

Cymru Arlein - On-line for a Better Wales¹

Welcome from Andrew Davies, E-Minister for Wales.

Almost all of us use television, video or telephones everyday. Many of us are now using computers, mobile phones and the Internet. Information and Communication Technology (ICT) has the potential to change our lives in Wales and throughout the world. We believe that the choices we make now - about which new technologies we use and how we use them - will be crucial to the future of Wales and could help us to create a Better Wales!

The Assembly will play an important role in influencing the way we move forward and we want to ensure that we get it right! In order to do this we need to know **YOUR** views on what needs to happen and what the Assembly should do to help. Whether you are a technical wizard or someone who has never touched a computer in your life, we want to hear your views.

There is already a lot of excellent work taking place in Wales, and beyond, that we can build on. But I think we need to do more. I want to use this document (and its associated website) to explore with you what needs to happen in Wales, and what the Assembly needs to do to play its role fully. With this in mind, I have established an Advisory Group² to assist me in identifying the key tasks ahead of us.

I have purposefully kept this document at a high level. I believe we need to focus on doing a few big things really well, rather than creating many new projects and initiatives. Don't get me wrong. Projects and pilots have, and will continue to have, a key role to play in this fast moving sector. However, I think the time is right for some substantial interventions that will make a big difference for the whole of Wales. We have tried to explore these here, but I do not presume that we have got it right.

WE NEED YOUR IDEAS – This document and the launch of the website are part of a consultation exercise to identify key areas for Assembly action. You can comment directly via a feedback page or by contributing to the discussion forums. Alternatively, you may e-mail us at info.age@wales.gsi.gov.uk or write to: ICT Strategy Unit, Cathays Park, Cardiff, CF10 3NQ. The consultation continues until 14th March 2001. We will then collate your views and prepare our strategic framework. We will continue to use the website to share information relating to ICT matters in Wales.

Our Vision

Our vision is of a Wales that:

- is widely recognised in its application of ICT in the way we deliver education and training through our modern, effective, efficient and accessible public services and through the way our businesses use ICT to lever genuine market growth
- builds on its unique and diverse identity to match economic growth rates elsewhere in the UK and Europe
- has a prosperous, well-educated, well-trained, highly skilled and healthy workforce fit for the knowledge economy

¹ This document is a summary of the website: www.wales.gov.uk/cymruarlein

² A list of members of this group can be found later in this document.

We want the people of Wales to feel comfortable in using ICT in their daily lives, have access to training and education to support them wherever they need it and create a thriving home market for Information Age goods and services.

We want Wales to be a place 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 our local communities are active, where ICT helps remove geographical barriers, reduces social exclusion and takes the distance out of doing business.

In short, we want a Wales that exploits ICT to improve social and economic prosperity and to achieve a better quality of life for all its citizens.

By working together at all levels across the region, by building on initiatives already undertaken and by making really effective use of Structural Funds, we believe that Wales has the opportunity to reap the benefits of the new Information Age. Although only a means to an end, ICT can make a significant added value contribution to delivering 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.

Why this is important

The Internet and Electronic Commerce are transforming economies and societies across the world. There is already a significant amount of effort and activity taking place to make the UK the best place in the world to conduct e-business. Yet despite all this activity, there is evidence that Wales is currently lagging behind other UK regions in the exploitation of Information and Communications Technology (ICT) (DTI International Benchmarking Study³). There are many factors that may 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 economic development opportunities offered by ICT.

In our BetterWales⁴ 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 developments in e-commerce can help us move quickly. But we have some major strides to take:

- The availability of skilled people is low, with many organisations experiencing significant problems recruiting and retaining good ICT staff
- The majority of businesses in Wales are small to medium sized enterprises and their take up of Internet connection and e-commerce is slow
- Public service investment in ICT varies considerably across Wales, as does the technical infrastructure available to provide joined up services
- Access by individuals varies significantly and is generally lower than the UK average. There is a real risk of a creating a digital divide, where lack of access to technology exacerbates social exclusion.

Many people and organisations are already actively working in these areas and we cite some examples. However, to realise fully the social and economic benefits, we need to build on this work, create partnerships to draw the various threads together and provide

³ www.ukonlineforbusiness.gov.uk/Government/bench/International00.htm

⁴ www.betterwales.com/

a clear concerted effort in all areas. We set out here some of the things we feel need to be done under four main sections:

- Enhancing Communities - e-citizens, e-inclusion and e-communities
- Building Businesses – e-business
- Improving Services – e-government and public services
- Developing Skills – e-education & training

What needs to happen

We think that there should be action across a broad set of theme areas:

- **Enhancing Communities - e-citizens, e-inclusion and e-communities.** How do we ensure Wales does not suffer from a digital divide with ICT contributing to social exclusion? People need to be able to access information and services if they are to be of benefit. How can we achieve this?
- **Building Businesses – e-business.** How can we ensure that all businesses, wherever they are located, are able to exploit information and communication technologies fully in order to improve their competitiveness, innovate and grow?
- **Improving Services – e-government and public services.** Delivering excellent services online, improving efficiency and leading by example. Can we do this in Wales?
- **Developing Skills – e-education & training.** Access itself is not sufficient. We need to make sure people have the necessary skills, understanding and trust to make best use of the technology. How can we achieve this?

Most importantly, we think that the actions proposed in each area need to be complementary, realistic and deliverable in reasonable timeframes. Whilst there is no doubt that the pace of change in the Information Age is increasing and continues to increase, we must be wary of being caught up in the Dot.Com hype. Our approach in Wales must be to take advantage of opportunities with all haste but ensuring that what we deliver is sustainable and worth having. In this document we set out some ideas for activities in each of the major themes.

The Assembly's Role

We see our role as stimulating and encouraging innovation and exploitation of ICT in Wales. Through our stewardship of public sector services, we see a role of providing clear examples of effective use and the ability to create and influence demand and take-up of facilities. What we must also ensure is that we do not hinder or get in the way of take-up of facilities and services. We will continue to provide detailed ICT related policy and guidance in the various sectors such as Health and Education; the complexities of these areas cannot be handled fully in a single approach. To support the development of this strategic framework, we have established a small task team - the Information Age Advisory Group⁵. This team will also consider and advise on the most appropriate role for the Assembly.

We feel there is a need to improve co-ordination across the various initiatives. We also feel that large scale, sustainable interventions are now required, rather than many development projects, although these still have an important role to play. We would like your views on what the Assembly should and should not do in achieving this.

⁵ A list of members of this group can be found later in this document.

International Developments

The development of an Information Society in Wales cannot be considered in isolation. Actions at UK, European and international level influence what we can do. Growth in the use of the Web is predicted to continue at even greater rates than those experienced already. Over 300 million people are connected to the Web world-wide and this is expected to grow to 500 million over the next 2 years (NUA Internet Surveys⁶) and by 2003 half of Western Europe's population is expected to have access to the Internet (IDC Report Internet Usage and Commerce in Western Europe 1998-2003, February 2000).

Electronic commerce in Europe accounted for £60bn in 1999 and is expected to grow to £120bn by 2003, with global value expected to increase to £1.9 trillion by 2002 (European Survey of Information Society⁷). Businesses and national and regional governments around the world are implementing strategies to respond to the Information Society. Canada and the US have been early movers in investment and use of ICT by businesses, the public sector and individuals. In the Far East, Singapore is investing heavily in infrastructure and taking other steps to move forward quickly as a successful Information Society. Australia has ambitious plans and is moving ahead in making public services available electronically.

In the European Union, the Nordic countries in particular have for some years made concerted action to develop their Information Societies. Most EU Members states now have Information Society plans, aimed at increasing participation in the e-economy, and driving forward growth and social integration. This is particularly relevant for us in Wales where the e-economy can help to overcome problems experienced by geographically peripheral regions. The European Commission has formed an Information Society Directorate general that is co-ordinating action to ensure that Europe can compete effectively in the world-wide information economy.

Innovation and knowledge are increasingly becoming the decisive sources of wealth and also the main sources of difference between nations, businesses and people. Without doubt, those countries that exploit ICT to the full will achieve greater economic prosperity.

UK Developments

The UK Government is committed to getting the UK online and making it one of the world's leading knowledge economies. Important work has been done on the role of e-commerce in promoting UK competitiveness e-commerce@its.best.uk⁸ (published in October 1999) and on applying ICT to public services (Modernising Government⁹ published in March 1999 and e-government: a framework for public services in the information age¹⁰, April 2000). Education and learning have been enhanced through the establishment of the National Grid for Learning¹¹ and University for Industry¹² initiatives. The UK government is publicly committed to making the UK the world's best

⁶ www.nua.ie/

⁷ www.ispo.cec.be/esis/default.htm

⁸ www.cabinet-office.gov.uk/innovation/1999/ecommerce/index.htm

⁹ www.citu.gov.uk/moderngov.htm

¹⁰ www.citu.gov.uk/iagc/strategy.htm

¹¹ www.ngfl.gov.uk/

¹² www.ufiltd.co.uk/

environment for electronic commerce by 2002 and to ensuring that all government services that can be delivered electronically are available online by 2005. The Electronic Communications Act has removed statutory blockages to e-business.

Monitoring progress in achieving Information Society objectives is important. There are many published indicators of national performance and participation in the Information Society. The DTI International Benchmarking Study¹³ gives comparisons. The 2000 Spending Review and the crosscutting review into the knowledge economy also strengthened the leadership and financial control powers of the e-Envoy - the e-Envoy's first annual report¹⁴ published in September 2000 provides a comprehensive overview of the current UK position.

Welsh Developments

A lot has been happening in Wales at national and local level to move forward in the Information Society. The following are some examples.

For Businesses:

- The WDA has the **Wales Information Society**¹⁵ project, which has initiated a number of large-scale programmes aimed at raising awareness of the benefits and providing independent advice and guidance for SMEs, in addition to developing a consensus-based Strategy and Action Plan for an all-Wales Information Society.
- A range of public and private sector initiatives are being progressed via **Business Connect**¹⁶. These include major projects that are being developed by agents of the National Assembly such as the Welsh Development Agency¹⁷ (WDA) and the Wales Tourist Board¹⁸ to help companies make effective use of ICT opportunities in general.
- Operating through a team of ICT Business Advisors, the WDA's **Wales smE-Business** programme is helping SMEs throughout Wales to exploit and maximise the benefits of ICT. This £5 million large scale awareness-raising initiative aims to reach more than 10,000 businesses, with some 1,500 expected to go on to receive in depth one-to-one support.
- After being successfully piloted across the UK during 1999-2000 under the Technology Means Business programme, **@TEB in Wales**¹⁹ is a scheme to accredit ICT consultants and advisers. UK-wide, the target is to have 1000 advisers registered or accredited by March 2001.

In Health:

- The NHS in Wales has been at the forefront of exploring the use of Telemedicine and has extensive telecommunications infrastructure in place.
- ICT is core to new plans for improving Health Service facilities in Wales with the National Assembly investing £5 million over the next two to three years.

In Education and lifelong learning:

¹³ www.ukonlineforbusiness.gov.uk/Government/bench/International00.htm

¹⁴ www.e-envoy.gov.uk/2000/progress/anrep1/default.htm

¹⁵ www.wis.org.uk/splash.html

¹⁶ www.businessconnect.org.uk/

¹⁷ www.wda.co.uk/

¹⁸ www.tourism.wales.gov.uk/

¹⁹ www.atebcymruwales.co.uk/

- The Assembly's £18 million Education ICT strategy builds on the continuing investment in the **National Grid for Learning**²⁰ and will provide school and adult learners with greater access to ICT. It should provide a real boost to Lifelong Learning and social inclusion.
- The national framework of **Individual Learning Accounts**²¹, available to everyone over 19 to help them pay for their learning, will in future contain discounts for ICT-related courses.
- The **Wales Digital College**²² (WDC) is working closely with colleges and other agencies in Wales to enable viewers with digital television to access interactive on-line learning through their sets, as well as information about other learning opportunities.
- The Higher Education Funding Council for Wales²³ (HEFCW) has agreed to participate with the other United Kingdom HE bodies in a project to explore the potential of, and options for developing, an e-university with the aim of establishing a globally-competitive provider of higher education programmes via virtual distance learning.
- In higher education, through the Joint Information Systems Committee²⁴ and joint information and communication technology-based initiatives, the HEFCW will promote the development of electronic information tools and services to enhance teaching, research and administration. HEFCW has set aside funds to provide for a broadband electronic Metropolitan Area Network (MAN) facility in North Wales to match the facilities currently available in South and Mid Wales. It is also providing for the development of an all-Wales video conferencing network, to include further as well as higher education.

In Communities:

- The University for Industry²⁵ will open some fifty **cyswlltdysgu learndirect**²⁶ learning centres in Wales by March 2001, and a further fifty are likely to be established by 2002.
- £13 million from the New Opportunities Fund's²⁷ Community Access to Lifelong Learning (CALL) will support
 - the development of ICT learning for adults at learning centres,
 - the development of Community Grids for Learning, which support the National Grid for Learning and provide community-based websites which are relevant and interesting, and,
 - through library authorities, the creation of a People's Network of ICT learning centres in public libraries.
- The **LlwybrPathway**²⁸ Rural Information Society Programme, has conducted major awareness-raising sessions and provided increased opportunities for the

²⁰ www.ngfl.gov.uk/ngfl/index.html

²¹ www.dfee.gov.uk/ila/

²² www.colegdigidol.co.uk/

²³ www.wfc.ac.uk/hefcw/index.html

²⁴ www.jisc.ac.uk/

²⁵ www.ufiltd.co.uk/

²⁶ www.learndirect.co.uk/

²⁷ www.nof.org.uk/

²⁸ www.llwybr.org.uk/

public to access the Internet and ICT-based local government services via public access points.

To stimulate innovation and investment:

- "**Know How Wales**" is an initiative that provides a team of people dedicated to brokering additional and more effective commercial collaborations between academic institutions and businesses. With the joint sponsorship of the Welsh Development Agency and the Higher Education Funding Council for Wales, the scheme is creating seven Commercial Manager posts to host Centres of Expertise and commercialise the knowledge and expertise of academic institutions.
- Establishing a **Knowledge Exploitation Fund** of £4 million in 2000-01 and £10 million in 2001-02 to accelerate the exploitation of research and development and other knowledge and expertise, and to boost the wealth creating capabilities of Further and Higher Education institutions in Wales.
- Channelling £0.82 million in 2000-001 into the Higher Education Funding Council for Wales (HEFCW) **Training and Consultancy Services** provision, and expanding the scheme into Further Education. Earmarking £0.5 million of HEFCW funds for supporting Higher Education institutions to participate in the Welsh Development Agency's Wales **Spinout** Programme that aims to stimulate the creation of new businesses and mentor their subsequent development as "spinouts" from Welsh Higher Education institutions.
- Increasing Assembly funding of the **Teaching Company Scheme**²⁹ and introducing, ahead of the rest of the UK, the Further Education equivalent scheme - "Colleges and Businesses in Partnership".

Enhancing Communities – e-citizens, e-inclusion and e-communities

One of the greatest risks we face in the Information Age is the creation and widening of the digital divide. This is the challenge we must rise to and to ensure that inequalities and exclusion don't occur.

ICTs take the distance out of participating in activities. This allows people to take part in, for example, debates, education and training, which would otherwise have been inaccessible because of their location or inability to attend. 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. Age is not a barrier here, although services and information will need to be targeted to best meet the needs of specific groups.

As more people have access to ICTs 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 workplaces.

To take advantage of this, people need access to the Web. This may be individually or via community facilities. It will increasingly include channels other than via an Internet

²⁹ www.dti.gov.uk/ost/link/tcs.html

connected PC. Technology will continue to develop 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 WAP Phones, web-enabled games stations or digital TVs offer routes to help prevent the digital divide. For many the cost of Internet access will remain the critical factor. For those who will not be able to have personal access to the Web, we must ensure that community-based facilities exist that are close, convenient and appropriate for use.

Getting people to take up ICT, especially in deprived areas will depend on a number of factors, one of which is the availability of enthusiastic and dedicated leaders to demonstrate what can be achieved, in a way that makes sense to local people. They will also need local people to drive projects and experiment with the use of ICT to explore new ways of supporting their community.

Our Vision is of a Wales which exploits ICT to improve social and economic prosperity to achieve a better quality of life for all its citizens.

Key Actions for Enhancing Communities

We think key actions in this area are:

- Focus on how we will get the population of Wales connected, either as individuals or via community resources. We will explore ways of influencing and achieving this with businesses and organisations. We will improve the co-ordination between existing schemes that support community-based ICT centres.
- We want to encourage and support communities to create their own resources and services. We will consider with community leaders how this can be taken forward.
- We already have schemes to pass skills, advice and expertise onto businesses. We will look at ways to offer similar services locally in the community and voluntary sector.

What do you think? What do other people think? What else should we be doing? Write to us at the address at the end of this document to let us know what you think.

Building Businesses - e-business

Information and communication technologies (ICTs) are transforming economies and societies around the world. Electronic commerce, made possible by advances in ICTs is already and will increasingly, have a profound effect on businesses, Government and citizens and on the way people live and work.

Significant effort and activity is already taking place to ensure the UK becomes the world's best environment for electronic commerce (e-commerce@its.best.uk³⁰, Modernising Government White Paper³¹, UK Online Annual report³²) Yet, despite all this activity, a number of key surveys suggest that Wales is currently lagging behind other UK regions in the exploitation of ICTs (DTI benchmarking study 2000³³).

³⁰ www.dti.gov.uk/cii/ecommerce/ukecommercestrategy/ecommerce_at_its_best.shtml

³¹ www.cabinet-office.gov.uk/moderngov/

³² www.e-envoy.gov.uk/2000/progress/anrep1/default.htm

³³ www.consumers.gov.uk/infoage/infoage.htm

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; and access to affordable and suitable ICT infrastructure. In order for Welsh businesses to compete in the knowledge-based economy, it is vital that these barriers are overcome. Getting a critical mass of people connected online will create a local market for companies in Wales.

Our vision is of 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 grow.

Key Actions for Building Businesses

The Assembly has a role to play in stimulating and encouraging innovation and exploitation of ICT in Wales, but it is important that we prioritise our activities and resources for maximum effect. We think we need to:

- Increase **awareness** of the potential offered by ICT to stimulate demand. We will continue to operate a range of large scale awareness raising programmes such as Wales SME-Business in partnership with the public and private sectors to increase awareness of the benefits of ICT. We are also committed to ensuring the long-term sustainability of our informal network of ICT Support Centres throughout Wales. We will ensure that key public services in Wales are provided online and increase the level of public sector procurement traded electronically.
- Increase the number of people receiving high quality related ICT **advice and training**. We will support the mainstreaming of @TEB as a quality assurance mechanism for those providing ICT advice to business.
- Increase the availability of a **wide range of ICT** skills. We will work with the education and training providers to ensure an indigenous pool of suitably trained people is available.
- Identify models of **best practice** and support implementation. We will continue to work alongside the public and private sector to identify and disseminate exemplars of successful best practice, which can be implemented in businesses throughout Wales. We will help businesses to implement these solutions on a one-to-one basis through programmes such as Wales SME-Business.
- Provide better-focussed **business ICT advice** to increase business competitiveness. 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. It is recognised that advice must be delivered in a co-ordinated and timely way by first class advisors.
- Support the development of a **world class affordable ICT infrastructure** based on the most advanced available technologies **throughout Wales**. We will work with telecommunications providers, bringing in OFTEL and the DTI as necessary, to ensure that a comprehensive broadband ICT infrastructure is accessible to all at a price they can afford to support e-trading and other activities.

What do you think? What do other people think? What else should we be doing? What else should others be doing to help us? For example: Should we be doing more to encourage teleworking, especially in rural areas? Could we do more to encourage businesses to use ICTs to do new things, as well as traditional

activities more effectively? Are there ways of helping companies making better use of those they already employ with considerable IT know-how, especially the young? Could our public sector do more using ICT to procure supplies and services from businesses in Wales? Write to us at the address at the end of this document to let us know what you think.

Improving Services – e-government and public services

Information and communication technology (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 Assembly already undertakes almost all of its formal consultations³⁴ using the Internet. Online voting and e-mail access to officials and elected members will foster openness in the democratic process, thereby increasing social inclusion and community involvement.

This potential can only be realised through sustained and co-ordinated investment, a clear focus on key objectives and careful stewardship, especially of the significant change management programme this will demand. UK Government has set demanding targets for electronic service delivery by the public sector (Modernising Government White Paper³⁵, Information Age Government – targets for local authorities³⁶) and has set out a strategic framework for meeting these targets (E-Government report³⁷). The Assembly will liaise with Local Authorities and other public sector bodies in Wales on how best to meet these targets.

Our vision is of a Wales which utilises information and communication technology to ensure more active involvement of citizens and businesses in the development and formulation of policy, with full and open access to enhanced public services structured to meet the needs of citizens.

Key Actions for Improving Services

We need to be realistic about what can be achieved. We do not presume that we will need to pursue the same program proposed in other parts of the UK; our efforts will concentrate on priorities set by the people of Wales. Nevertheless, we feel there are some key actions we can propose now:

- **Modernising public services ICT working group:** Many initiatives will continue to be important to deliver on a UK wide basis - an example of this is Ukonline.gov.uk³⁸, the citizens portal. Health call centres (NHS Direct³⁹) and Inland Revenue⁴⁰ online facilities are other examples. The 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. To achieve this, we will consider setting up a modernising public services ICT working group to provide a mechanism to take this forward with local authorities, Assembly sponsored bodies and the NHS.

³⁴ www.wales.gov.uk/consultations/consultations_e.html

³⁵ www.citu.gov.uk/moderngov/whitepaper/4310-00.htm

³⁶ www.local-regions.detr.gov.uk/consult/iag/index.htm

³⁷ www.citu.gov.uk/iagc/pdfs/Strategy.pdf

³⁸ www.ukonline.gov.uk/online/ukonline/home

³⁹ www.nhsdirect.nhs.uk/

⁴⁰ www.ird.govt.nz/menu.htm

- **Connect our public services effectively:** A broadband public sector network would provide a platform for modernising and transforming the quality and delivery of public services in Wales, as well as improving communication between the Assembly, Local Government, the NHS and other public sector bodies. Work is already under way to identify ways of creating such a network that not only provides the necessary facilities but also stimulates a genuine competition for telecom services across Wales⁴¹.
- **Electronic service delivery:** Driving forward electronic services in the public sector does not have the same compelling market opportunities and benefits as the private sector. That is not to say there are no opportunities for streamlining our services and using ICT to make them more efficient, available and effective. There will be many and we must pursue these with vigour. We will need strong leadership and commitment to delivering services in different ways to different criteria and the Assembly will play its part, politically and through its officials, in driving this forward. We will **agree targets and approaches** with Local Authorities, Assembly Sponsored Public Bodies and the NHS 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 timescale that benefits all.
- **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.
- **Accessibility:** By the end of 2002, all elected officials will be accessible via e-mail.
- **Consultation:** Extend the Assembly's use of the Internet as a means for consultation and encourage Local Authorities to follow our lead.
- **Standards:** Citizens need to trust the electronic services that we intend to put in place. It is important that we approach this openly and at an acceptable pace. This is an area where we think getting it right is more important than getting it done quickly. Interoperability will be key for us to effectively build citizen centred electronic services. We will adopt and promote the technical standards put in place by the Office of the e-Envoy, including metadata, website, gateway, and authentication. These will apply across the public sector in Wales.
- **Health:** The Assembly will progress targets and activities with the NHS in Wales through the revision of existing NHS Information, Management and Technology Strategy⁴².

What do you think? What do other people think? Write to us at the address at the end of this document to let us know what you think.

Developing Skills – e-education & training

The skills, competence and ability of the Welsh people to exploit ICT are critical to the success of *Cymru Arlein*. 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 lifelong in its approach. There is already

⁴¹ A Progress report is available at the end of this document.

⁴² www.wales.gov.uk/polinfo/health/keypublications/englishimt_e.htm

considerable activity in both the pre and post 16 areas to take forward ICT skills, education and training. We will build on these, ensuring they are complementary and best meet the needs of Wales, especially in the Welsh language areas. The Assembly is already taking forward a wide range of initiatives to raise standards in schools and to support lifelong learning and social inclusion and ICT plays a central role.

Our vision is of a Wales whose citizens feel comfortable using ICT in their daily lives and have access to training and education to support them, whenever they need it.

Key Actions for Developing Skills

We think the key activities in this area are:

- We want children leaving school to know how to use the ICT resources available to them. To achieve this, we think that 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 in the Welsh language. This is looked at in detail by the Assembly's Education and Lifelong Learning Committee⁴³.
- Many organisations have difficulty in getting and keeping staff with ICT skills. We will discuss with CETW what can be done to increase the number of people being trained in ICT skills in further and higher education in Wales.
- Better co-ordination of initiatives from the Assembly, local government and UK bodies, such as lottery boards
- 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.
- National Assembly to continue to encourage joint working and collaboration with commercial providers of educational content. Specific action may be required to get a faster take up on bilingual content.
- CETW to develop a clear ICT skills strategy to be delivered across Wales (including E.U. structural fund programmes).

What do you think? What do other people think? What else should we be doing? What else could others be doing to help? Write to us at the address at the end of this document to let us know what you think.

⁴³ [assembly/committees/EducationandLifeLongLearningCommittee/01-00 \(15th Nov\)/ELL 1-00\(p3\)_e.html](http://assembly/committees/EducationandLifeLongLearningCommittee/01-00%20(15th%20Nov)/ELL%201-00(p3)_e.html)

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	Minister for Assembly Business and e-Minister, National Assembly for Wales (Chair)
Peter Gregory	Director NHS Wales, Information Age Champion Designate
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
Nigel Finlayson	Head of Business Information Systems, National Assembly for Wales
Nick Batey	ICT Strategy Unit, National Assembly for Wales (Secretariat)

Public Sector Network Task Group

A first meeting of the Steering group has been arranged for Thursday 23rd November. Minutes of the meeting will be posted when available.

Aims of the group

1. To identify user requirements, solution options, indicative costs, procurement process, management issues and funding options for a broadband public sector network in Wales.
2. To recommend an implementation plan to the Information Age Strategy Advisory Group by February 2000.

Background

Broadband high-speed access has been identified as being of crucial importance to the future economic, social and educational wellbeing of Wales. A public sector network with such access would provide a platform for modernising and transforming the quality and delivery of public services in Wales, as well as improving communication between the Assembly, local government, the NHS, other Assembly sponsored bodies and the voluntary sector. It is hoped the network would act as a catalyst to the improvement of the telecommunications infrastructure in those parts of Wales where the potential availability of the full range of network services remains problematic, an improvement which is necessary if the whole of Wales is to participate in the knowledge based economy.

A lot of good work has already been carried out in developing networking arrangements between different parts of the public service in Wales but development is patchy. This work needs to be built upon to ensure reliable and universal access across the whole of Wales. An all Wales/ all sector approach is essential if we are to benefit from economy of scale. It is important, therefore, that the network meets the needs of the individual stakeholders and is flexible enough to cater for future developments.

Composition of the group

3. The group is likely to consist of around 20 individuals selected from within the Assembly, local government, NHS, other Assembly sponsored bodies, the voluntary sector and the telecomms industry, including those individuals who expressed an interest to be part of the WIS (Wales Information Society) Public Sector Network working group proposed at the Welsh Public Bodies Network workshop in March of this year.

Work of the group

4. **The size of the group and the relatively tight deadline is likely to preclude regular face to face meetings. A meeting in early October will be arranged to outline the work of the group and a restricted access bulletin board will be set up on the Assembly's web site to facilitate discussion. A meeting will be arranged for early December to agree a user requirement specification. Consultants will be commissioned to report on networking options, indicative costs and management issues. In parallel to this, funding options will be investigated by the Group. A final meeting in February 2000 will agree on recommendations to be put to the Information Age Strategy Advisory**

Tell us what you think!

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

The consultation continues until 14th March 2001. We will then collate your views and prepare our strategic framework. We will continue to use the website to share information relating to ICT matters in Wales and you can register for updates on ICT strategy developments at the web site:.

You can see our website at www.wales.gov.uk/cymruarlein. Free Internet access is available through the Linked Library scheme. For a full list of the libraries involved call Learn Direct on 0800 100 900.

Alternatively you can respond by completing and returning the form below or by writing to: ICT Strategy Unit, Cathays Park, Cardiff, CF10 3NQ.

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