sector organisations, companies/ institutions using broadband to serve their clients and the owners of the broadband networks.

The Dissemination Work Package was responsible for coordinating all dissemination actions of the project. The Work Package concentrated on diffusing information of the project and project results. There were three main areas in this work package: meetings, virtual platform and promotion material.

Meetings included national workshops and international seminars. Virtual platform acted as a source of information for all partners and external actors of the project. In order to create a uniform graphical image for the project the logo, print and web layout as well as report templates were produced for project dissemination purposes. The Work Package was also responsible for creating press releases, brochures and the project web site.

Information and objectives

The dissemination task concentrated on dissemination actions, spreading information of the project and project results.

- Internal Project Information Channel
 - implementing and maintaining the project web system for internal communication
- External Project Information Channel
 - implementing and maintaining the project web pages for global dissemination
- The graphical image of the Birra project
- Local dissemination activities such as presentations and workshops
- Summary of the dissemination results

The project web site, local workshops and international seminars comprised the primary instruments of dissemination. In addition other media channels and mechanisms were used as well. The dissemination activities took place during the entire project duration.

Implementation

Result for dissemination	Date	Type of dissemination
Dissemination plan	March-05	Document
Internal information channel	March-05	Information channel
Graphical image	September-05	Document and logo
External information channel (web site)	March-05	Information channel
Information for internal and external information channels	January-05- June-06 ->	Digital documents and presentations
Project presentation template	September-05	Preseantation
Internal report templates	September-05	Document
Project brochures	1st October-05 2nd Mars- 06	Paper
Press conference	Härnösand 18th November Finland 17th March 2006 Iceland 16th June 2006	Press releases
4th National workshop	Look at the Dissemination action	Documents and presentations
International seminar in Finland	17th of March 2006	Documents and presentations
International seminar in Iceland	16th of June 2006	Documents and presentations
Publish result reports	June- 06	Documents
Publish eLadder Model	June- 06	www.birraproject.net

Results

The Project Web System

The BIRRA project web system was divided into two parts: internal and external information channel.

Internal Information Channel

Internal information channel was the Virtual Office application. It was taken into use in the beginning of the project. To log in the application a user name and a password were needed. Internal information channel was primarily made for project participants and contained internal and administrative project material.

Main sections of the internal web system included:

- Project administration
- Detailed project plan
- The Discussion Forum
- Project Manager tool
- Common calendar

E-Meeting system was Marratech.

WP4 took into use a brokerage platform, EducaNext2, which was a service supporting the creation and sharing of knowledge. EducaNext was a service created within the frameworks of an IST project, UNIVERSAL. Iceland Telecom set-up the service and maintained it.

External Information Channel

Publicly accessible web site that was primarily aimed at dissemination

- a description of the project
- project objectives
- milestones
- the on-line accessible or downloadable public deliverables

Publicly accessible pages contained also useful background material for the project partners. The project web page can be found in the Internet address:

<http://www.birraproject.net> .

Major sections of the external web page include:

- Project description; aims, schedule etc.
- Consortium of partners
- Technical documents and public deliverables
- Presentations from the various project meetings
- Image gallery
- Scheme and Manual of the eLadder Model

Dissemination material

In the beginning of the project the work package 6 leader was responsible for creating a logo, print and web layout, report templates and presentation template for project dissemination.

The BIRRA project logo along with EU and Northern Periphery logos were used in all project publications.

The findings of different work packages were distributed in the transnational and national seminars arranged during the project. The results were also reported in reports and published on the project web site.

During the project each country organised at least one press conference to inform about the project. The press conferences were arranged in connection of the transnational meetings. Press releases were sent to the media.

National Workshops

The findings of each work packages were distributed in the transnational and national seminars arranged during the project.

Each country arranged national workshops. The objective of the workshops was to influence and involve regional, local and national decision makers as well as to test the eLadder Model.

International Seminars

The first international project seminar took place in Finland in March 2006. Another international seminar was arranged in Iceland in June 2006.

Reports

Information of the project results was distributed to selected target groups. Most of the results were received approaching the end of the project.

Two study reports were published on the web.

Transnationality

During the project one international seminar was arranged in Finland and another one in Iceland.

The tasks of the work packages were evenly distributed among the project partners. To achieve the work package results the partners had to work in close cooperation. It was

important to meet the deadlines, because the next step was built on the foundation of earlier results. This meant that all the partners had to give their contribution to the work.

The eLadder Model was tested in all the project countries. The results were utilized in finishing the model.

Conclusions

Dissemination is an essential part of the project. To differentiate dissemination from other project activities as an autonomous work package was a new approach.

The advantages of having the Dissemination Work Package were that it enhanced the importance of dissemination and enabled the creation of the uniform graphical image. In principal all the project partners shared the responsibility of producing material for the Dissemination Work Package. However, in reality the partners concentrated on working for other work packages and the content production for Dissemination Work Package was no in their focus.

Donnie Morrison has presented eLadder-Model in 'The Impact of eGovernment in Europe' conference on 13th of September 2006 in Helsinki, Finland. It was very well received and is now recommended as a best practice case study to be added to the i2010 'Best Practice' Web site. The area of Emilia Romagna in North Italy is making a recommendation that BIRRA be implemented in their region. There was also significant interest from Latvia, Estonia and Ireland.

Dissemination actions:

Sweden:

- The 22nd of february 2005 a conference in the city of Härmösand on "ICT in regional development strategies", where the BIRRA-project will be presented. On the conference there were presentations also from the Swedish Ministry of Industry, the Swedish Business Development Agency and the Swedish Association for Local Authorities and Regions. Participants on the conference are policymakers and stakeholders in regional development and especially in ICT-issues.
- Workshop the 11th of May 2005 with participants from 7 different companies. The workshop was part in a preliminary study to find out obstacles and barriers for the uptake of IT-tools among SME:s.
- The participants represented companies with the amount of employees from 10-250, and were CEO:s or IT-managers for their company.
- In the session we discussed all possible obstacles that could be relevant for companies IT-take up. We formulated a gross list from which some were chosed to use in the questionnaire for our survey, that we´re running for the moment.

- BIRRA project meeting will take place in Härnösand Sweden 17th-18th on November. There was also press Conference.
- “Offentliga rummet” on 13th May to 1st Juni in Sundsvall.
- Eladder model workshops (Participants on the workshop was policymakers and stakeholders in regional development.).

Finland:

- Lapin tietoyhteiskuntastrategian linjantarkistuspalaveri, Hotel Santa Claus, Kuru-kabinetti on 18th of February 2005. Participants on the conference are policymakers and stakeholders in regional development and especially in ICT-issues.
- International Seminar in Saariselkä 18th to 19th on March. On the conference there were presentations also from the Ministry of transport and communications Finland. Participants on the conference are policymakers and stakeholders in regional development and especially in ICT-issues. (Report on Lapin Kansa newspaper and reportage on local TV.)
- Eladder model workshops in Tornio, Kajaani and Rovaniemi (Participants on the workshop was policymakers, stakeholders in regional development and entrepreneurs).

Scotland:

- eGovernment Economics Project (eGEP) Final Conference “Getting full Impact of eGovernment - launching a European Measurement Framework”, 8 February 2006 , Vienna
- ”Learning from regional benchmarking to deliver i2010”, Brussels, 30 March 2006
- Eladder model workshops (Participants on the workshop was policymakers, stakeholders in regional development and entrepreneurs).

Iceland:

- Feykir is the local paper for the Skagafjordur region, here are the listing of publication in Feykir
 - Feykir 2006
 - Frontpage on 22.tbl
 - Page 2 in 23.tbl.
 - Page 6 in 24.tbl.
 - Feykir 2005
 - Lastpage in 33.tbl
- In the News (16.06.2006) : Sigrún Gunnarsdottir was interviewed by the Ríkisútvarpið RUV - The Icelandic National Broadcasting Service in relation to the BIRRA conference

- <http://dagskra.ruv.is/streaming/sjonvarpid/?file=4284227/9>
- One of the biggest newspaper in Iceland, publication in relation to a conference called the IT-day 2006: Upplýsingatækni í dreifbýli
- Broadband in Rural and Remote areas - BIRRA (Appendix 1) also here (<http://utvefur.is/UTbladid2006/nr/2210>)
- Part of an article that was published in the yearbook of Association of chartered Engineers in Iceland. the name of paper is : Rannsóknir Símans (Appendix 2)
- "News" on internal website, yearbooks or websites within Iceland Telecom, Post- and Telecommunication administration in Iceland, Byggdastofnun and UD (Upplýsingatækni í Dreifbýli) such as : <http://utvefur.is/UTbladid2006/nr/2209>
- Eladder model workshops (Participants on the workshop was policymakers, stakeholders in regional development and entrepreneurs).