



**The Welsh Assembly Government's
Information Age Strategic Framework
for
Wales**

Contents

Foreword/Welcome from Andrew Davies AM, E-Minister for Wales	3
Executive Summary.....	4
1. Our Vision – On-line for Wales	7
Why is this important	8
2. Enhancing our Communities	10
Key Commitment	10
Objectives.....	10
3. Building Successful Businesses.....	13
Key Commitment	13
Objectives.....	13
4. Improving Public Service	15
Key Commitment	15
Objectives.....	15
5. Developing ICT Skills	20
Key Commitment	20
Objectives.....	20
6. Ensuring First Class ICT Infrastructure.....	23
Key Commitment	23
Objectives.....	23
7. Our Budgets.....	26
8. Next Steps.....	27
Appendices	
A. Detailed Action List.....	29
B. Information Age Advisory Group	36
Feedback Page.....	37



**Forward/ Welcome from Andrew Davies, E-Minister
for Wales.**

Thank you very much again to all of you who contributed to the Cymru Ar-lein - Online for a Better Wales consultation or who have simply shown an interest. We have now developed the Cymru Ar-lein Strategic Framework which reflects the excellent feedback that we received and the discussion that took place on this website during the ICT Strategy Consultation between 17th January and 14th March 2001 and since this date.

The National Assembly will provide strategic leadership and co-ordination to build on the good work that is already taking place in Wales and beyond. I have established a set of challenging but achievable targets for the Assembly and for Wales in the Cymru Ar-lein Strategic Framework. I have purposefully selected a small number of high level targets that should make a big difference. In addition to this, the National Assembly will continue to support a wide range of successful projects and initiatives already going on in Wales.

Cymru Ar-lein - Online for a Better Wales was unanimously approved by the National Assembly Plenary on 3 July and was launched on 22nd November 2001. The site will continue to be open to receive your comments after the launch, as we believe your feedback will be essential to the success of Cymru Ar-lein. You can comment directly via the feedback page or by contributing to the discussion forums. Alternatively, you may e-mail us at info.age@wales.gsi.gov.uk .

Cymru Ar-lein - Online for Better Wales

Executive Summary

Introduction

The e-Minister, Andrew Davies, emphasises the opportunity for ICT¹ to enable sustainable - economic, social and environmental - development, social inclusion and equal opportunities. The Welsh Assembly Government has identified appropriate use of ICT as a key tool for personal, organisational and community development throughout Wales.

We want Wales to be:

- **United** through its use of ICT, **confident** in promoting our achievements on the world stage and **creative** in exploiting ICT for the benefits of individuals, communities and businesses.
- **Committed** to fostering, through the effective use of ICT, its unique and diverse identity, and the benefits of bilingualism.
- Using ICT to become more prosperous, well-educated, skilled, healthy, **environmentally and culturally rich**
- **Served** by modern, effective, efficient and accessible public services that use ICT to enhance their services.
- **Active** in its use of ICT in local communities, where the voice of local people is heard
- **Fairer** – a place where everyone is valued and ICT is used to give everyone an opportunity to play a full part

The challenge

The economy

GDP per capita in Wales is low relative to the UK average. It is clear that ICT is capable of generating significant gains in productivity across economies and opening up markets and new areas of enterprise. This has been shown to be true for countries on the periphery of Europe, such as Ireland and the Scandinavian countries, for small countries with unusual economic circumstances (such as Singapore) as well as for the world's largest economy, the United States.

If Wales fails to address business's ICT needs, companies and talented individuals will leave Wales and others will fail to arrive. This applies to manufacturing companies, as well as to media and software companies. It also applies to the public sector, to universities and to local government. Without a world-class ICT system, Wales will position itself on the wrong side of the "digital divide" - in receipt of grants and subsidies, but essentially a failing economy. Within Wales, there will also be a "digital divide" between individuals and regions which are strong on ICT and those which are not. This will enhance existing divisions.

Welsh society

The topography of Wales has meant that previous advances in communications technology - canals, railways and roads - have had less effect in Wales than other parts of the UK. ICT is the first communications technology which can be as effectively deployed in Wales as anywhere else.

The only issue is cost. There are no serious environmental problems involved; indeed ICT makes it possible for people to work globally from rural locations.

ICT, which already offers alternative language paths and translation tools, is also exceptionally useful for a country with the linguistic profile of Wales: it will help foster the use of both languages in many settings.

¹ The term "Information and Communication Technology" or ICT refers here to any technology we use to store information or communicate with each other – computers, phones, televisions, the Internet and world Wide Web...

Other Welsh strengths - the country's strong voluntary sector and civil society - will also be boosted by ICT, which can be used to foster community development and peer learning.

ICT is also a socially enabling technology, offering access to education, training and jobs. Around the world, evidence shows that ICT has been a key factor for countries, which have successfully transformed themselves. We want to see such a transformation here.

The Solution

Early in 2001, The National Assembly undertook its largest ever electronic consultation on proposals for the digital future of Wales. 3,000 organisations and individuals were contacted urging them to participate in creating and shaping the Assembly government's ICT Strategy. The result is *Cymru Ar-lein – Online for a Better Wales* the strategic framework, which was unanimously approved by the National Assembly for Wales on 3rd July 2001.

Andrew Davies the e-Minister launched Cymru Ar-lein on 22nd November 2001. It's unique holistic approach – both in practice and embedded in the website - provides top level strategic vision for the whole of Wales. A “joined-up” partnership approach and SMART² target actions ensures that the vision is delivered. It directly supports the National Assembly's sustainable development agenda, through key programmes in community regeneration, e-learning, appropriate transport, e-procurement, and e-democracy.

Continuous feedback is essential to continued development of Cymru Ar-lein in our rapidly changing technological, environmental and cultural landscape. Therefore the website remains permanently open to receive your comments, information about your own activities and feedback on our progress.

Co-operation and partnership are essential to achievement of the Cymru Ar-lein vision. The Welsh Assembly Government provides the leadership and co-ordination role and is assisted by a wide range of partners engaging in integrated activities. Our partners include:

- Cymru'n Creu
- Education & Learning Wales (ELWA)
- Forum for the Future
- National Library of Wales
- NHS Wales
- People's Network Wales
- Syniad
- Wales Council for Voluntary Action (WCVA)
- Wales on the Web
- Welsh Development Agency (WDA)
- Welsh Language Board
- Welsh Local Government Association (WLGA)

What can you do to help?

Visit the site (www.cymruarlein.wales.gov.uk), register for updates so that you can keep track of our progress and feedback your thoughts via the fora, feedback form or email info.age@wales.gsi.gov.uk. Ring 0800 100 900 to find out where you can get on-line free to view Cymru Ar-lein.

Join us in this important work by considering how you can use ICT to improve your community, work or voluntary organisation. Contact potential partners and tell us all about your own ICT activities via the website fora.

² SMART stands for Specific, Measurable, Achievable, Realistic and Timed

The achievement

Cymru Ar-lein is on the web at www.cymruarlein.wales.gov.uk. The strategic framework has five themes:

- Citizen and Community
- Private Sector
- Public Sector
- ICT Skills
- Infrastructure

For each theme a number of key commitments and delivery objectives have been developed. For each objective a number of targets, with owners and time scales and progress reports are published regularly on the site so that people in Wales (and outside) can follow our progress. A major feature of the site is the Discussion fora, which enable citizens to be closely involved in the development of the strategy, seek help and guidance and tell us how we're doing. In addition to the five themes above, there are also fora on: ICT and the Welsh language, European funding for ICT and ICT and Sustainable Development.

What have we done so far?

The actions database on the Cymru Ar-lein website provides updates on the targets within the framework. Some key milestones are noted below:

- Of our 84 original goals, we have completed 17 already, 59 are on target and 8 have been rescheduled. New targets have now been added and you can see progress on all targets on the website.
- An early development of Cymru Ar-lein is its database of ICT facilities across Wales. The citizen can find their nearest ICT facility such as the local library, school or ICT learning centre.
- The Assembly is providing the central hub of the Welsh Lifelong Learning Network, providing 100 Mbps connections and internet connectivity into every unitary authority. Local Authorities will link this hub to schools, libraries and community learning centres in Wales.
- A Scoping Study has taken place in preparation for the All-Wales Portal. Wales on the Web – which may form the gateway element of the Portal - is currently being tested.
- The National Assembly is currently evaluating Implementing Electronic Government (IEG) Statements from Local Authorities in Wales, with a view to sharing good practice, establishing partnerships and agreeing local e-government targets.
- A minimum of three electronic white boards (or equivalent technology) have been provided for every secondary school in Wales and a minimum of one to every primary and special school. Funding has also been provided for teacher training on the new technology.
- Plans have been agreed for the first stage of an all-Wales teacher support structure in Wales as part of an integrated e-Learning Strategy.
- The Assembly is looking at its own working patterns and processes to establish a mechanism by which it can use ICT for organisational improvement
- The Welsh Language Board have produced a list of ICT tools already available in the Welsh language on the web at: <http://www.bwrdd-yr-iaith.org.uk/techgwyb/rhestmeddalwedd-e.html>

Further Information

For more details on the full range of current and planned ICT activities in Wales, go to www.cymruarlein.wales.gov.uk, or contact 029 2080 1025 for a printed version or visit your local library to view the website.

1. Our Vision – Online for a Better Wales

- 1.1. Almost all of us use television, video or telephones every day. Many of us are now using computers, mobile phones and the Internet. These are all Information or Communication Technologies. These technologies have the potential to transform society and the economy in Wales; they are already doing so in many parts of the world. The choices we make now - about which new technologies we use and, more importantly, how we use them – are crucial to the future of Wales and will help us to create a Better Wales! That is why Information and Communications Technology (ICT) is so integral to our strategic plan, Betterwales.com, and our National Economic development strategy.

Our vision

We want Wales to be:

- ❖ **United** through its use of ICT, **confident** in promoting our achievements on the world stage and **creative** in exploiting ICT for the benefits of individuals, communities and businesses.
- ❖ Committed to fostering, through the effective use of ICT, its unique and diverse identity, and the benefits of bilingualism.
- ❖ Using ICT to become more prosperous, well-educated, skilled, healthy, environmentally and culturally rich
- ❖ Served by modern, effective, efficient and accessible public services that use ICT to enhance their services.
- ❖ Active in its use of ICT in local communities, where the voice of local people is heard
- ❖ Fairer – a place where everyone is valued and ICT is used to give everyone an opportunity to play a full part
- ❖ A place which values its children and where young people want to live, work and enjoy a high quality of life

- 1.2. We want the people of Wales to feel comfortable in using ICT in their daily lives, have access to bilingual training and education, public services and healthcare to support them wherever they need it. We want Wales to be a place where our local communities are actively using ICT to help remove physical, geographical and linguistic barriers, where ICT is used to combat social exclusion and reduce existing social divisions. A Wales where people can choose to live and work in rural areas, enjoying a high quality of life with the benefits of distance learning and home working. A Wales where ICT is a key to enabling sustainable development and creating a thriving home and overseas market for Information Age goods and services. A Wales that uses ICT to foster and sustain our culture and language. A Wales where healthcare can be delivered locally through the use of telemedicine.
- 1.3. In short, we want a Wales that exploits ICT to deliver sustainable improvements in social and economic and health prosperity to achieve a better quality of life for all its citizens.

- 1.4. By working together at all levels across Wales, by building on initiatives already undertaken and by making really effective use of European Funds, Wales has a major opportunity to use ICT to deliver economic and social prosperity. By exploiting the opportunities of the e-economy, in particular the Internet, Wales can achieve sustainable growth, increased global competitiveness, enhanced employment opportunities and a better quality of life for all.

Why this is important

- 1.5. The Internet and Electronic Commerce are transforming economies and societies across the world. The UK Government is driving forward its objective to make the UK the best place in the world to conduct e-business³. Yet despite all this activity, Wales is currently lagging behind other UK regions in the exploitation of ICT in business (DTI International Benchmarking Study⁴). There are many factors that contribute to this position but one thing is clear - Wales must act on a number of different fronts if we are to take advantage of the social and economic development opportunities offered by ICT. Let us be quite clear. The consequences of not doing so are dire:

- Wales will slip further down the economic league table;
- We will lose highly skilled individuals;
- Businesses will be discouraged from forming in Wales, and
- We will be characterised by the division between individuals who have ICT and those who do not.

- 1.6. In our BetterWales document, we recognised the opportunities and benefits the information age could offer Wales and committed ourselves to developing an information age strategy to take Wales forward. The time has never been better to address this; the availability of Objective 1 funding, an expectation by many parts of the population and technological developments can help us move quickly. But we have some major strides to take. We need to:

- Increase the availability of skilled people, to help tackle the significant problems many organisations experience recruiting and retaining good ICT staff.
- Help directors, chairpersons, leaders, executives and professionals to fully understand the potential of ICT to improve business efficiency and communications in the public and business sectors.
- Speed up the take-up and effective use of Internet and e-commerce, particularly in small to medium sized enterprises, which form the majority of businesses in Wales.
- Reduce variation in public service investment in and use of ICT, and improve their technical infrastructure to ensure delivery of user-centred, joined up services. We need to be lifting services to the level of the best.
- Increase and improve the services and tools available through the medium of Welsh and raise the level of awareness of those that do exist.
- Ensure the ability of individuals access electronic services increases to above the UK average. We need to minimise the effect of any digital divide, using technology to tackle rather than exacerbate social exclusion.

- 1.7 Many people and organisations are already working to tackle these and realise the social and economic benefits. Yet despite this, too many people are not making the connection, literally and figuratively. We need a major culture shift in terms of understanding ICT, recognising the benefits of its exploitation and being able to do so.

- 1.8 While small pilots and initiatives will always have an important role to play, we need to see larger-scale interventions to deliver critical mass and sustainable solutions.

³ www.e-envoy.gov.uk

⁴ Business in the information age: international benchmarking study 2000 – UK Online for Business (published October 2000)

1.9 This document sets out our intentions to address this critical strategic challenge for Wales. But the Assembly cannot make this happen alone. We will only achieve our vision for a better Wales by working in partnership with people in Wales; with local government, the health services, business, academia, individuals and communities, the voluntary sector and all our sponsored bodies. Each and every one has their own significant role to play.

1.10 There are five interrelated themes across which we all need to co-ordinate our activities:

- **Enhancing Our Communities - e-citizens, e-inclusion and e-communities.** People need to be able to access and use bilingual information and services to develop and enhance themselves and their communities. We need to use ICT to combat social exclusion, not contribute to it.
- **Building Successful Businesses – e-business.** All businesses, wherever they are located in Wales, need to be able to exploit information and communication technologies fully in order to retain their competitiveness, innovate and grow.
- **Improving Public Services – e-government and public services.** Citizens increasingly, and rightly, expect their public services to be organised and delivered to suit them, not the organisations delivering them. Service providers need to use ICT effectively to provide joined up, customer focused services. The public sector also has a major role in stimulating other sectors, which we must address much more strategically and coherently.
- **Developing ICT Skills – e-education & training.** We need to make sure that everyone in Wales has the opportunity to acquire the necessary skills, understanding and trust to make best use of the information age. Critically, this needs to be sustained throughout future generations. People really are key.
- **Ensuring First-class Infrastructure.** Progress within the first four themes depend for success on first class ICT infrastructure, including affordable broadband network facilities for individuals, communities, homes, businesses and public services.

1.11 Finally, we need to recognise that this is social, cultural and managerial challenge that faces us, not a technical one. It is the way we apply the technology that will dictate the future economic and social shape of Wales, not the technology itself!

2. Enhancing Our Communities

- 2.1 Achieving a cultural shift in the way individuals and communities view and use ICT is at the heart of delivering a sustainable and beneficial Information Age Society in Wales. Many people in Wales face physical, social or linguistic barriers to accessing online services and information. Rapid technological change could lead to people already facing barriers becoming increasingly disadvantaged. We need to reach out to raise aspirations to learn about and use ICT to enhance an individual's own lot. We need to ensure access to facilities and to people to can help make sense of this bewildering array of new opportunities. Everyone in Wales should have the opportunity to acquire the skills and capability to use ICT. We need to encourage more to do so.
- 2.2 If we are to convince people to learn about and use ICT, especially in deprived areas, we will need to demonstrate its immediate benefits. We will need enthusiastic and dedicated leaders to demonstrate what can be achieved in a way that makes sense to local people. People will need to be encouraged to learn how to make use of these facilities and services. Local people will need to drive projects and experiment with the use of ICT to explore new ways of supporting their communities.

Key Commitment

- 2.3 To use ICT to enhance communities, their culture and languages, promote social inclusion and help combat a digital divide.**

Objectives

Accelerate the understanding and take-up of the Information Age in Wales by establishing a major e-communities programme

- 2.4 ICT can take the distance out of participating in activities. This allows people, for example, to access education and training which would otherwise have been unavailable because of their location or inability to attend, or access certain types of healthcare via telemedicine facilities, avoiding the need to travel to a distant hospital. . This improved accessibility, especially to information via the Web, offers the opportunity for communities to develop interests and share knowledge, promoting their own local developments and opportunities. The village hall, chapel, pub, shop and school have historically defined communities. In the future their ICT facilities and web-sites will also define them.
- 2.5 As more people have access to ICT and the Internet, they will be able to access public and commercial services otherwise unavailable to them. This increased access by citizens and communities will also generate markets for Information Age products and services, thus offering opportunities for improving the local economy and job prospects. The knowledge economy allows people to continue to live and enjoy the qualities of life offered in rural areas while still being able to play an active part in local, national and even international communities and workplaces.
- 2.6 However, latest Welsh data⁵ indicates that just 15% of households in Wales have Internet access – joint fourth lowest figure compared to 19% for the UK. These figures remain small when compared with the United States, where in July 2000, 52% of the population (144m people) had access to the Internet.

⁵ Internet inequality in Wales by Dr Chris Llewelyn published December 2000 (ISBN 0 907749 99 2)

- 2.7 We will therefore introduce a large-scale e-communities programme with our key partners, Education and Learning Wales (ELWa) and Welsh Development Agency (WDA). This initiative will be aimed at helping individuals, families, businesses, voluntary organisations and schools in communities across Wales to make more effective use of the Internet and ICTs. It will look to deliver skills development and careers guidance. It will also promote e-commerce clusters within specific sectors; and include schemes for implementing information age technologies. Local ICT Support Centres will be established to provide technical or mentoring advice and offer 'free' hands-on technical services on a proactive basis. The centres will encourage business start-ups, and be located in rural/deprived areas not covered by other ICT centre initiatives or where the market does not have a presence, supporting the Communities First action plans.
- 2.8 We will also ensure a major awareness-raising programme is delivered across Wales. Existing and planned programmes by key partners, such as the WDA, ELWa, IdeA and Syniad will be better co-ordinated for greater impact. This will be a programme linked to similar activities in the business and public sectors, to maximise impact in geographical areas and gain best impact from scarce resources.

Ensure that everyone in Wales has access to ICT facilities that are close, convenient and accessible.

- 2.9 To take advantage of the Information Age, people need access to the Web both individually and via community facilities. It will increasingly include channels other than via an Internet connected PC. Technology will continue to develop rapidly and offer alternative access routes to meet specific needs. We must keep an open mind to the introduction of new channels and not depend on only one or two. The price of a PC will remain a barrier for many people, so the development of lower cost access via mobile phones, web-enabled games stations or digital TVs may offer better routes. For many the cost of Internet access will remain the critical factor.
- 2.10 We will ensure that appropriate facilities are available in communities to provide access to services and skills for all. We will build upon the successful work already being taken forward under schemes such as the **People's ICT Network in public libraries** and **University for Industry cyswilt dysgu learndirect Centres**, by adding complementary ICT learning centres based in schools, youth clubs, leisure centres, community halls and pubs. Other public sector locations such as GP Surgeries, hospital information points and Assembly offices may be able to offer facilities. Funding is also being provided for local projects to extend access to ICT and lifelong learning targeted at disadvantaged communities in Wales.
- 2.11 Public libraries will always need to provide important traditional services concerned with the lending of books and with reference materials. Developing IT capabilities will allow them to do much more besides and to become even more central to the communities they serve. Through the New Opportunities Fund the National Assembly is already providing resources for network infrastructure, digitisation of learning materials and ICT skills training for Public Library staff. At the heart of the People's Network funding programme is a commitment to social inclusion, ensuring that no citizen is excluded from obtaining ICT literacy and gaining access to networked content. It is therefore expected that access to those networked resources will normally be free at the point of use.

Actively promote the use of ICT to enable sustainable development and have a positive rather than negative impact on our environment.

- 2.12 ICT can be used to reduce damage to our environment. Video and computer conferencing or email can be used to enable more flexible working practices and reduce the need for some journeys, allowing us to make more appropriate choices about how we use our resources and reduce negative impacts on our environment. People will still need to meet face-to-face but they will be able to complement these with video or computer meetings and working from home in the business and voluntary sector.

- 2.13 The National Assembly already makes use of video conferencing for meetings. We will promote this much more actively and will encourage other organisations to do so. We will launch a major promotion of the use of video conferencing in conjunction with partner sectors who have or are about to deploy video conferencing, including the NHS, local authorities and further and higher education institutions.
- 2.14 We will continue to develop provision of transport information⁶, with view to extending to hand held devices once they become more widely available, in order to make public transport a more viable option.
- 2.15 We will encourage recycling and reuse of computers and other electronic equipment, supporting measures such as the EU Directive on Waste from Electrical and Electronic Equipment.

Raise the status of the Welsh language with respect to ICT, to support the continued growth of the Welsh language and to help minimise digital exclusion due to language.

- 2.16 The National Assembly is committed to promoting the use of the Welsh language and has adopted the vision of creating a bilingual Wales. The provision of bilingual ICT will have a key part to play in realising this vision, particularly in the Objective 1 area where 82% of Welsh speakers live. Bilingualism is an essential component of the strategic development of ICT both to enable ICT to be accessible to all citizens and also to use ICT to forward the National Assembly's vision for a bilingual Wales. To achieve this, and to avoid perpetuating a linguistic digital divide, the Welsh language will be wholly integrated into all ICT policies and activities in Wales.
- 2.17 Many of our communities are bilingual or Welsh speaking, including Penrhyndeudraeth⁷, Wales's first Networked Village. Throughout the projects above, we will ensure that access, support and material is available in Welsh as well as English. The National Assembly will be working closely with the Welsh Language Board and others to provide accessible information about the Welsh language. Bilingual and Welsh language ICT tools and facilities already available should be more widely publicised and their use encouraged, particularly within any Assembly-sponsored project. We will encourage and support the provision of Welsh language ICT tools, web resources, content and facilities and encourage their use. In conjunction with the Welsh Language Board we will establish a forum to drive forward key developments, particularly in the area of agreeing national standards, such as a Welsh character keyboard.

⁶ <http://www.traffic-wales.com/>

⁷ <http://www.penrhyndeudraeth.com/default.htm>

3. Building Successful Businesses

- 3.1 Information and communications technologies (ICT) can transform the prospects for the Welsh economy, particularly the rural economy. Electronic commerce, made possible by advances in ICT is already, and will increasingly, have a profound effect on businesses, Government and citizens and on the way people live and work. Those businesses which fail to exploit ICT to their advantage will find it increasingly difficult to remain competitive.
- 3.2 We want to see an advanced, dynamic and more diverse economy in which everyone has a chance to prosper. Welsh companies need to deliver high quality, high value products and services by being innovative and using technology to the full. Those that have not already geared themselves up to take advantage of the global market place must be encouraged to do so.
- 3.3 We want existing and new businesses to use ICT in ways appropriate to the diversification and development of their business, exploiting their know-how, creativity and linguistic skills to competitive advantage. For social and economic development in Wales to be sustained, businesses of all sizes need to integrate ICT into their business processes, using ICT to complement and build on their strengths, and to transform their weaknesses.
- 3.4 Businesses in Wales are predominantly made up of small and medium sized enterprises (SMEs). Studies have identified a number of factors contributing to the low uptake of ICTs. The main themes are:
- a general lack of awareness of benefits to the business;
 - a lack of adequately skilled staff to make effective use of the technology;
 - a lack of Welsh language tools and software and
 - access to affordable and suitable ICT infrastructure.
- 3.5 In order for Welsh businesses to compete in the knowledge-based economy, it is vital that these barriers are overcome. We want Wales to be at the forefront of the new economy and for e-commerce to be the norm within the shortest possible time.

Key Commitment

- 3.6 Develop a Wales where all businesses, wherever they are located, are able to exploit information and communication technologies fully in order to improve their competitiveness, innovate and achieve sustainable growth.**

Objectives

Provide practical, accessible support to businesses, in Wales, enabling them to use ICT and e-commerce opportunities successfully.

- 3.7 Access to appropriately focussed support, pertinent to their particular business is one of the key enablers for companies to rapidly and effectively adopt ICT and e-commerce to improve their business. We will focus work with key partners such as Business Connect, Department of Trade and Industry (DTI), Chambers of Commerce and the WDA to ensure a full range of highest quality support programmes are available to companies in Wales. We will expect to see improved co-ordination and co-operation between programmes. This is particularly important in development and support of Objective 1 programmes.

- 3.8 Through programmes such as the Assembly's ICT and management skills for Farmers programme, WDA's Wales smE-Business programme⁶, Opportunities@Wales⁷ and the Neath Port Talbot Supply chain project, support advice, facilitation and training will be delivered to over 25,000 companies in Wales to increase SME use of ICT to support business.
- 3.9 We will seek to ensure that all public sector ICT advisors providing advice to business will be @TEB accredited. We will work with the private sector to encourage them to do likewise.

Encourage the development of home-grown high technology companies in Wales.

- 3.10 We want Wales to be a place where new companies choose to locate, especially companies in new media and software sectors. We want to see an increase in the birth-rate and growth of indigenous high technology, multimedia companies in Wales. The WDA will work to actively promote the attraction of Wales for these companies. They will establish business parks and incubator units with extensive support facilities and infrastructure, such as Technium in Swansea and Intelligent City in Cardiff. New site developments will include ICT infrastructure in the same way as other infrastructure like electricity, roads, water and gas.
- 3.11 The Welsh **Digital Media Initiative**, established to support new and developing companies in the high growth multimedia sector will help. Incubated companies will be provided with office facilities, high bandwidth Internet access, rack space and servers at the @Wales building in Cardiff Bay. Support will continue to be provided for Sgrîn, the Welsh media group, and the International Film School, in addition to helping to maintain the development of a strong local multimedia industry.
- 3.12 Infrastructure plays a key part in making Wales attractive to new media companies. We say more in Developing first class infrastructure (Section 6).

Encourage e-commerce activities that will enable the development of local products and services in Wales

- 3.13 92% of business transactions are business to business (B2B). There are significant potential benefits in adopting Business to Business (B2B) for SMEs in the UK. Research has indicated that in an average scenario, the total savings for SMEs will be around £18bn and could be as high as £24bn per year – some 3% of UK Gross Domestic Product (GDP). The awareness and support programmes will highlight this opportunity. Additionally, development of e-commerce in the public sector will be an essential tool for stimulation of development in the private sector. We talk more about this in *Improving Public Services (Section 4)*
- 3.14 For businesses, full use will be made of the unique opportunity provided by European funding to improve the economic performance of the west of Wales and the Valleys and bring it up to that of the rest of Wales and Western Europe. Programmes such as **Wales smE-Business**, **Opportunities@Wales**, **@Teb** and ICT and Management Skills for Farmers programmes will take on key roles in this area and the Assembly will take the lead in identifying future opportunities.

Promote and celebrate the success stories in Wales.

- 3.15 We need to make sure we celebrate publicly the many success stories in Wales. One key demonstration of this is the e-commerce awards. We will continue to sponsor these awards in Wales, encourage entries for B2B as well as B2C business applications and look to stimulate at least 150 entries for Wales in 2002.

⁶ <http://www.wis.org.uk/english/sme/index.html>

⁷ <http://www.opportunitywales.co.uk>

4. Improving Public Services

- 4.1 ICT offers huge potential for improving the quality, efficiency and delivery of services provided by the public sector. ICT will make public services more accessible to the citizen and allow more active involvement of citizens and businesses in the development and formation of policy - the National Assembly already uses this and undertakes almost all of its formal consultations⁸ using the Internet. Extending on-line voting and providing e-mail access to officials and elected members will foster openness in the democratic process, increasing social inclusion and community involvement. We talk more about this in *Enhancing Our Communities (Section 2)*.
- 4.2 Traditionally most public sector organisations have tended to organise service delivery from the point of view of their own organisational structures and functional responsibilities. As a consequence a single life event (e.g. the birth of a child; starting work; or starting higher education) can result in a citizen or business needing to deal with many different organisations, and perhaps supplying very similar information to all of them. This can be a slow and frustrating process for the customer. It is also an unnecessary expense for different parts of the public sector to capture essentially the same information several times over. To make joined-up services that are focused on the customer organisations and departments will need to work together to identify and agree priorities and opportunities and take action.
- 4.3 The annual expenditure on procurement by the Welsh public sector already totals £3 billion. This is equivalent to 40% of the Assembly's budget and represents 11% of Wales' Gross Domestic Product. We have a major role in stimulating developments in other sectors through our actions.
- 4.4 UK Government has set demanding targets for electronic service delivery by the public sector (Modernising Government White Paper⁹, Information Age Government – targets for local authorities¹⁰) and has set out a strategic framework for meeting these targets (E-Government report¹¹). The differing positions in Wales will require an approach suitably tailored to our needs. There is therefore a need for a common framework for action across the public sector in Wales to help ensure that new technologies are harnessed to deliver more convenient, joined-up, responsive and efficient public services in Wales.
- 4.5 As public sector organisations in Wales drive forward their plans for providing Information Age Government services, many of the issues that they encounter are common. And if services are to be increasingly joined-up, it makes sense to adopt a common approach to tackling such issues.

Key Commitment

- 4.6 We will, through our partnerships and agreements, use ICT to deliver first class public services across Wales and play our part in stimulating developments in other sectors.**

Objectives

Use appropriate technologies and collaborative ventures to provide accessible, friendly, bilingual and citizen-centred services better, faster and cheaper

⁸ <http://www.wales.gov.uk/keypubconsultation/index.htm>

⁹ <http://www.cabinet-office.gov.uk/moderngov/whtpaper/>

¹⁰ <http://www.local-regions.odpm.gov.uk/consult/iag/index.htm>

¹¹ [http://www.e-envoy.gov.uk/oeo/oeo.nsf/sections/ukonline-actionplan/\\$file/actionplan.htm](http://www.e-envoy.gov.uk/oeo/oeo.nsf/sections/ukonline-actionplan/$file/actionplan.htm)

- 4.7 Understanding and recognising the benefits of ICT within public sector services is key to leaders of public services, officials and politicians being able to take this challenging agenda forward. Through better co-ordinated, high profile awareness programmes by organisations such as the Welsh Local Government Association (WLGA), Syniad and the Improvement and Development Agency (IdeA), we will help these leaders to fully understand the opportunities and their role in delivering the benefits.
- 4.8 We expect appropriate public services to be increasingly delivered electronically. However, it is quite clear that not all public services can, or even should, be delivered in this way. We will therefore work with public sector partners, through our partnership arrangements and performance agreements, to identify and agree the priority services to be delivered. Our focus should be on identifying services that are desired and of benefit to people of Wales and can help develop our public sector understanding of the cultural and organisational issues to be addressed. Many organisations will have differing priorities. But we expect to increasingly see collaborative working and sharing of best practice. Below we touch on some of the key activities and requirements.

e-Assembly

- 4.9 The National Assembly already exploits ICT significantly to operate. Members have touch screen access to information in the chamber and extensive access to information and services via desktop and laptop facilities. All members are accessible by, and make extensive use of, email. We only publish our Official Record of Proceedings electronically and we publish minutes of our Cabinet meetings to the Internet. Overall, this has made the National Assembly one of the most open and accessible democratic legislatures in the World. We will establish our own *e-business* strategy and plan by the end of 2001, demonstrating how we will continue to extend our effective delivery of electronic services and electronic democracy.

Local Government

- 4.10 Local Government has one of the most significant roles to play in ensuring the Information Age reaches and improves citizens, communities and business in Wales. The Local Government Partnership council, will agree which services should be targeted first for electronic delivery and how best these should be co-ordinated and developed. To address this, the Partnership Council has established a task and finish group and they will provide a first report to the Partnership Council in July 2001. With the Best Value Initiatives to be addressed locally, ICT will offer significant opportunities and challenges for Local Government. We expect to see an increase in sharing of best practice across local government and beyond. Many lessons will be equally applicable in the NHS and Assembly Sponsored Public Bodies such as the WDA and ELWa. Consistency and sharing of solutions will need to feature more prominently, especially in key areas as networking infrastructure. Programmes to connect schools, public libraries and other local government operated services should be achieved using common infrastructure, which will increasingly be accessible across Wales. We talk more about this in *Ensuring First Class Infrastructure. (Section 6)*

NHS

- 4.11 The NHS in Wales has a significant programme of change ahead of it as set out in the NHS Plan for Wales¹². ICT plays a critical role in these plans, clearly reflected by the target to increase spending on ICT to 2% of total spend. Their Information Management and Technology Strategy *Better Information, Better Health*, is being updated and will set out the revised key priorities and actions when it is published in December 2001. A key facet of this is to build on excellence in the Health Service in Wales but using existing funds in more imaginative effective ways. A number of key programmes are already underway:

¹² <http://www.wales.gov.uk/healthplanonline/index.htm>

- Contract to replace and upgrade the existing network facilities in DAWN. These will be integrated into a broader, public sector network when security and confidentiality concerns have been addressed.
- Programme to connect every GP surgery in Wales and provide consistent modern GP systems.
- NHS Direct Wales now provides access to bilingual nurses via phone to provide people at home with easier and faster advice and information about health, illness and the NHS, so that they are better able to care for themselves and their families. NHS Direct Online provides a gateway to health information on the Internet.
- Development of a major tele-medicine programme, building on earlier pioneering work undertaken in Wales.

4.12 Developing and implementing shared financial services for NHS Wales covering contractor payment work currently undertaken by health authorities, to support the enhanced role for Local Health Groups (LHG) envisaged *under Improving Health in Wales*. ICT will be critical to the successful delivery of this agenda and the achievement of the expected efficiency savings. Twelve out of 15 trusts in Wales are already working together on a joint procurement of a new Financial Management System and have agreed to ensure that this will be compatible with shared service developments

Welsh Development Agency (WDA)

4.13 The Welsh Development Agency has a key role to demonstrate how public sector organisations can use ICT to conduct and deliver their business more effectively. Their e-WDA programme will ensure that the Agency is also fully engaged in the process of becoming e-enabled. Components of this programme include firm targets for the Agency to meet (and in many cases beat) UK Government targets for areas such as document management and e-procurement. The two-year process will transform the Agency into one of the leading e-development agencies in the world.

Wales Tourist Board's Destination Management System

4.14 The Wales Tourist Board has an integrated database that allows the tourism products of Wales to be sold in new ways, via electronic and conventional means. This web enabled system ensures that Wales' data can be effectively integrated with the rest of the UK and Europe. A dynamic mechanism will be introduced to support online, real-time bookings of accommodation and other tourism products through a variety of channels - including Tourist Information Centres, the www, call centres (a single number for Wales) and potentially through kiosks, digital TV, Wap and third generation phones etc. The mechanism will retain the 'personal service' that is so important to tourism, yet benefits from the new opportunities that media developments are offering, and also ensures that the tourism businesses are 'in charge' of the development of their business

Education and Learning Wales (ELWa)

4.15 Education and Learning Wales have a major role to play in directing and solving many skills issues in Wales. We discuss this further in *Developing ICT Skills section*. ELWa will also play a key role in specific initiatives, such as the **ICT and Management skills for Farmers**, developed in partnership with farmers unions and the Wales wide Agri-food Partnership's Farm Development Group and due for launch in Autumn 2001. This £5m project will run for 4 years and reach a fifth of the farm holding in Wales. ELWa also plays a key role in developing the skills aspects of the Mid Wales Partnership ICT Programme, designed to increase ICT knowledge and skills among people and organisations in mid-Wales.

Use government activities as a stimulator and enabler

Electronic procurement

4.16 We will use the demands of the public sector in Wales to stimulate activity in the private sector. Electronic procurement in the Public Sector in Wales will be a key area for early and collective action. There are substantial real savings to be made that can help contribute to the costs of developments. Creation of a substantial electronic purchasing regime in the public sector will also stimulate the private sector companies to invest and engage in e-commerce - an important step in improving our economy. In order to stimulate Welsh e-businesses and improve economic and environmental sustainability it is essential that we develop ways of using ICT to stimulate increased procurement within Wales. That is, to develop e-procurement systems that will enable us to purchase locally produced items from small businesses, taking into account the bilingual needs of the public sector in Wales, rather than moving solely towards bulk buying. As part of the review undertaken into Procurement in the Public Sector, we will commission a study into the best way to take this forward.

Assembly Sponsored Public Bodies

4.17 Addressing the opportunities and challenges of the information age will feature as a key strategic agenda item for all Public Bodies sponsored by the National Assembly. We expect to see demonstrable programmes and activities to support the objectives set out in this framework. There continue to be real opportunities for the public sector to use digital technologies to improve the efficiency of internal processes and provide electronic service delivery to internal and external customers. The emphasis here will be on sharing and building on existing good practice. Increased commonality of core systems and services such as finance and personnel should become the norm.

Improve co-ordination of public services through joint procurement and purchase of compatible ICT systems

Public Sector Networking

4.18 The public sector in Wales **spends significant sums** on telecommunications costs. We intend to take forward an All-Wales approach to networking that will deliver better value for money and promote competition in Wales for telecommunications services, which should have consequential benefits for users in private sector, particularly in more rural areas. A key feature of this will be using the aggregated demand for networking requirements to create a broadband public sector network for Wales. We talk more about this in *Ensuring First Class Infrastructure*. (Section 6)

Adopting Standards

4.19 As public sector organisations in Wales drive forward their plans for providing Information Age Government services, many of the issues that they encounter are common. And if services are to be increasingly joined-up, it makes sense to adopt a common approach to tackling such issues.

4.20 The UK Cabinet Office has developed an e-government interoperability framework¹³ that provides policies and standards for achieving interoperability and information systems coherence across the public sector. It is a cornerstone framework policy for the UK e-government strategy, and as such adherence to these policies and standards by UK government bodies is mandatory. The E-government Interoperability Framework has adopted Internet and World Wide Web standards for all government systems. The aim is to adopt common usable standards which are well supported by the marketplace. The framework's standards will of course need to keep pace with market developments and new technology.

¹³ [http://www.e-envoy.gov.uk/oeo/oeo.nsf/sections/briefings-top/\\$file/interoperability.htm](http://www.e-envoy.gov.uk/oeo/oeo.nsf/sections/briefings-top/$file/interoperability.htm)

4.21 Examples of key standards in the interoperability framework are:

- Information systems are to be designed so that as much information as possible is accessible via common commercial web browsers
- All appropriate government information systems should be capable of being connected to the internet
- Data schemas will be defined using XML
- Email products will support SMTP/MIME
- Computer networks will use TCP/IP
- Hypertext transfer will use HTTP.

These and other standards are defined in greater detail in the interoperability framework.

4.22 The National Assembly for Wales is involved in consultations about these technical standards and strongly advocates their adoption across the public and private sector in Wales. This will enable more rapid progress to be made in Wales than if separate solutions were to be adopted and will not restrict our freedom to provide appropriate services or agree additional standards within Wales.

Relationship to UKOnline Initiatives

4.23 UKOnline is the Government's drive to make the UK one of the world's leading knowledge economies and to ensure that everyone in the UK who wants it will have access to the Internet. This is being delivered through a series of branded programmes and services, the brand being used to unite the current range of Information Age services and programmes across all sectors e.g. UKOnline Centres, UKOnline for Business, ukonline.gov.uk. The Assembly supports the aims of UKOnline and will continue to work closely with Cabinet Office in delivering its programmes and services in Wales.

Continue to enhance democracy in Wales by encouraging citizens to use ICT to interact and engage with government, including the National Assembly

4.24 The Assembly will extend its use of the Internet as a key tool during consultations and in the formation of policies. We will actively encourage other organisations in Wales to follow our lead.

4.25 Similarly, following the lead of Assembly Members, we look to promote the benefits ICT will offer all local councilors to support their constituents. Enabling their use of e-mail, and being able to access this at home or in work will be key steps forward in improving openness and democracy in Wales. The Partnership agreement looked to set a target of June 2001 to achieve this. Through the local government e-Government Task and Finish group, this date will be reviewed and a challenging but achievable date identified.

Develop use of technologies within the voluntary, care and other services

4.26 Voluntary, care and other services perform vital services for individuals, often at moments of great need. ICT can offer innovative opportunities for delivering and accessing services as well as opportunities for improved communications within and between services.

4.27 As a priority, we will connect up GP practices and provide Doctors, Nurses and other clinical professionals with the skills to use the technology. We will also ensure a proper framework for holding of information enabling confidentiality of personal records and use of high level data to indicate performance. In the longer term we aim to create a joint platform for health and social care information and electronic health records in collaboration with other UK countries.

5. Developing ICT Skills

- 5.1 The skills, competence and ability of the Welsh people to exploit ICT are critical to sustainable economic development in Wales. Education and training providers have a key role in delivering our vision. Schools, colleges, universities and commercial providers all need to play a part. Our approach in Wales needs to be truly life long and developmental. ICT has the potential to revolutionise the way we learn, our perception of learning and our access to it.
- 5.2 Aside from formal learning institutions such as schools and further and higher education establishments, we need to recognise the important role of informal and non-formal training. 80 per cent of the 2010 workforce are already in work. We need to develop ICT skills strategies which maintain a focus on reaching individuals in work and out of work, whether through work based training, encouraging independent learning or in raising interest in learning. The importance of this is underpinned by the European Commission's adoption of the e-learning action plan for promoting use of ICT in education, training and industry. In addition, the Lisbon European Council included, in its new definition of basic skills, IT skills and technological culture because of their importance to adaptability as well as general vocational skills – all factors which will contribute to a knowledge economy and society.

Key Commitment

- 5.3 Ensure everyone in Wales can acquire the skills and understanding to participate in and benefit from the Information Age.**

Objectives

Improve ICT facilities in all training and education establishments and enable effective use of these facilities.

- 5.4 There is already considerable activity in the pre and post 16 areas to take forward ICT skills, education and training. We will build on these, ensuring they are complementary, bilingual and best meet the needs of Wales
- 5.5 We want children leaving school to know how to use the ICT resources available to them. To achieve this, in addition to extensive, well supported, ICT facilities within schools, our teachers need to be trained and skilled in how best to make use of ICT in teaching, and more resources need to be developed to support the Welsh curriculum and the Welsh language. Use of resources such as the BBC's "Digital Curriculum" and material generated from the lottery funded Digitisation of Learning Materials Programme will help.
- 5.6 Over the next three years, we will be providing more than £75 million to improve and extend access to ICT for learners across Wales and to develop digital learning resources. We are already working to improve pupil:computer ratios in the classroom and to establish a network of School Learning Centres that will enable pupils to use ICT across the curriculum as well as to develop the ICT skills they will need in the workplace. And we are also supporting the development of ICT Learning Centres and mobile ICT facilities in the community that will be available to learners of all ages. Through ELWa, we will also invest in enhancing facilities and training in the further and higher education sectors, building on the excellent work already achieved. For example, the Welsh Learning Network project in Further Education (FE) institutions in Wales aims to incorporate ICT into the curriculum, its design and delivery.

Encourage the development of essential ICT skills throughout local communities

- 5.7 Various ICT Skills-related needs were identified during consultation including convincing communities that ICT can be useful to them, increasing ICT Skills in the community, voluntary sector, micro-businesses etc and maximise use of existing ICT facility in communities. We will investigate the possibility of funding ICT skilled FE and HE students into local communities on placements. Students would be required to open up existing services for greater time than currently possible, provide IT consultation and support for local individuals, voluntary organisations, micro-businesses and develop appropriate ICT skills within the community. It is hoped that such a scheme might also help to create and maintain community based web resources, enhance graduates project management and interpersonal skills and reduce the brain drain of ICT competent graduates from Wales. This would be closely allied to any e-Communities programme.
- 5.8 ELWa will also co-ordinate life long learning in local settings via lifelong learning partnerships e.g. by CCETs, Ufl Hubs, including agreement on quality issues - accreditation of learning centres and materials.
- 5.9 The major awareness campaigns, as discussed in other sections, will all need to focus clearly on the benefits and opportunities offered through improved training and education, and how ICT can now enable access to these opportunities.

Encourage the development of a coherent framework for ICT qualifications in Wales

- 5.10 As part of the Basic Skills Strategy for Wales we will strengthen the currency of the National Literacy and Numeracy Guarantees, we will combine them into a new 3-strand qualification, the Wales Tripartite Award. This will include a certificate in essential Information Communications Technology (ICT) skills alongside the new National Guarantee Certificates in Literacy and Numeracy. The inclusion of ICT recognises the need to strengthen such skills in Wales and acknowledges the usefulness of ICT as an effective medium for learning essential skills.
- 5.11 This is all vitally important to ensure we equip our future generations to flourish and benefit from information Age services and facilities. But we also need to ensure that the existing labour force, particularly those not currently in employment, has the skills to meet business needs. To this end, increased emphasis is being placed on the provision of ICT skills under the National Assembly's Work Based Learning for Adults programme, while enhancements to ICT provision are also being developed under the UK Government's New Deal programmes
- 5.12 There is currently a plethora of ICT qualifications available in the UK. The National Assembly will encourage the Qualifications, Curriculum and Assessment Authority for Wales (ACCAC) - supported by the Qualifications and Curriculum Authority (QCA) - to identify a clearer structure of qualifications in this area. Enabling identification of European Computer Driving Licence (ECDL) equivalent qualifications and eventually leading to targets in this area. @teb will continue to provide a standard for ICT business advisors.

Encourage the development of bilingual educational and training materials that are relevant to needs in Wales to enable life long learning and support the Welsh National Curriculum.

- 5.13 The need for bilingual materials is beginning to be met by projects such as ECDL in Welsh at Bangor University. The National Assembly is keen to see these and other bilingual materials and facilities made available in the community to encourage the development of ICT skills by all people in Wales and to help counter the current lack of ICT-skilled Welsh speakers.

- 5.14 The Assembly is also committed to the provision of digital content for schools through the development of The National Grid for Learning (NGfL) Cymru. The NGfL Cymru team will be commissioned to identify and develop curriculum content in both Welsh and English and develop it so that it is suitable for ICT applications. The NGfL Cymru team will have a key role in commissioning new digital curriculum content and making material readily available across the Internet. NGfL Cymru will work in partnership with the private sector and liaise closely with Estyn and ACCAC on quality assurance.
- 5.15 The BBC's work on the Digital Curriculum and actions with the Wales Digital College will also play a part.
- 5.16 The Joint Information Systems Committee (JISC) has a regional support centre in Wales that is taking forward equivalent work in the post-16 sector.
- 5.17 It is also important to ensure that Wales creates and retains people with the higher-level ICT skills. These are needed to support companies and organisations in Wales, take forward research and development and expand key clusters of high technology companies. Highly skilled technicians and engineers will also be required to manage and maintain networks and infrastructure. This is a difficult area to tackle and will need clear agreed actions from many agencies and organisations. To make sure this critically important aspect is addressed in a manner appropriate to Wales, we will in conjunction with ELWa, establish an expert group and commission a study to advise the National Assembly and its partners on the key actions to address the ICT skills issues. The National Council for Education and Training for Wales was established on 1 April 2001 and forms part of ELWa. The National Council will produce its corporate plan for developing a world class education and training infrastructure for Wales later this year, of which ICT will form an essential part.

6. Ensuring First-class ICT Infrastructure

- 6.1 Widespread access to ICT is becoming increasingly important in today's society, as an essential enabler of economic growth, social inclusion and efficient public sector services. Higher bandwidth telecommunications is an ever more crucial aspect of ICT infrastructure as usage of connectivity increases and as a convergence of content and of delivery technologies blurs the boundaries between broadcasting, publishing, and the Internet.
- 6.2 A key concern in Wales, however, is that competitive supply of higher bandwidth services has tended to concentrate in the dense urban areas of South Wales, leaving large parts of the country relatively under-served. This raises the prospect of a developing 'digital divide', with a lack of affordable higher bandwidth services leading to these areas falling further behind in terms of relative economic prosperity.
- 6.3 High-speed connectivity is vital if our schools, colleges and public libraries are to benefit from the increasing amount of high quality educational material and multimedia training packages available over the Internet. Investment in a higher bandwidth network for schools is seen as important in two respects: it offers the opportunity of improving the quality of education delivered to pupils and also acts as a means of educating the future workforce on the benefits of ICT and higher bandwidth connectivity.
- 6.4 ICT infrastructure is more than just networks. Ensuring key aspects of content, content management and information management are put in place, along with mechanisms for promoting and accessing these, is equally important. The National Assembly will work with key partners to achieve deliverables on content.

Key Commitment

- 6.5 **We will work with partners in the Public and Private sector to ensure Wales develops first class ICT infrastructure based on the most advanced available technologies to support our overall vision and objectives throughout Wales.**

Objectives

Facilitate the development of modern telecommunication networks and improve access to affordable higher bandwidth services

- 6.6 We will work with telecommunications providers, bringing in OFTEL and the DTI as necessary, to ensure that higher bandwidth telecommunication services are available to all at a price users can afford. We will also work closely with the Radiocommunications Agency to ensure that wireless spectrum is made available for deployment of higher bandwidth services, especially in the areas of Wales where the cost of laying fibre infrastructure would be too costly.
- 6.7 The WDA has commissioned a study to identify policy actions that would ensure ubiquitous access to broadband services in Wales. The report is due to be published in the summer of 2001. What is already clear is that there is a lower level of demand for higher bandwidth services in Wales than the rest of the UK. There is a need to raise the level of awareness of the benefits to businesses of higher bandwidth connectivity and of the services already available. In addition, there is a need to measure the level of demand to better understand the nature of demand across Wales.
- 6.8 The proportion of knowledge based industries is lower in Wales than in the rest of the UK. In order to nurture and attract these industries it is vital that access to higher bandwidth infrastructure is available. Developing knowledge-based industries in Wales will lead to an increase in demand for high bandwidth services, and be seen as an incentive for further investment in network infrastructure.

- 6.9 One key feature of increasing accessibility to higher bandwidth services will be to use the collective demand of the public sector in Wales to stimulate the market. The public sector already makes extensive use of telecommunications networks in day-to-day operations and demand for broadband capability will grow over the next 5-10 years. WDA estimate that the Public Sector in Wales will represent over 50% of demand for broadband services in Wales. Better co-ordination of future public sector requirements for broadband services present the Assembly with two opportunities: firstly, to promote cost-effective public sector procurement; and secondly, to aggregate public sector demand for these services in areas where broadband companies may otherwise find it uneconomic to roll-out broadband infrastructure. A Task Group has been established to investigate the feasibility of developing a broadband network for the public sector in Wales and to identify ways of aggregating demand for broadband services. Work is already underway to establish the likely future demand for broadband services in the public sector and the cost and service benefits available in aggregating public sector demand.
- 6.10 Ahead of any formal proposals, we urge all public sector bodies in Wales to look to share and consolidate telecommunications needs. This should particularly apply to services funded through New Opportunities Fund and Capital Modernisation Funds for schools and public libraries. The MARAN project¹⁴ in Mid Wales is an excellent example of what can be achieved by collaboration. This has brought a new telecommunication provider into the area, delivering broadband services via microwave links across a large part of rural mid Wales and allowing three local authorities to provide cheaper, high speed services across all their needs: schools, public libraries and corporate services.
- 6.11 MARAN, and the Metropolitan Area Networks in Further and Higher Education in South Wales already provide extensive facilities in certain areas. The North Wales Metropolitan Area Network will add to this. We will explore using these networks, to provide immediate benefits and savings for other public and voluntary services, ahead of any larger scale activities.
- 6.12 ICT infrastructure is part of our larger infrastructure in Wales, including roads and rail networks. As part of the development of the road networks, we have built extensive networking capability to support traffic data and information systems etc. These may help to provide a solution to broadband needs, although they will not be sufficient in their own right. We will therefore commit to making best appropriate use of these facilities in our approach to networking in Wales.

Increase accessibility to, and appropriate use of, Video Conferencing throughout Wales

- 6.13 Further and Higher education organisations are continuing to develop extensive Video conferencing networks. Similar facilities exist in Health and Local Authorities. More extensive use of these facilities can save time and travel costs within the public and business sectors and help reduce our impact on the environment. We will work with partners to ensure this infrastructure is extended, made available more widely and actively promoted.

Ensure that cultural and linguistic information relating to Wales is collected, preserved and made available in an electronic format and raise the profile of Wales on the International stage by providing a focus for bilingual, Welsh content and services

¹⁴ <http://www.ceredigion.gov.uk/socitm/>

6.14 We will work with a variety of partners to ensure that Wales develops and promotes its full range of content. This will build on work already underway such as:

- the cultural consortium “Cymru’n Creu” made up of membership from all the cultural Assembly Sponsored Public Bodies, the WDA, broadcasters and a representative from the arts umbrella organisations.
- the National Library’s substantial digitisation programme to give easy online access to a wide range of Library materials and to assist other organisations in Wales wishing to digitise material of their own. Digitisation projects include **framed works**¹⁴, **Campaign!**¹⁵ and the consortium bid **Gathering the Jewels**¹⁶.

6.15 A key feature of this will be the formation of an appropriate Welsh Portal Service. This will play a pivotal role in presenting services and information across the globe. The National Library is already developing key aspects of this through Wales on the Web. **Wales on the Web** will be a first point of entry for all levels of enquiry on Welsh topics. Anyone needing high quality information and knowledge about Wales will naturally use Wales on the Web as their first resource. The National Assembly will work with the National Library and other key partners, to identify and develop a suitable service to meet our key objective.

Improve co-ordination of Geographical Information Systems in Wales

6.16 In line with our intention to exploit fully our existing infrastructure, the National Assembly undertakes to:

- collect a comprehensive and quality assured set of geographically referenced information to form the basis of traveller and tourist information in Wales for all journeys
- develop new techniques for collecting information to measure the service offered by different transport modes
- provide the public with information about journeys to enable efficient journey planning and modification
- undertake pilot schemes to illustrate the value of enhanced information for journey planning and efficiency
- inform industry and the public about the information which is available and the ways in which this information can be accessed

6.17 Local government and others can already access transport information, including camera stills. This service will be extended to the general public as soon as possible. Bus and train information currently available via telephone will be made available on the web.

6.18 The National Assembly is currently preparing the outline of the National Spatial Planning Framework for consultation in June 2001, a full draft by November 2001 and a final version by November 2002. Much of the data required will be presented using Geographical Information Systems (GIS). Processes will involve partner organisations in the work possibly involving a Steering Group and a larger Network of bodies to act as a sounding board for the work at key stages. The National Assembly’s Agriculture Division together with the Farming and Rural Conservation Agency (FRCA), Agricultural Development Advisory Service (ADAS), Countryside Council for Wales (CCW), National Parks, local authorities and archaeological trusts have delivered an integrated IACS scheme and the Tir Gofal rural conservation scheme. Digitisation of farm records began in July 2001. The WDA has shown its commitment to new technology and the information age through its WIS project (Wales information society) and ASPECT (Analysis of Spatial Planning and Emerging Communication Technologies). Such ventures have opened up the GIS-for-Wales debate. The National Assembly will work with AGI Cymru and others to co-ordinate developments in this area.

¹⁴ <http://cairsweb.llgc.org.uk/ffraworks.htm>

¹⁵ <http://www.llgc.org.uk/Ymgyrchu/index.htm>

¹⁶ <http://www.gtj.org.uk/>

7. Our Budget

7.1 We are already planning to spend over £198M over the next three years on ICT related activities, some of which we have highlighted below.

JIGSAW providing joined up services to farmers and the community
£9m over 3 years

Farming Connect

Providing ICT facilities and ICT and business skills training to the farming business
£10m over 3 years

The People's Network and the New Opportunities Fund putting all public libraries on-line, Digitisation of Learning Materials and training Public Librarians
£13.8m over 3 years

Health Information Management & Technology putting all GPs on-line, enhancing telemedicine, HOWIS, Cymruweb and DAWN
£27.7m over 3 years

NHS Invest to Save projects providing shared human resources/payroll/financial services for NHS in Wales (health authorities, local health groups, and trusts) and pursuing e-prescribing
£14m over 2 years

ICT for training and education:

£75 million over 3 years for schools, further and higher education and other lifelong learning venues

European Funds for ICT a variety of programmes funded by the European Union
Minimum £30.2m over 5 years

ICT systems for Trunk Road Network and Trunk Road Infrastructure investing in the Trunk Road Infrastructure systems to enable data collection, data storage, data analysis and information provision.
£28m over 4 years

Special Grant Scheme for management information systems (people and technology) to support Social Service delivery and performance management
£6.4m over 3 years

WDA ICT activities including e-communities, e-commerce awards and other projects
£10.4m this year

Raising the Stakes the publicity and marketing programme for Cymru Ar-lein
£750k over 3 years

Lifelong Learning Network

£26.4m over 3 years

7.2 In this document we have identified our intentions. Some of these may not be delivered through existing spend and may result in further bids. These will be handled in the National Assembly's normal budget planning round based on an annual review of Cymru Ar-lein and our progress towards the Information Age in Wales.

8. Next Steps

The Assembly's Role

- 8.1 Our role is to provide strategic leadership and direction and to stimulate and encourage innovation and exploitation. We will encourage use of ICT that will provide environmental, social and cultural benefits and contribute to sustainable development in Wales. While ensuring that developments are appropriate and sustainable, we must also ensure that we do not hinder uptake of facilities and services.
- 8.2 Through our own use of ICT and our stewardship of public sector services, we have the ability to provide clear examples of effective use of ICT and the opportunity to create and influence demand and take-up of facilities.
- 8.3 We will continue to provide detailed ICT related policy and guidance in the various sectors such as Health and Education as the complexities of these areas cannot be handled fully in a single approach.
- 8.4 We will look to make large scale, sustainable interventions that cannot be made by other organisations alone, such as achieving an improved public sector network and broadband access throughout Wales.
- 8.5 It is vital to ensure as many people and organisations in Wales as possible are aware of and sign up to this framework. We will work with key partners to run major awareness campaign across Wales in co-ordination with other ICT awareness raising activities. The purpose of this campaign will be to transmit clearly the key strategic importance of this topic and encourage individuals and organisations to get involved in developing the strategy and enacting it.

Improving Direction and Co-ordination in Wales

- 8.6 The Cymru Ar-lein consultation process highlighted a need to improve co-ordination of ICT activities across Wales. The National Assembly has a role in ensuring that there is sufficient co-ordination between the various stakeholders and to clarify any ambiguities in relation to targets set elsewhere in the UK. The Information Age Advisory Group¹⁷, which has aided the formation of this strategy, will be reviewed and re-established to provide strategic co-ordination across Wales. The group will recommend changes to existing groups and propose new structures as required.
- 8.7 We have begun development of mechanisms within the Assembly to improve co-ordination across the various initiatives and this work will need to continue and develop to make best use of the many projects already underway and make more appropriate choices for developing and linking new projects.

Review and Evaluation

- 8.5 We will continue to use the Cymru Ar-lein website to inform the people of Wales of progress and developments of the Strategic Framework for ICT in Wales. The Strategic Framework will be reviewed and updated on a rolling basis throughout the year, with an all encompassing annual evaluation and update in co-ordination with the National Assembly's budget round. The original consultation responses and summary document can still be found on the Cymru Ar-lein website for reference, so you can measure what we are doing against what was originally suggested.

¹⁷ A list of members of this group can be found later in this document.

8.6 The discussion fora will remain open throughout this process to allow you to comment on our progress. Only by keeping in regular touch with the views of people in Wales will we be able to ensure that the framework is sufficiently responsive to rapidly changing needs and technologies and hence ensure that Wales gains real benefits from ICT. We need your feedback!

Conclusion

8.7 In BetterWales.com¹⁸ the National Assembly identified the three guiding themes of creating sustainable development, tackling social disadvantage and ensuring equal opportunity for all. ICT is only a tool. Applied poorly, it has the potential to increase social divides, inequalities and environmental damage. Applied well, it can combat social exclusion, help improve our environment and achieve sustainable growth. **The effect that ICT will have in Wales depends not on the technology but on how we choose to use it.** We must use ICT to help us to create a truly Better Wales. To do this people and organisations throughout Wales will need to know enough to make the right decisions on use of ICT. However positive and well grounded the intentions of the National Assembly, we can not achieve this vision for Wales on its own. Only by working together across all sectors and communities can we truly achieve a Better Wales.

¹⁸ <http://www.wales.gov.uk/themesbetterwales/index.htm>

Appendix A - Detailed Action Lists

Enhancing Our Communities

Ensure that everyone in Wales has access to ICT facilities that are close, convenient and accessible.

Partner	Action	Target
Assembly	Establish and promote a comprehensive list of all community ICT access and learning facilities and improve standards and consistency of services.	January 2002
Assembly & Loc.Gov	Every public library in Wales will be on-line, offering supported access to Internet and web-based services	end of 2002
Loc Gov	ICT facilities in over 400 learning centres in schools and community venues across Wales including Welsh language tools will be available to the wider community	Dec 2001
WDA	Business ICT support centres will be available for general public use at certain times.	Immediate
Assembly /Agricultural Agencies/ WLB	Provide "joined up services" to farmers and the community through automated processes and data capture, use of Internet for claim submissions from farmers, delivery of integrated GIS records, use of bilingual tools and provision of free access to the Internet for farmers via National Assembly Divisional Offices.	April 2002

Accelerate the understanding and take-up of the Information Age in Wales by establishing a major e-communities programme

Partner	Action	Target
Assembly / WDA/ ELWa	Deliver awareness raising campaign in communities	Aug 2002
Assembly / WDA	Develop a major e-communities programme (including large scale Objective 1 bid)	Oct 2001
All Partners	Encourage citizens and communities to learn about the potential of ICT and make use of electronic services	On-going

Aid voluntary sector organisations to exploit ICT appropriately in delivering their services.

Partner	Action	Target
Assembly / WDA	Ensure that awareness raising campaign is specifically targeted at voluntary organisations and provides them with full details of the facilities described above	Aug 2002

Raise the status of the Welsh language with respect to ICT, to support the continued growth of the Welsh language and to help minimise digital exclusion due to language.

Partner	Action	Target
WLB	Publicise bilingual and Welsh language ICT tools and facilities already available and encourage their use	On-going
WLB	Set up a forum to discuss the linguistic context of ICT and needs in the field of Welsh and ICT	Oct 2001
All Partners	Encourage and support the provision of Welsh language ICT tools, web resources, content and facilities and encouraging their use.	On-going

Actively promote the use of ICT to enable sustainable development and have a positive rather than negative impact on our environment.

Partner	Action	Target
Assembly Loc. Gov	Improve public transport information in order to make public transport a more viable option.	Nov 2001
All Partners	Maximise recycling and reuse of computers and other electronic equipment in line with the EU Directive on Waste from Electrical and Electronic Equipment etc	On-going

Building Successful Businesses

Provide practical, accessible support to businesses, in Wales, enabling them to use ICT and e-commerce opportunities successfully.

Partner	Action	Target
Assembly	Improve co-ordination of existing business support programmes, so that benefits to the business community are maximised and that the standards of individual projects are consistent	On-going
WDA/ OpportunitiesWales	Deliver support advice, facilitation and training to over 25,000 companies in Wales to increase SME use of ICT in business.	Dec 2003
@TEB	We will seek to ensure that all public sector ICT advisors providing advice to business will be @TEB accredited. We will work with the private sector to encourage them to do likewise.	On-going
ICT Support Centres Steering Group	Enhance, grow and develop the all Wales network of Business Connect ICT Support Centres offering impartial ICT help and guidance to over 5,000 businesses each year.	On-going
	See also complementary actions above	

Develop a synergy between ICT and the Welsh language so it Welsh speaking organisations are not disadvantaged and bilingual working is made accessible for all businesses in Wales.

Partner	Action	Target
WLB	Market the advantages of providing bilingual services and websites to business	On-going
WLB	Disseminate information to businesses about existing Welsh language software and tools	On-going

Encourage e-commerce activities that will enable the development of local products and services in Wales.

Partner	Action	Target
Public Sector	Increase levels of business conducted electronically (e-Procurement) to help stimulate local take-up of e-commerce.	To be agreed
Assembly /WDA	Stimulate at least 100 e-commerce award entries in Wales.	2002
Business	Actively consider how use of ICT can improve your business	On-going
Business	Encourage staff to undertake ICT training such as the European Computer Driving Licence	On-going

Encourage the development of home-grown high technology companies in Wales.

Partner	Action	Target
Assembly , WDA	Actively encourage and support the establishment and development of high tech, multimedia companies in Wales.	On-going

Improving Public Services

Use appropriate technologies and collaborative ventures to provide accessible, friendly, bilingual and citizen-centred services better, faster and cheaper.

Partner	Action	Target
Syniad, WLGA	Awareness raising and training sessions will be delivered for Councillors and Senior Officers with a view to all councillors to have publicly available email addresses in the medium term. (end 2002)	Autumn 2001
Loc. Gov	Partnership to agree appropriate approach and targets for Electronic Service Delivery	Dec 2001
Assembly /ASPBs	Agree targets and approaches with Assembly Sponsored Public Bodies in Wales. These will need to be realistic in recognising the many problems we face in Wales but challenging in delivering critical mass in key areas in a time scale that benefits all.	Dec 2001
WLB/ All partners	Ensure that public body websites are bilingual and are updated simultaneously in both languages	On-going
All Partners	Consider whether services for Citizens and Communities could be enhanced through ICT and develop clear strategies to deliver these.	On-going

Use government activities as a stimulator and enabler

Partner	Action	Target
Assembly	Publish Assembly e-business.	Dec 2001
Assembly	Key business processes electronic	2003
Public Sector	Increase levels of business conducted electronically (e-Procurement) to help stimulate local take-up of e-commerce.	To be agreed
Loc. Gov, ASPBs	To consider plans for the widespread application of ICT in their communications and services to suppliers and customers	On-going

Improve co-ordination of public services through joint procurement and purchase of compatible ICT systems.

Partner	Action	Target
Assembly	To use aggregation of public sector networking requirements to improve value for money and stimulate market development of broadband services generally in Wales.	Jan 2002
Public Services	Adopt the e-government interoperability framework standards across the public sector in Wales.	On-going

Continue to enhance democracy in Wales by encouraging citizens to use ICT to interact and engage with government, including the National Assembly.

Partner	Action	Target
Local Authority	Work towards ensuring all councillors have internet e-mail addresses that they can access from home or work. (Date to be agreed by Partnership council)	to be agreed
Assembly	Extend the National Assembly's use of the Internet as a means for consultation and encourage public bodies in Wales to follow our lead.	May 2002

Develop use of technologies within the voluntary, care and other services.

Partner	Action	Target
NHS	As a priority connect up GP practices and provide Doctors, Nurses and other clinical professionals with the skills to use the technology.	Dec 2003
NHS/ Loc. Gov	Ensure a proper framework for holding of information enabling confidentiality of personal records and use of high level data to indicate performance, with a view to creating a joint platform for health and social care information and electronic health records as a long term goal (in collaboration with other UK countries).	On-going

Developing ICT Skills

Encourage the development of essential ICT skills throughout local communities.

Partner	Action	Target
Assembly	Consider establishing community placement schemes	Sept 2001
ELWa	Co-ordination of delivery via lifelong learning partnerships e.g. by CCETs, Ufl Hubs including agreement on quality issues - accreditation of learning centres and materials	Immediate and on-going
ELWa	Provide a strategic framework to increase the number of people receiving high quality ICT advice and training.	Jan 2002
	See also actions above	

Improve ICT facilities in all training and education establishments and enable effective use of these facilities.

Partner	Action	Target
Assembly	Establish ICT Task Force and NGFL Digital Resources team for Welsh schools	During 2001
Assembly	Audit the current and planned ICT provision in schools in Wales	Oct 2001
Loc Gov	Improved pupil:computer ratios and demonstrable improvement in use of ICT across the curriculum	On-going
Assembly	All schools to be connected to the Internet	2002
Assembly /ICT Task Force	Ensure teachers in Wales receive key ICT training in effective use of ICT to deliver the curriculum	On-going
All Partners	Promote the use of European Computer Driving License (ECDL) and other bilingual courses and qualifications to your own staff.	On-going

Encourage the development of a coherent framework for ICT qualifications in Wales.

Partner	Action	Target
ELWa	Develop National Literacy and Numeracy Guarantees for Wales, which together with the key skills certificate in ICT will provide the new Tripartite Award	Jan 2003
Assembly	Establishment of NGfL Cymru	Dec 2001
ACCAC	Ensure that an ICT qualifications framework appropriate to the needs of Wales is established	July 2001

Encourage the development of bilingual educational and training materials that are relevant to needs in Wales to enable life long learning and support the Welsh National Curriculum.

Partner	Action	Target
WLB	Hold seminars on software, tools and ICT training (e.g. ECDL, Cysill, Cysgair) that are already available in Welsh and publish information packs on the subject.	May 2002
WLB	Publish a list of the software, tools and ICT training available in Welsh on the WLB website, ensuring it is regularly updated.	Oct 2002
Assembly	Ensure bilingual digital resources are developed and available to support the National Curriculum in Wales	On-going
	See also actions above	

Increase the number of people developing higher level ICT skills and keep them in Wales.

Partner	Action	Target
ELWa	Establish an expert group to advise the National Assembly and its partners on key actions to address ICT skills issues including high level skills and issues	Sept 2001
ELWa	Consider what can be done to increase the number of people being trained in ICT skills in further and higher education in Wales and include this in the ICT skills strategic framework	Jan 2002

Ensuring first class ICT infrastructure

Facilitate the development of modern telecommunication networks and improve access to affordable higher bandwidth services

Partner	Action	Target
Assembly	To work with telecommunications providers, OFTEL, DTI and the Radiocommunications Agency to ensure roll-out of affordable, higher bandwidth telecommunication services throughout Wales.	On-going
Assembly	Exploit and develop the networking capability that already exists alongside our road infrastructure.	On-going
Assembly	Encourage third generation telecommunication providers improve services and in particular to provide a uniform service along the main transport routes in Wales.	On-going
ELWa	Provide a broadband Metropolitan Area Network (MAN) facility in North Wales to match the facilities currently available in South Wales.	Jan 2002
Assembly	Investigate the cost and service benefits of aggregating demand for broadband services across the public sector in Wales.	August 2001
Assembly /Cabinet Office/Df EE	Estimate likely future demand for broadband services from the public sector. Evaluate different models for co-ordination/ aggregation and procurement/ provision of the bandwidth requirements for different parts of the public sector and develop more detailed proposals for practical implementation.	Sept 2001
Assembly	Undertake a review of the Transport Directorate's information systems network with a view to forming partnerships to assist the development of competitive data communication services in Wales, including making it the rule to put fibre in automatically when roads are upgraded.	Dec 2001
WDA	Identify key policy and strategy activity to ensure ubiquitous access of broadband services in Wales.	Sept 2001
Assembly /WDA	Identify the level of demand for broadband services within the private sector in Wales.	Nov 2001
WDA/ Assembly	Raise awareness of the benefits of higher bandwidth services to businesses and provide independent advice on the costs and availability of these services across Wales.	On-going
Assembly / WDA	Actively encourage and facilitate Wales as a preferred location for knowledge-based industries.	On-going
WDA	Increase % of businesses with access to Broadband services	On-going
WDA	increase % of businesses with access to more than one Broadband supplier	On-going

Increase accessibility to, and appropriate use of, Video Conferencing throughout Wales

Partner	Action	Target
ELWa	Develop an all-Wales video conferencing network, to include further as well as higher education with a view to exploitation of video conferencing across other sectors in the longer term	On-going

Ensure that cultural and linguistic information relating to Wales is collected, preserved and made available in an electronic format and raise the profile of Wales on the International stage by providing a focus for bilingual, Welsh content and services.

Partner	Action	Target
Assembly	Develop key content strategy proposals and launch portal for Wales	Jan 2002
National Library	Establish a substantial digitisation programme to give easy online access to a wide range of Library materials and to assist other organisations in Wales wishing to digitise material of their own.	2003 and on-going
	See also actions at	

Improve co-ordination of GIS within Wales.

Partner	Action	Target
Assembly	Encourage the development of an integrated approach to Geographical Information Systems in Wales	On-going

Next steps

Partner	Action	Target
Assembly	Information Age Advisory Group to be reformed to address strategic co-ordination role in Wales.	October 2001
All	Feedback your views on the Strategic Framework for ICT in Wales and our progress towards the National Assembly's Information Age Vision for Wales.	On-going
Assembly	Respond to feedback by updating the Framework on a rolling basis.	On-going

Appendix B - Information Age Advisory Group

The Information Age Advisory Group has been formed to advise the e-Minister in developing the Information and Communications Technology Strategy. He is keen to receive advice from a broad range of informed practitioners in the public and private sectors who will consider whether the strategy is appropriate, sustainable, deliverable and beneficial to Wales.

Information Age Advisory Group members

Andrew Davies AM	Minister for Assembly Business and e-Minister, National Assembly for Wales (Chair)
Peter Gregory	Director of Personnel, Management and Business Services and Information Age Champion, National Assembly for Wales
Andrew Green	National Library of Wales
Jacky Tonge	Chief Executive, Powys County Council
Patrick Sullivan	Director, Wales Information Society, WDA
Prof. Tony Davies	e-Commerce Innovation Centre, Cardiff University
Simon Gibson	Ubiquity Software Corporation, Newport
Ann Beynon	BT National Manager Wales
Phil Brady	Director of Information Services, University of Wales, Bangor
Simon Tse	Director, NTL Director of National Business Markets in Wales and Central and West of England.
Nigel Finlayson	Head of Business Information Systems, National Assembly for Wales
Nick Batey	ICT Strategy Unit, National Assembly for Wales (Secretariat)

Tell us what you think !

The website associated with this strategy allows you to comment via a feedback page, discussion forum or e-mail to: info.age@wales.gsi.gov.uk .

Cymru Ar-lein is in permanent consultation and we are eager to hear your views. The website is also used to share information relating to ICT matters in Wales. You can register for updates on Cymru Ar-lein developments at the website.

You can see our website at <http://www.cymruarlein.wales.gov.uk>. Free internet access is available at most local libraries through the People's Network. To find out your local free internet access point please call Learn Direct on 0800 100 900.

Alternatively you can respond by completing and returning the form below or writing to; Cymru Ar-lein, Welsh Assembly Government, Cathays Park, Cardiff, CF10 3NQ.

Data entry fields marked with * are required.

Your Name*	
E-mail Address	
Postal Address*	
Town*	
Postcode	
Topic of Feedback	Citizen & Community / Private Sector / Public Sector / ICT Skills / Infrastructure / Other (delete as appropriate)
Feedback*	

Please continue on a separate sheet(s)