



ENTERPRISE AND CULTURE COMMITTEE

11th Meeting, 2004 (Session 2)

Tuesday, 30 March 2004

The Committee will meet at 2 pm in the Debating Chamber, Assembly Hall, the Mound, Edinburgh

1. Renewable Energy in Scotland: the Committee will take evidence from:

Panel 1

William Gillett, Deputy Head of Unit for New and Renewable Energy Sources, Directorate-General Energy and Transport, European Commission;

Panel 2

Lewis Macdonald MSP, Deputy Minister for Enterprise and Lifelong Learning, Scottish Executive;

on its inquiry entitled Renewable Energy in Scotland.

- 2. Broadband in Scotland:** the Committee will take evidence from Mr Alan Kennedy of the Machars Broadband Action Group (Public Petition 694) on its inquiry into Broadband in Scotland.
- 3. Procedures Committee inquiry:** the Committee will consider a letter from the Convener of the Procedures Committee on its inquiry on Timescales and Stages of Bills.

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Clerk to the Committee (Acting)
Room 2.7, Committee Chambers
Ext. 0131 348 5214

The following meeting papers are enclosed:

Agenda Item 1

Submission from European Commission

[EC/S2/04/11/1](#)

Submission from the Scottish Executive

[EC/S2/04/11/2](#)

Agenda Item 2

Cover note on Petition 694 on availability of broadband

[EC/S2/04/11/3](#)

Agenda Item 3

Letter from the Convener of the Procedures Committee

[EC/S2/04/11/4](#)



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR ENERGY AND TRANSPORT
DIRECTORATE D - New Energies & Demand Management

Brussels, 25.03.04

INQUIRY INTO RENEWABLE ENERGY IN SCOTLAND

1 Renewable Energy Activities in the European Union

The European Commission is responsible for proposing policies and legislation, which are then formally adopted (after negotiation) by the Council and the Parliament. Once adopted at EU level, each Member State is required to implement policies and to transpose EU Directives into national legislation, within their own systems and structures.

The European Commission is also responsible for managing a number of community programmes, which are funded from a budget to which all Member States contribute. Such programmes support activities of common interest, for example research, market orientated activities, co-operation with developing countries, and aid to regions of the EU which are lagging behind.

2 EU Renewable Energy Programmes

Concerning the sector of renewable energies, the Commission has supported research and technological development (RTD) since the 1970s, and continues today to give a high priority to both long term and short term research on renewable energy and energy efficiency technologies. This research is managed by the Commission through a series of 4 year framework programmes. The current RTD programme (FP6) runs from 2003 to 2006 [1], with a budget of 810M€ allocated to the sector of Sustainable Energy Systems, within which an important part is allocated to renewable energies. In addition, support is given to research for small and medium enterprises (SMEs) and for international co-operation (INCO), both of which include work on renewable energies.

In addition to work on research and development of renewable energy technologies the Commission has also been supporting since the early 1990s activities aimed at tackling non-technological barriers to the growth of renewable energy markets. This work has been managed through the ALTENER programme, which for the 4 year period 2003-2006 forms an integral part of the Energy Intelligent Europe (EIE) programme [2].

In the context of the regional support within the EU, the Commission has encouraged those responsible to give priority to the renewable energy sector, recognising its importance for cohesion, local job creation, the environment and the security of energy supplies.

Similarly, it has been recognised by the EU that sustainable energy services are essential to achieving the Millennium Development Goals in the context of co-operation with the developing countries, for example through the Cotonou agreement and the European Development Fund. An important commitment by the EU to sustainable energy services for poverty alleviation was made at the Johannesburg summit in the autumn of 2002, where the EU Energy Initiative for Poverty Eradication was launched, as well as the Johannesburg Renewable Energy Coalition (JREC). Programmes are currently being developed and implemented to fund these commitments, including COOPENER, which forms an integral part of the EIE programme.

3 EU Renewable Energy Policies

Building on its early work of supporting RTD on renewable energies, the EU began working towards a policy framework for renewable energies in the early 1990s, which culminated in the publication of the White Paper and Action Plan for Renewable Energy Sources in 1997 [3]. This document, which was adopted by the Council and Parliament forms the basic policy framework within which much of the recent work on renewable energy at an EU level has been based. The main components of the White Paper were an overall goal of doubling the contribution of renewable energy in the final EU energy consumption (from 6% to 12%) by 2010 and the establishment of an Action Plan for achieving this goal, including the Campaign for Take-Off which ran from 1997 until the end of 2003. This White Paper also set targets for each renewable energy technology, and progress against these targets was reported to the Council and the Parliament in a Commission Communication in February 2001 [4].

Following important developments in the energy sector in the late 1990s, the Commission published for consultation a Green Paper on the Security of Energy Supplies [5] in December 2000, and followed this with a Communication in 2001, summarising the results of this consultation. These documents both confirmed the important role of renewable energies in the future EU energy economy and the need to accelerate the growth of renewable energy markets in order to diversify EU energy supplies and improve energy security.

Based on this policy framework, the Commission began work in 1999 to put in place legislation which was designed to achieve the agreed policy goals.

4 EU Renewable Energy Legislation

The first pioneering EU legislation in the renewable energy sector was the *EU Directive for Electricity Produced from Renewable Energy Sources* [6], which was adopted in September 2001. This includes indicative targets for the percentage of renewable energy in the final electricity consumption of each EU Member State, as well as requirements concerning:

- guarantee of origin of renewable electricity
- simplification of administrative procedures for approving the construction of renewable electricity generators
- transparency of pricing for connections to the electricity grid

- reporting on progress towards the agreed targets
- requirement that the Commission make recommendations by October 2005 concerning whether or not national support schemes for renewable energies should be harmonised across all EU member states.

The second Directive which addresses the use of renewable energies in the EU is the *Directive on Biofuels* [7], which was adopted in May 2003. This Directive requires all EU suppliers of transport fuels to include 2% of biofuels by 2005 and 5.75% by 2010 in their delivered fuels to final users. This Directive was complemented later in 2003, by an important revision to the existing *Directive on the taxation of transport fuels* [8], which allows member states to reduce or abolish the levels of excise tax on biofuels. These directives were foreseen in 2002 by a *Communication* which set out a strategy for biofuels in the transport sector [9].

Renewable energy also has an important role to play in the buildings sector, and this was recognised in the *Directive on the Energy Performance of Buildings* [10] which was adopted in December 2002. This Directive requires the certification of buildings, and renewable energy systems are to be included in the methodology which must be used in each Member State to produce such certificates.

It is clearly recognised that all of the EU legislation concerning the use of renewable energy sources should be implemented together with the efficient management of energy demand. Hence the use of renewable energy sources is also encouraged in the *Directive on the cogeneration* which was adopted in February 2004 [11].

Work is continuing on the development of the EU policy and legislative framework, which will encourage the use of sustainable energies, and the next Directive is expected to address the provision of energy services. Discussions are also underway concerning how to bring forward policies and legislation which will accelerate the markets for renewable heating and cooling.

5 Future perspectives

The Commission is currently preparing a new Communication on Renewable Energies. This will summarise the progress towards the EU targets that has been achieved by each of the Member States in recent years, and will look forward to the future. It is currently foreseen that this Communication will be published in advance of the forthcoming summit on renewable energies, which is to be held in Bonn in first week of June 2004.

Following a public consultation, as well as discussions with the programme committee and expert groups, the Commission is revising the Work Programme (FP6) for EU research on sustainable energies. The revisions are likely to involve giving a greater emphasis to short to medium term research on electricity grid issues, as well as to demonstration activities on marine energies and biomass. The revised text of the Work programme will be published in late May, in preparation for the third Call for proposals, which will be launched in June 2004.

REFERENCES

- 1 <http://fp6.cordis.lu/fp6/home.cfm>
- 2 http://europa.eu.int/comm/energy/intelligent/index_en.html
- 3 White paper for community strategy and action plan COM(97) 599 Final
- 4 Communication from the Commission on the implementation of the Community strategy and action plan COM(2001)69(01)
- 5 Green paper towards a European strategy for the security of energy supply COM(2000)769
- 6 Directive 2001/77/EC on the promotion of the electricity produced from renewable energy sources in the internal electricity market
- 7 Directive 2003/30/EC of the European Parliament and Council of 8 May 2003 on the promotion of the use of biofuels and other renewable fuels for transport
- 8 Council Directive 2003/96/EC of October 2003 restructuring the Community framework for the taxation of energy products and electricity
- 9 Communication of the European Commission of 7 October 2001 on an action plan and two proposals for Directives to foster the use of alternative fuels for transport, starting with the regulatory and fiscal promotion of biofuels COM 2001 547 Final.
- 10 Directive on the energy performance of buildings COM 2002/91/EC
- 11 Directive on cogeneration 2004/8/EC

SUBMISSION FROM THE SCOTTISH EXECUTIVE

Introduction

1. The Executive welcomes this Inquiry and particularly the Committee's wish to have a broad debate about all forms of renewable energy in Scotland. The renewables sector is growing rapidly and provides both challenges and opportunities for our manufacturing sector. Statutory responsibility for energy matters rests both with the Scottish Ministers and with the UK Government at Westminster; Scottish Ministers have executively and administratively devolved powers for the promotion of renewables and for consents for new developments under sections 36 (all applications to build new power stations over 50 MegaWatts or over 1 MegaWatt for hydro and offshore renewables) and 37 of the Electricity Act 1989 (overhead power lines). Responsibility for all other matters, including renewables R&D, and electricity trading and transmission issues, rests with the Westminster Parliament.

The Executive Policy

2. An increase in the amount of renewable energy generation as a means of reducing carbon emissions is an important part of our efforts to tackle climate change. The UK Government has set a goal of reducing the UK's carbon dioxide emissions, the main contributor to global warming, by 60% by 2050. The development of renewable energy will be an important contributor to the success of that policy. It also provides new opportunities to enhance our manufacturing capacity and to provide new employment, not least in the remote and rural areas. We published a strategy document, *Securing a Renewable Future: Scotland's Renewable Energy*, on 25 March 2003. This strategy confirmed our existing 2010 target for domestic renewable electricity generation (18%), set an aspirational target for 2020 (40%), and announced a series of actions that we and others would take in order to create a policy, planning and economic environment that would support these targets while paying full attention to important environmental issues.

3. Our policy is founded on the principle that our targets should be met by a range of technologies. Onshore wind, being the most competitive technology, will make the major contribution over the next few years, but we expect that technologies such as deep water offshore wind, wave power, tidal stream, and biomass will make an increasing contribution as the years go on. We are taking specific actions to promote the newer technologies; these actions are described further below.

The Renewables technologies

(a). Wind energy

4. Onshore wind turbine technology has become increasingly competitive over the last decade and is set to become extensively deployed. Its technological status, coupled with the available natural resource, means that onshore wind can be expected to play a major role in meeting the 2010 target. Although the UK was initially slow to develop this resource, since the introduction of the incentives provided firstly by the Scottish Renewables Obligation (SRO) and now by the Renewables Obligation Scotland (ROS), installed capacity is increasing significantly.

Significant issues raised in the processing of onshore wind proposals include protection of the natural heritage, public perception and civil and military aviation issues. These issues are discussed further at paragraphs 31 to 37 below.

5. There has been little interest shown so far in developing offshore wind energy off Scotland's coasts, although some proposals are now starting to emerge. Among the reasons for this are the inhospitable nature of much of Scotland's offshore environment, the prospect of developments on-shore, and the lack of ready access to the electricity grid. As a result, only one project has been pursued to consent- that at Robin Rigg in the Solway Firth, where the grid connection will be to the English side of the Firth. A recent development is the proposal by Talisman Energy UK Ltd and Scottish and Southern Energy plc to develop a 1 Giga Watt (1000 MW) wind farm based on the Beatrice oilfield in the inner Moray Firth. If successful, this project would make a major contribution towards our 2010 and 2020 targets. The Executive has awarded grant of £193,320 towards a front end engineering and design study and an operational and maintenance analysis study. The next stage of the project is a turbine demonstrator project which could start to produce electricity in 2005.

(b) Hydro

6. Hydro power is a commercial technology long established in Scotland and it accounts for a significant proportion of our existing renewable output. Most is from large scale hydro. It is expected however that there will be very few further large scale hydro developments in Scotland. Most of the economically attractive sites have been developed and increasing environmental constraints seem likely to limit, but not necessarily rule out, further development of this technology in the future. There are, however, an increasing number of proposals for small run of river hydro projects (although there are significant natural heritage issues with these also) and these projects, together with the continuing refurbishment of the large hydro schemes (refurbished hydro up to 20 Mega Watt (MW) capacity is eligible for support under the ROS) will ensure that hydro will continue to play its part in Scotland's renewable energy mix and contribute to our targets.

(c) Biomass and Landfill Gas

7. Unlike most renewables, biomass is capable of providing continuous output once a robust fuel supply infrastructure is in place. So far, there has been only one significant project in Scotland- at Westfield in Fife which utilises poultry litter. Eleven landfill gas projects and one energy from waste project have been developed under the SRO. A further two energy from waste and twelve landfill gas projects have got contracts under the SRO but have not yet been developed. Public perception issues are a factor with biomass projects. Scotland's natural timber resource is capable of providing a ready supply of fuel for biomass plants, and provides new opportunities for our forestry sector. The Executive is aware of a number of projects that aim to utilise forest residues. To date, there has been little interest in Scotland in growing energy crops, although there is evidence that this is beginning to develop.

(d) Wave and tidal stream

8. Electricity from wave and tidal stream devices, if they can be successfully developed, offers the prospect of a more predictable source of renewable energy to complement that from wind. Scotland has the greatest marine energy potential in the UK. However, wave and tidal devices are further from commercialisation than other renewable energy sources and there are also a number of competing designs. Shoreline wave energy conversion is technically developed (and operating on Islay) but not commercially viable, whilst offshore wave and tidal stream technologies are still mainly at the R&D stage. The Executive has committed £2.125 million towards the development of a Marine Energy Test Centre in Orkney. This centre will be a world class facility for the development, testing and accreditation of marine energy generation and delivery systems. It will provide a single point of convergence for developers of marine devices and enable closer links to be forged between companies and the academic sector. The first stage of the project- a wave test facility- is now operational and the first wave device is expected to be in the water early in 2004. We are at present participating in discussions with Highlands and Islands Enterprise and other partners to consider the timing of a second stage of the project- a facility for testing tidal stream devices.

Photovoltaics

9. Photovoltaics are as yet not generally cost-effective but it is hoped that they will be by the time that the 10-year UK Major PV Demonstration Programme ends in 2012. The programme has been allocated £20 million to 2005. In Scotland, over £500k has been awarded to 13 projects to date. Two Scottish schemes (a housing association in Glasgow and a community centre in Lewis) made successful bids during 2003. Off-grid PV and solar water/space heating installations are supported under the Scottish Community Renewables Initiative (see paragraphs 42 and 43 below): in its first year of operation, the SCHRI has contributed over £300k to 9 full solar/pv projects and almost £200k to 15 hybrid technology projects with solar/pv content.

The Executive targets

10. Scotland has a huge renewable energy resource. In *Programme for Government 2*, we set a target that 18% of electricity generated in Scotland should, by 2010, be from renewable sources. During late 2002 and 2003, we consulted on the proposition that Scotland should aspire to generate as much as 40% of its electricity from renewable sources by 2020. The responses supported our view that there would be benefits in setting a 2020 target now and in our policy document, *Securing a Renewable Future*, published in March 2003, we confirmed the 40% aspiration. This commitment was subsequently incorporated in *A Partnership for a Better Scotland*.

11. These targets are strongly linked to and driven by the UK renewable energy targets of 10% of electricity supplied to be from renewable means by 2010 with an aspiration to double that by 2020. As indicated at paragraph 3 above, we expect our targets to be met by a mix of renewable technologies. It is not, however, possible to forecast what that mix might be. This will depend on a number of factors; for

example, how quickly the emerging technologies reach commercial viability and whether effective supply chains can be developed for biomass.

12. We believe that on current trends our 18% generation target by 2010 will be met. The number of proposals being consented, considered and brought forward by developers indicates that renewables generation will start to rise markedly over coming years. The 40% target is more challenging, and its achievement will depend on a number of factors, including decisions about closure or refurbishment of existing plant. We set this target on the basis of consultation with the industry and acknowledging the potential benefits of setting a longer term target in terms of our climate change commitments. Although the target is challenging, we believe that the policies that we either have in place or are developing will enable it to be met. We will keep these policies under review in the light of progress made towards the achievement of the targets.

13. The latest available information (2002) shows 10.4% of Scottish generation coming from renewable sources. At present- given that large hydro makes up the greater part of our renewables resource- the figure can vary considerably year on year. For example, in 2001, which was a fairly dry year, hydro power (excluding pumped storage schemes) accounted for 7.6% of the electricity generated in Scotland; this rose to 9.0 % in the wetter 2002. However, as more renewables developments are built, we expect from now on to see the renewables generation percentage increasing year on year.

14. The targets (generation and supply) relate to the **output** produced by renewable plant. It is not possible to say precisely what additional **capacity** will be required in order for these percentages to be reached. This will depend on a number of factors, such as the actual output from commissioned plant (output varies between technologies) as well as the retiral of existing conventional plant and any replacement. However, in preparing *Securing a Renewable Future*, we estimated that in order to hit the 18% target, we would need to install a further 1000 MW of renewables generation capacity and that that in itself would represent an increase in build rate of around 500% of that achieved during the previous decade.

15. The current installed MegaWatt capacity for renewables is: large hydro 1790 MW; hydro pumped storage 700 MW; micro hydro 20 MW; wind 183 MW; micro wind 3MW; landfill gas 21MW; biomass 12 MW; wave 0.043 MW. The total renewables generation capacity is therefore around 2729 MW (239 MW of this total qualifies for Renewable Obligation Certificates.) The total installed capacity for Scotland including thermal generation is approximately 10 GigaWatts.

16. In 2003, the Executive consented over 400 MW of new renewables capacity, comprising on and offshore wind and small hydro. As at 1 January 2004, we were considering a further 23 developments totalling 1,300 MW under the section 36 consent procedures. Scoping opinions had been or were being prepared in respect of a further 26 developments totalling 3,000 MW. Other, smaller, developments had been approved or were being considered by local authorities. A full note of the developments consented, applications being considered, scoped etc. is attached as an annex to this paper.

Opportunities for manufacturing and employment

17. *A Partnership for a Better Scotland* sets economic growth as the Executive's top priority and puts sustainable development at the heart of everything we do. We expect that the renewables sector will contribute greatly to our economic growth and will create new jobs that support our environmental objectives. We also believe that the development of renewables will provide opportunities for our existing manufacturing sector, and that a number of established companies will diversify and transfer their existing skills and experience. The renewables industry has already demonstrated that it can create increased economic activity. Vestas-Celtic has established a tower manufacturing and assembly facility at Macrihanish, with the work force steadily increasing to around 180 people. Scottish companies have competed successfully for manufacturing contracts in relation to wind farm developments in England and Wales, for example, Isleburn Mackay & Macleod in Easter Ross won a £6 million contract for fabrication for the Scroby Sands development, safeguarding 100 jobs, and Aberdeen-based CNS Subsea won a £1 million contract for cabling for North Hoyle. NOI Scotland Ltd in Fife are working with QinetiQ on stealth technology application to turbine blades to help overcome problems with radar.

18. The Executive has co-sponsored a study, undertaken by Mott Macdonald and with support also from Scottish Enterprise, Highlands and Islands Enterprise and the DTI's Renewables Advisory Board, to examine the capability of the UK industry to develop a viable, long term renewable energy industry. The study has mapped out separately, for Scotland and the rest of the UK, the exact nature of both the opportunities and the constraints.

19. The report was published on 16 January. Its main findings are:

- Approximately 8,000 jobs are at present sustained by renewables in the UK (including induced jobs), around 1,900 of them in Scotland.
- **On average, 10 full time jobs are sustained per megawatt installed.**
- By 2020, between 17,000 and 35,000 jobs could be sustained by renewables in the UK. (Although we expect that many of these will be in Scotland, it is not possible to be precise about the number; that will depend on a number of factors including the pace of development here and our companies' ability to win manufacturing orders for developments both in the UK and overseas.)
- The total monetary value of the industry, adjusted for imports, is of the order of £290 million (excluding activity associated with grid developments and items such as project financing costs).

The figures cited above exclude the value of and jobs in those large hydro schemes which are not eligible under the Renewables Obligations.

Impact of renewables on security of supply

20. The intermittent nature of a number of renewable sources, in particular wind, has given rise to some concerns about security of supply. However, the fact that wind sites are dispersed throughout the country, and are located in areas of high wind resource, can act to balance the overall intermittence effects of this type of

generation. The marine energies- wave and tidal stream- are far more predictable, while biomass can generate continuously subject to the availability of a fuel supply. Analysis undertaken by the DTI for the energy White Paper found that the electricity system could cope with an increasing amount of intermittent generation. However, it was also found that as that proportion of intermittent generation increases, there is likely to be an additional cost involved in maintaining grid stability.

Government support

21. Prior to April 2002, support for renewable energy developments in Scotland was driven by the Scottish Renewables Obligation (SRO). The SRO schemes provided a guaranteed long-term market for electricity generated under individual contracts together with a guaranteed premium price. 109 developments were awarded contracts under the SRO; over 30 developments are now operating, generating electricity from wind, wave, hydro, biomass and landfill gas. They include the world's first commercial wave energy project on Islay.

22. On 1 April 2002, we introduced the Renewables Obligation Scotland (ROS), which remains in force until 2027. This places a legal obligation on licensed electricity suppliers to source an increasing amount of their electricity from renewable sources, or pay a fixed amount per unit of shortfall into a buy-out fund. The amount that suppliers must source from renewables is increased year on year- it is set at 4.3% in 2003-04 and rises to 10.4% in 2010-11. We announced in December 2003 that we planned to consult on further staged increases in the period to 2015-16 when, if an amendment to the legislation is approved by the Scottish Parliament, the level of the obligation on individual suppliers will reach 15.4%.

23. The ROS is paralleled exactly by a Renewables Obligation Order in England and Wales. This is because the electricity market operates on a Great Britain basis. The Executive and the DTI have recently consulted on proposals for a number of technical changes to the Obligations; these are due to take effect on 1 April 2004. There will be a full review of the workings of the Obligations in 2005-06, which will review progress and set out a strategy for the period to 2020.

24. The support provided through the Obligations is backed up by capital grants for renewables developments, available on a UK basis through schemes administered by the Department for Trade and Industry. These schemes total nearly £350 million over the period to 2006. Most of that investment is aimed at the new technologies such as offshore wind and biomass; other technologies, such as energy from marine sources, are supported through funding for R&D, again administered by the DTI. The DTI has spent £15 million on the research and development of wave and tidal power since 1999; £6 million of which came to Scottish companies. The industry can also benefit from grants from bodies such as the Carbon Trust, which is funded jointly by the DTI and the Executive.

25. The Executive intends to introduce a grant fund for SME's in Scotland who are interested in developing renewables. The intention is to target support at developing the newer technologies- for example, wave and tidal power, and biomass. Details are still being worked up but it is intended that the scheme will

come into operation in the financial year 2004-05. It will operate along side the existing DTI support schemes.

The Forum for Renewable Energy Development in Scotland (FREDS)

26. One of the key actions that we set out in *Securing a Renewable Future* was the establishment of a partnership between Government, academia and industry to drive forward the economic development of the renewable energy industry in Scotland. This Group, the Forum for Renewable Energy Development in Scotland (FREDS), chaired by the Deputy Minister for Enterprise and Lifelong Learning, held its first meeting on 20 October 2003. Drawing on the wide range of experience and expertise provided by its members, the role of the Forum is to identify the actions necessary to capitalise on our renewables potential and to secure the optimum economic development opportunities for Scotland. The Group meets quarterly and papers are published on the Executive web site.

27. Our intention is that most of the detailed work will be done by sub-groups of the Forum, using the experience and knowledge of experts in the particular area that is being considered. A sub-group on marine energy was established at the October 2003 meeting of the Forum, charged with bringing forward proposals for accelerating the commercial development of wave and tidal stream devices and developing a manufacturing base for marine energy technologies in Scotland. The sub-group has held a number of meetings and is expected to bring forward its conclusions and recommendations to the main FREDS group at its meeting in May. A sub-group to consider what needs to be done to accelerate the penetration of biomass technology was set up at the January 2004 meeting of FREDS; it is expected to report in September. This sub-group will consider biomass as a heat source as well as a generator of electricity.

28. We intend that the Forum will continue to meet for as long as we believe it to be helpful in promoting Scotland's renewable energy industry. Progress reports will be published.

29. The new Energy Intermediate Technology Institute, based in Aberdeen, will examine the potential for commercial exploitation of renewable energy technologies and will play a major role in developing links between Scottish businesses and our academic institutions. We are backing the ITI with £150 million over the next 10 years.

The Grid

30. Upgrading the transmission system to accept increasing amounts of renewables generation is crucial in ensuring that the generators can meet the Government targets for renewable energy generation. In a number of areas of the country, there is already very little spare capacity, and major upgrading of the transmission system will be required. Although transmission issues are reserved to the UK Government, the Executive participates in the work of a number of groups looking at the implications for the GB electricity network of the Government's renewables targets including a group looking in particular at the requirements of the Highlands and Islands. Studies undertaken for the DTI have identified the costs of

installing up to 6 GW in England & Wales and 6 GW in Scotland. Ofgem has since allowed the Scottish Transmission Operators to start the design work on the first stage of this work, on the basis of reclaiming expenditure at the next price review.

Planning and consents issues

31. Renewable energy development is subject to control. This is achieved either through the Electricity Act consents process or through the local planning system in the case of those individual proposals that fall below the Electricity Act thresholds. Consent under section 36 is required for developments that have a capacity in excess of 50 MW. In the case of water driven (hydro) and offshore developments that threshold is 1 MW. Consents issued under section 36 of the Electricity Act usually confer deemed planning consent under the Town and Country Planning (Scotland) Act 1997. The Scottish Ministers have executively devolved powers under the Scotland Act in respect of section 36 of the Electricity Act 1989. This means that all developments in Scotland that require consent under section 36 are handled by the Executive and that Scottish Ministers have order making powers under that section. These include powers to set fees for consent and for setting thresholds.

32. Although consents under section 36 of the Electricity Act are not part of the local planning process, planning policy as set out in the National Planning Policy Guidelines (NPPG), particularly NPPG 6, and planning circulars apply to these developments. Unlike planning permissions, Electricity Act consents cannot be the subject of appeals. Applications for consent under the Electricity Act are the subject of dedicated Environmental Impact Assessment Regulations (The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000). These require developers to consider whether an Environmental Statement (ES), setting out the potential environmental impacts of the development and the measures to prevent or mitigate them, would be appropriate in respect of the proposed development. An ES would be mandatory in respect of a large project (in excess of 400 MW) but is usually required for all renewable energy developments.

33. It is in the interest of developers to consult with the stakeholders (the planning authority, Scottish Natural Heritage, SEPA and non-government organisations) in the preparation of the ES. A Scoping Opinion, which sets out the issues to be addressed in the ES, can be sought from Ministers. The ES should accompany any application for consent. The developer is required to place notices in the local and national press setting out details of what is proposed, advising where copies of the ES can be viewed and providing details of who representations should be made to. Developers are also obliged to make non-technical summaries of the ES available on request.

34. When an application has been made, the Executive undertakes its own consultation with a wide range of stakeholders, such as the local authorities in whose area the development is to take place, SNH, and SEPA. Following that process, a determination is made by Ministers. That can be to grant consent with or without condition, to refuse consent, or to refer the matter to a public inquiry (PLI). A referral to a PLI would normally take place when the Minister is of the view that only with a public inquiry can he properly weigh any two or more conflicting issues and,

secondly, that only with a public inquiry could those with the right to make representations have their representations properly taken into account. Following that, the Minister would take account of the Inquiry report in reaching his determination.

35. In reaching their determination, Ministers must have regard to our international, EC and national obligations in respect of species and habitats, birds, landscapes, and the cultural and built heritage. Other considerations include the safeguarding of airports and of civil aviation and military technical sites, such as air traffic control radar and telecommunications. To those must be added the impacts on the amenity of local residents, including visual amenity, and the availability of Tactical Training Areas for military purposes.

36. The paramount consideration is that of Ministers' international obligations and those established by European Directive. Our locational guidance does not rule out developments in such designated areas, but it is made clear that in the case where development has the potential to adversely affect them it would have to be demonstrated that there are no alternatives and overriding reasons of national significance for the project to proceed, with compensatory measures where necessary to ensure that the coherence of the site network is maintained. Similar considerations apply in the case of protected species outwith sites as well as consideration of the potential effect on favourable conservation status for developments where the Habitats Directive is a relevant consideration. In the case of national designations, such as National Parks and National Scenic Areas, where development would have an adverse impact on the core value of the area, it can be approved only when offsetting benefits of national significance can be demonstrated.

37. The safeguarding of civil and military aviation sites is an important matter, which requires Ministers to have regard to the advice of the appropriate authorities. Wind farms can have a serious adverse impact on the operation of radar and unless this is taken into account in the siting and design of these developments, air and public safety could be put at risk. The Executive is represented on a DTI led Working Group established to study the extent of these impacts and possible mitigation and preventative measures. The Working Group has published interim guidelines for the use of developers and planning authorities. Support has been given to research on how the impacts can be reduced and as a result of this, work has started on applying military "stealth" technology to wind turbine blade design.

38. The suggestion has been made that the Executive should put in place a national locational strategy for renewables, in particular for the development of on-shore wind energy, and which would include strategic guidance for developers. We believe, however, that the current planning guidelines are sufficient at present and indeed provide robust guidance for developers and for local authorities. The existing guidance allows local planning authorities to set out a locational strategy for their areas. A number of Councils have chosen to take this approach, others have not. We are also aware that developers are discussing proposals with local authorities, Scottish National Heritage and other relevant bodies at a very early stage of the process and that this will contribute to identifying areas best placed for development before an application enters the planning process.

Local issues

39. We recognise the importance of local communities obtaining benefit from renewables developments. The practice has developed within the industry of developers negotiating and agreeing a sum which is allocated towards funds that these communities establish. Some Councils wish to see a minimum or standard amount of payment set for developers to pay to communities which have wind farms built in their area. No powers exist within the planning system, either at Executive or local authority level, whereby this could be done. Nor would it be appropriate for Scottish Ministers to intervene in this way, due to their involvement in section 36 cases, and their potential involvement in local authority planning appeal cases.

40. We are, however, supportive of a proposal by Highlands and Islands Enterprise to develop a community equity scheme, which would allow communities to hold a financial stake in renewables developments in their area. The Executive will continue to discuss the details of a possible scheme with HIE, and to consider how such arrangements might be developed elsewhere in Scotland.

Public perception

41. A survey undertaken this year by the Central Office of Information for the DTI (which included a Scottish sample) found that current opinion about renewable energy was largely positive, that the environmental benefits were largely understood and that a considerable majority of people thought that the Government should further encourage its development. Nevertheless, there is some opposition to local sites, particularly to on-shore wind farms. The Executive has commissioned two surveys of public attitudes to Scotland's wind farms; the first (undertaken in 2001) was withdrawn following discovery of a sampling error. Despite that error, we believe that the core findings of that survey remain relevant. The findings of both surveys confirmed support for renewable energy development with a substantial majority in the 2003 survey saying that their local wind farm has had a broadly positive impact in their area. The Executive intends to continue to survey public opinion, and to work with partners to promote the benefits of renewable energy.

The Scottish Community and Householder Renewables Initiative

42. The Scottish Community and Householder Renewables Initiative (SCHRI), developed by the Executive, provides a "one-stop" service for community groups and householders interested in developing renewable energy solutions to meet their own energy needs. An advisory service that provides expertise, advice and development support to individual householders and community organisations including councils, housing associations and voluntary groups was launched in June 2002. It is backed up by a grant scheme that was established in January 2003. £5 million has been allocated to the scheme over three years until 2004-05. The service for communities is operated on behalf of the Executive by the Energy Saving Trust (EST) in the lowland area and by Highlands and Islands Enterprise in their area. EST operates the householder scheme throughout Scotland.

43. The SCHRI works by increasing awareness of renewables technologies and their environmental impact and benefits, and by providing sustainable solutions to

local or individual energy demand. Capital funding is available up to a limit of 30% of the cost of a project and a maximum grant of £4000 for householders; community schemes can attract funding of up to £10,000 for feasibility studies and £100,000 for capital expenditure. In the first 12 months of operation of the grant scheme, 74 householder grants have been offered with 25 awarded, £324,409 has been allocated to 46 completed community projects; £1,087,316 has been allocated to 68 projects currently being processed.

SCOTTISH RENEWABLES PROPOSALS

ANNEX A

WIND

Development	Company	Location	Installed MW Capacity	Number of turbines	Date consented	Under construction
Wind farm consents						
Glens of Foudland	RES Systems Ltd	Aberdeenshire	27.3	21	2001	2004-5? (Construction delayed)
An Suidhe (An Suidhe)	PowerGen Renewables Ltd	Argyll & Bute	6.17	12	31st Mar 03	2004-5?
An Suidhe (Eredine)	PowerGen Renewables Ltd	Argyll & Bute	6.17	12	31st Mar 03	2004-5?
Cruach Mhor	Scottish Power	Argyll & Bute	30	35	07-Mar-03	Yes - projected completion Spring 2004
Black Hill	RES Systems Ltd	Borders	28.6	22	2001	2004-5? (Construction delayed)
Crystal Rig	Natural Power	Borders	49	20	-	Yes-projected completion Spring 2004
Robin's Rigg Offshore Wind Farm	Natural power	Dumfries & Galloway	180	60	19-Mar-2003	2004-5
Bualfruich, Howstry, Dunbeath	Anthony Hall	Highland	9	15	21-May-03	2004-5?

Causeymire, Caithness	National Wind Power	Highland	48	24	01-Nov-02	Yes - projected completion Autumn 2004
Cairn Uish Wind Farm	Natural Power	Moray	56	28	09-Jan- 2003	Construction commencing Spring/Summer 2004
Paul's Hill Wind Farm	Natural Power	Moray	56	28	31-Mar-03	Construction commencing Spring/Summer 2004
Busbie Moor	Airtricity	North Ayrshire	24.5	14	01-Jan-03	Yes - projected completion Spring 2004
Burgar Hill	National Wind Power	Orkney	5	2	2002	Yes - projected completion Winter 2004.
Burray	OREF Ltd	Orkney	1	1	2002	2004-5?
Flotta	Scotwind	Orkney	1.75	1	2002	2004-5?
Spumess point	Your Energy Ltd	Orkney	7.5	3	2002	2004-5?
Hadyard Hill	DP Energy/SSE	South Ayrshire	130	52	23-Dec-03	2004-5?

Wind farm applications					
Development	Company	Location	Installed MW Capacity	Provisional number of turbines	Application date
Boyndie	RDC Scotland	Aberdeenshire	14	7	01-Apr-03
Clashindarroch Wind Farm	AMEC	Aberdeenshire	129	47	11-Jul-03
Mid Hill	Natural Power	Aberdeenshire	49	25	01-Mar-03
Stoneyhill windfarm	Dudley Development Ltd	Aberdeenshire	37.8	42	11-Dec-02
Tullo	West Coast Energy	Aberdeenshire	12	12	01-Nov-03
Arkhill	RES	Angus	10.4	8	01-Jul-03
Arkinglas	AMEC	Argyll & Bute	19	9	01-Aug-03
Inverliever	SP	Argyll & Bute	30	22	19-Nov-03
Meall Mor	Herr von Pezold	Argyll & Bute	2.2	3	-
Tangy 2	Border wind	Argyll & Bute	-	-	-
Minch Moor	AMEC	Borders	24.5	14	01-Apr-03
Crystal Rigg Wind Farm extension	Natural Power	Borders	12.5	5	22-Jan-03
Artfield Fell	SSE	Dumfries & Galloway	20	15	5-Sep-03
Torrs Hill	Natural Power	Dumfries & Galloway	4	2	01-Apr-03
Windy Standard Wind Farm Extension	Natural Power	Dumfries & Galloway	90	36	14-Dec-01
Michelin Wind	Michelin Tyre plc	Dundee	4.5	3	30-May-03

Turbines					
Benquhat Hill	Natural Power	East Ayrshire	12	6	
Whitelee Wind Farm	SP	East Ayrshire, East Renfrewshire, South Lanarkshire	332	140	23-Jan-02
Ardoch Farm, Eaglesham	National Wind Power	East Renfrewshire			
Over Enoch, Eaglesham	National Wind Power	East Renfrewshire			
Clatto Hill	SP	Fife	30	17	24-Sep-03
Ben Aketil	RDC Scotland Ltd	Highland	21	14	16-Sep-02
Beinn Tharsuinn	SP	Highland	20	20	19-Apr-02
Boultach	Fivestone Ltd	Highland	1	1	12-May-00
Borrowston Mains	SP	Highland	13	10	25-Apr-02
Cambusmore	Renewable Energy Systems Ltd –	Highland	49.5	33	19-Feb-03 scping 20-Oct-03 application
Farr Wind Farm	National Wind Power	Highland	70	45	12-Sep-02
Gordonbush Wind Farm	SSE	Highland	100	35	18-Jun-03
Hill of Lieurary (by Caithness)	Scotrenewables Ltd	Highland	8	3	10-Jul-03
Novar II extension		Highland	25	18	14-May-03
Greenock	Airtricity	Inverclyde	59	-	09-May-03
Aultmore Wind Farm	AMEC	Moray	56	30 - 40	21-Aug-02 scoping 28- Oct-03

					application
Cairn Uish extension	Natural Power	Moray	additional 21 MW	28	14-May-03
Paul's Hill extension	Natural Power	Moray	additional 21 MW	28	14-May-03
Burnt Hill		North Ayrshire	-	-	-
Wardlaw Wood	Community Windpower Ltd	North Ayrshire	12	6	01-Dec-02
Black Law Wind Farm	SP	North Lanarkshire, South Lanarkshire, West Lothian	134	67	22-May-02
Gruff Hill (Ophir)		Orkney	7.5	3	2003
Rothiesholm		Orkney	7	8	2003
Balado	Glendevon Energy	Perth & Kinross	6	3	PLI
Braes O' Doune Wind Farm	Airtricity	Stirlingshire	100	50	31-Oct-02
Millenium Wind Farm	West Coast Energy	Highland	49	21	28-Nov-03
Edinbane, Skye	Amec/BE	Highland	47	27	01-Nov-02
Strath Brora Wind Farm	RDC Scotland	Highland	48	24	05-Sep-03

Wind farm proposals (scoping)					
Development	Company	Location	Installed MW Capacity	Provisional number of turbines	Scoping application date

Fetteresso	Fred Olsen/Natural power	Aberdeenshire			
Garvock Hill (Laurencekirk)	Garvock Hill Windfarm Ltd (farmers' consortium)	Aberdeenshire	12		
Glen Moriston		Aberdeenshire			34
Meall Ruadh	Atlantic Energy	Argyll & Bute	14		
Careston Estate wind farm	RES	Angus	51	06-Jun-03	25
Corbie Shank Wind Farm	RDC Scotland	Borders	102	14-Feb-03	40
Dun Law extension	SP	Borders	50		
Halkburn Farm	Wind Prospect Ltd	Borders		01-Aug-03	15
Monashee	West Coast windfarms	Borders	17.4		11
Sell Moor	RDC Scotland	Borders	48		
Toddle Burn	I&H Brown	Borders			24
Crystal Rig 2	Natural Power	Dumfries & Galloway	90	01-Oct-03	25
Dalswinton		Dumfries & Galloway		14-Oct-03	16
Ewe hill	ScottishPower	Dumfries & Galloway	80	Aug-03	68
Harestanes	SP	Dumfries & Galloway	400	09-Mar-03	180
Kyle Forrest	Amec	East Ayrshire	200	01-Oct-03	150
Baillie wind farm	Dudley Developments	Highland	66	27-Jun-03	24
Burn of Whilk	National Wind Power	Highland	20	20-Jun-03	10

Corriemollie	SP	Highland	30-40	03-Mar-03	
Dunmaglass Wind Farm	RES	Highland	100	24-Apr-02	50
Forss B- extension	RES	Highland	5.2		4
Invermoriston	RDC/West Coast Energy	Highland			
Melvich, Sutherland	Fountain Forestry	Highland	10	19-Dec-02	6
Nigg Hill	Shell Wind Energy Ltd	Highland			
Scolary Wind Farm	British Energy	Highland	72	14-Feb-03	48
Sleat	SSE	Higland			
South Shebster	CW Sutherland	Highland	50	18-Jun-03	25
Strathy	RenGen	Highland	50		
Stroupster	National Wind Power	Highland	50	19-Jun-03	25
Glenkirk, Tomatin	Eueus Energy (UK) Ltd	Highland	50	03/10/2003	25
Carcant	AMEC	Midlothian	12		6
Carn Kitty	Force 9 Energy	Moray	160	17-Mar-03	80
Hunterson Hydrogen windfarm	Hunterson Hydrogen	North Ayrshire	53	28-May-03	30
Kelburn	RES	North Ayrshire	38		19
Bracco Wind Farm	Airtricity	North Lanarkshire	75	11-Apr-03	29
Abercairny	Force 9 Energy	Perth & Kinross	54		
Calliacher wind farm	INH Brown	Perth & Kinross	120		
Drumderg	SSE	Perth & Kinross			16
Greenknowes	CRE Energy	Perth & Kinross	90	18-Sep-03	
Knowhead	British Energy	Perth and Kinross	57	27-Feb-03	29
Lochelbank Wind	National Wind	Perth and	108	24-Apr-03	50

Farm	Power	Kinross			
Sma'Glen	Force Nine Energy	Perth & Kinross	54		27
Clyde Wind Farm	Airtricity	South Lanarkshire	507.5	28-Feb-03	200
Hill of Garth	Viking Wind Ltd	Shetland	300		
Hart Hill	RDC Scotland	Stirling	30		14
Arnish Moor	Arnish Electricity Ltd	Western Isles	10.5		6
Barvas Moor (Lewis)	Lewis WindPower	Western Isles	600	26-Jun-02	240
Pentland Rd	Arnish Electricity Ltd and TXU	Western Isles	10.5		

HYDRO

Hydro consents					
Development	Company	Location	Provisional Installed MW capacity	Date consented	Under construction
Braevallich Hydro	Innogy	Argyll & Bute	2.5	26-Mar-03	Yes - projected completion Winter 2004.
Garrogie Hydro	Innogy	Highland	2	Jun-03	Yes - projected completion Winter 2004.
Kingairloch Hydro	SSE Generation Ltd	Highland	2.5	26-Mar-03	

Dalmacouter		North Lanarkshire	approx 1.5	built but not connected	
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Hydro applications				
Development	Company	Location	Provisional Installed MW capacity	Application date
Ben Glas	Ambient Hydro Ltd	Argyll & Bute (Loch Lomond & Trossachs National Park), Stirling	1	06-Aug-02
Douglas Water Hydro	Innogy	Argyll & Bute	3	14-Jul-03
Alt Fionn	Ambient Hydro Ltd	Highland	1.4	06-Aug-02
Fasnakyle Hydro extension	SSE Generation Ltd	Highland	7.5	29-Aug-03
Glendoe Hydro	SSE Generation Ltd	Highland	100	06-May-03
Refurbishment Tummel/Garry HE Station	SSE Generation Ltd	Highland/Perth & Kinross	0	05-Dec-02
River E Hydro	Innogy	Highland	3	20-Dec-02
Shieldaig/Slattadale Hydro	Highland Light & Power	Highland	3.55	01-May-03
Stronlairg	Innogy	Highland	10.3	20-Jun-03

Hydro proposals (scoping)				

Development	Company	Location	Provisional Installed MW capacity	Scoping application date
Allt Hallater	Innogy	Argyll & Bute	1.1	06-Mar-03
Inverlael Hydro	Innogy	Highland	1.4	27-Jun-03
Inverar Hydro	Innogy	Perth & Kinross	1.1	04-Sep-02
Easter Aberchalder	Innogy		1.7	26-Sep-03

Other proposals					
Development	Company	Location	Technology	Provisional Installed MW capacity	Status
Binn Farm (relocation)	Sita UK	Perth & Kinross	Energy from Waste	1.9	Consented
Orkney Test Centre	Carl Bro	Orkney	Hydro	1	Application 7 Feb 03
Altens	SITA	Aberdeen City	Biomass	11	Application 01/09/2001

EXISTING WIND FARMS**ANNEX B**

Development	Company	Location	Installed MW Capacity	Number of turbines	Date commissioned
Beinn an Tuirc (North)	CRE Energy Ltd	Argyll & Bute	7.5	23	Dec-01
Beinn an Tuirc (South)	CRE Energy Ltd	Argyll & Bute	7.5	23	Dec-01

Beinn Ghlas	National Wind Power Ltd	Argyll & Bute	8.4	14	Jun-99
Deucheran Hill	Powergen Renewables	Argyll & Bute	15.75	9	Nov-01
Tangy	SSE	Argyll & Bute	15	15	Dec-02
Bowbeat Hill (Emly Bank)	Powergen Renewables Ltd	Borders	15	12	Sep-02
Bowbeat Hill (Roughside Hill)	Powergen Renewables Ltd	Borders	15	12	Sep-02
Dun Law	CRE Energy Ltd	Borders	17.16	26	Jul-00
Windy Standard (Gallow Rig)	National Wind Power Ltd	Dumfries and Galloway	10.8	18	Sep-96
Windy Standard (Polwhat Rig)	National Wind Power Ltd	Dumfries and Galloway	10.8	18	Sep-96
Hare Hill	CRE Energy Ltd	East Ayrshire	13.2	20	Nov-00
Myres Hill	NEG Micon	East Renfrewshire	1.8	2	Dec-01
Forss	RES	Highland	2.4	2	Apr-03
Novar (Bendeallt)	National Wind Power Ltd	Highland	9	18	Oct-97
Novar (Meall an Tuirc)	National Wind Power Ltd	Highland	8	16	Oct-97
Bu Farm (Rothiesholm)	TXU Europe	Orkney	2.7	3	Mar-02
Sigurd	NEG Micon	Orkney	1.5	1	Nov-00
Thorfinn (Burgar Hill)	NEG Mikon Ltd	Orkney	2.75	1	May-02
Thorfinn (Burgar Hill)	NEG Mikon Ltd	Orkney	1.5	1	Apr-00
Burradale	Shetland Aerogenerators Ltd	Shetland	3.7	5	Dec-00

Hagshaw Hill (S10)	CRE Energy Ltd	South Lanarkshire	7.5	13	Nov-95
Hagshaw Hill (S15)	CRE Energy Ltd	South Lanarkshire	7.5	13	Nov-95

Enterprise and Culture Committee

Meeting 30 March 2004

E-Petition PE 694 on Availability of Broadband Services

Introduction

1. **Petition 694** is an e-petition. The petition, from **Alan Kennedy and Joyce Kennedy on behalf of the Machars Broadband Action Group**, raises concerns about the availability of broadband services, citing south west Scotland as a particular example. It calls for the Scottish Parliament to urge the Scottish Executive to ensure provision of broadband facilities to all communities throughout Scotland by mid-2005.

Progress of the Petition

2. The petition was raised on 10 December 2003 and was available for on-line signature on the Parliament's e-petitions webpage until 18 February 2004.
3. At its meeting on 27 January the Enterprise and Culture Committee considered the outline approach to its broadband inquiry. At that meeting (in the expectation that the petition may be formally referred to it in due course) the Committee agreed to take evidence from the petitioner as part of the broadband inquiry. This evidence session has now been arranged for 30 March.
4. The petition received 384 on-line signatures, and was formally submitted to the Parliament. It was considered by the Public Petitions Committee at its meeting on 3 March 2004, at which the petitioner made a short presentation. The Public Petitions Committee agreed formally to refer the petition to the Enterprise and Culture Committee as part of its broadband inquiry.

Further information

5. A written submission to the inquiry from Mr Alan Kennedy is attached at Annex A.
6. An e-petition brief prepared for the Public Petitions Committee is attached at Annex B. Further details on the petition, and on-line discussion prompted by it, are available on the Public Petitions Committee's [e-petition webpage](#).
7. The Official Report of the Public Petitions Committee's consideration of the petition is now available on that Committee's [webpage](#).

Recommendation

- 8. The Committee is invited formally to accept the referral of the petition.**
9. The Committee has previously agreed to take the issues raised by the petitioners into account as part of its current inquiry. These issues can be explored with the petitioner in oral evidence. Any particular points raised could be put to the Minister when he appears to give evidence, and addressed in the inquiry report.
- 10. On this basis the Committee is invited to agree formally to conclude its consideration of the petition.**

Annex A

SUBMISSION TO THE ENTERPRISE COMMITTEE INQUIRY INTO BROADBAND IN SCOTLAND

From: Alan Kennedy

Introduction and Background

I am now retired after a series of careers in the armed forces, the oil industry and latterly in London as a consultant working with just about all the major UK companies and government organisations on best business practices. I was also a visiting lecturer at Strathclyde University on Facilities Management. Until September 2003, my experience of Broadband was limited to a simple non technical awareness that it was desirable but not available in my rural area.

As part of my retirement interests I am involved in research concerning characteristics of botanical DNA and plant identification.

I became frustrated at not being able to receive and send large file transfers on plants via my PC. General inquiries made it abundantly clear that Broadband was unlikely to reach my area in any form for the foreseeable future. Nothing appeared to be happening to improve things so I formed the Machars Broadband Action Group with a view to getting Broadband in by whatever means to cover this very remote and rural area in Galloway. After a very steep learning curve on Broadband and a lot of hard effort from the 3 other team members and the local IT advisor for Scottish Enterprise we have at last negotiated for a community satellite -fed wireless network to be set up which will cover Wigtown, Whithorn and the surrounding areas. It should begin to operate in March 2004. Eventually, if the support is forthcoming, systems will be interlinked to cover the whole of the Machars peninsula.

It is from the experiences gained by me throughout the set up phase that I wish to submit some key observations and then my proposals on 'what future action is required'.

The Committee may also be aware that I have submitted an E-petition, No 694, to the Scottish Parliament, seeking action to address the lack of Broadband in Scotland.

I make the following observations:

1. Many people still have no idea what Broadband is or what it can do. These include some PC users. Many and varied have been the responses to attempts to explain it! Those ranged from "is it something to do with mobile phones?" to "do I need to rewire my house?"
2. Those who do understand Broadband have, in many cases, lost hope of getting it since they see trigger figures set by BT, which

they believe are unrealistic---or they see no trigger figure at all, which is even worse!

3. There is a lot of anger and frustration at BT who fail to tell the full story concerning Broadband and conversion of exchanges. BT do not say that the signal will not normally reach beyond 6 Kms as the wire goes from the exchange. Nor do BT explain that their alternative 'Exchange Activate' is an inferior form of Broadband at a fairly hefty premium. BT do not tell you that Broadband needs a copper based line cable so new build sites with other types of cabling may not be able to receive BT Broadband.
4. Even those communities who hit the Broadband trigger figure have to wait months thereafter for BT to do the exchange conversion work. Having had considerable pressure applied to announce more trigger figures BT have now singularly failed to demonstrate that they understand the nature of the public's concern that Broadband upgrading is being unfairly applied across Scotland There are persistent beliefs that BT cherrypick small key highly populated areas to install Broadband to deter alternative commercial sources of supply being launched.
5. One of the most important points and one that has taken a lot of hard work to overcome is the belief amongst the public that if they have registered their interest with BT that is all they have to do. This has come about because nowhere are they seeing details of any alternative technical solution such as leased line or satellite. This MUST change if Broadband is to be introduced on a truly universal basis across Scotland.

There is absolutely no concept of alternative solutions in most people's minds. At present BT practically has a monopoly on provision of Broadband information. This is holding back progress and keeping costs artificially high. Competition must be a driving factor in the process of getting Broadband established everywhere.

6. Community involvement is a key factor in getting Broadband by whatever means.

In my case one town had a very active and involved Chamber of Commerce, which really backed the Action Group. The other town had a Business Association, which was totally apathetic and failed to appreciate the benefits or indeed take any part in drumming up support. The latter situation made it much harder to get names albeit that town had greater potential for Broadband users.

The above observations represent one person's viewpoint but I am sure most if not all those involved in my local campaign and also many of those

throughout Scotland who have backed my parliamentary petition would support me

WHAT FUTURE ACTION IS REQUIRED?

1. Re technological, commercial barriers, etc

a) Most independent Broadband service suppliers bemoan the cost of special broadband' leased lines', only available from BT. I understand costs, which can be up to £20,000 per annum depending on the location and the bandwidth provided, makes them prohibitive to use as an alternative to satellite services albeit they would offer significant technical advantages. BT's attitude towards their tariffs is pretty inflexible by all accounts. Pressure needs to be brought on BT to make such technology available at lower cost to independent service providers, particularly where rural areas are affected.

b) If anyone wants broadband just about the worst thing they can do is to register interest with BT. Doing that without considering alternative suppliers means immediately losing options for competition re costs and service. What is sorely needed is some system whereby an independent register of people interested in signing up for Broadband can do so. All service providers should be able to access this list. I am sure, with a little bit of thought, it could be done in a variety of ways without involving contraventions of the Data Protection Act

c) MPs and MSPs have, in the main, backed and supported the introduction of Broadband. However the message about its importance does not yet seem to have got through to some local government officials and elected councillors. They need to take a much more active role in promoting all broadband schemes, particularly in rural areas, and some direct education on the subject would not go amiss

2. Re Policy Development and Funding

a) More must be done to encourage communities to start their own broadband action groups. I had to develop my own template to do it involving, public promotion, registration procedure, research on suppliers, prequalification procedures, specifications, tender and tender evaluation. Why should other bodies interested in doing what I did not have some way of accessing the format? More needs to be done here. Maybe giving every bona fide action group a grant of £100 would help. I spent quite a bit of my pension as well as time getting things started!

b) We need an effective public advertising campaign to tell people ALL about Broadband and how to get it. Scottish Enterprise is trying to do this but the effort is slow, disjointed and far too centrally controlled with little imagination. More delegated/financial authority needs to be given to local managers to spend as they see fit on local promotions. I would add that locally, in D&G, the support from Scottish Enterprise has been very good despite the rein on anything innovative from the centre.

c) It seems ludicrous that Scottish Enterprise's Broadband installation grants are not available to those in the fishing or farming industries. This is apparently an EU decision. It appears that other European countries are either ignoring it or have found a way around this rule. We must do the same since our rural industries must have access to technology such as Broadband on the same basis as everyone else.

Should new Targets be Set?

a) I remain convinced that mid 2005 for 100% broadband across Scotland is achievable. However it will simply not happen if it is left to BT and the occasional alternative suppliers to achieve it. No one has yet really addressed the really small rural exchanges problem. I understand that there are about 400 with no hope of being converted under current forecasts. Yet these are the critical rural areas for encouraging opportunity and developing new business. In my own area it is reported that two new firms have declined to set up outlets because there is no Broadband. Alternative service options are not publicised and appreciated.

What is needed is a clear unequivocal policy that addresses all the problems identified. It must bring all the ends together and it must be widely publicised in practical language that the public can understand and relate to. At present such a policy does not exist as far as the public are concerned.

Should New targets be Set?

a) I feel we need a simple slogan to get Broadband, from the concept of uptake through to installation.

At present I understand uptake in even city and town centres is not as high as forecast. Publicity needs to appear nationwide but especially in the rural areas as a high profile message. It should include mid 2005 as a target.

Links with UK Policy Development.

From the contacts I have made in England the spread of Broadband is even less positive than Scotland! Again, a clear lack of government and local authority will, apart from a few regional exceptions such as in Cumbria, has given rise to much pessimism. Wales seems much in the same boat. Northern Ireland alone has had the courage and foresight to simply say 'let's do it' and is getting on with it across the province. To follow their lead would be applauded and in the interests of rural community regeneration.

Are Targets for Broadband Impact Required?

Heavens, No! Setting a target from a central authority seems to be the bureaucratic kiss of death to any self-respecting project these days. If the cause is justified, and Broadband certainly is, targets are superfluous and Broadband will become a well recognised and valued information highway

provided government takes its responsibility for freeing up the obstacles and empowering those who want it with the ability to get it.

Final comment

It is interesting to note that in Japan wireless systems now provide more public access than traditional hard wired Broadband systems. We need to understand what and why things are happening elsewhere. We do not have much time left to catch up and keep pace with advances in technology. Action is needed now if Scotland is to have any significant role to play in generating future wealth and well-being across the whole country.

Annex B

E-petition Brief for Public Petitions CommitteeDate Prepared: 20th February 2004**1. E-PETITION SUMMARY DETAILS***1.1. Title:*

'Broadband for All of Scotland by mid 2005'

1.2. Petitioners:

The e-petition was raised by:

Alan Kennedy of Machars Broadband Action Group
 Wigtownshire
 DG8 9DF

1.3. Dates e-petition opened and closed:

The e-petition was raised on 10th December 2003 and was closed for signatures on 18th February 2004, after running for a period of 11 weeks.

1.4. Statistical overview of signatures:

A total of 383 signatories signed this e-petition; 357 were from Scotland, 19 from England; 3 from Wales; and 1 each from New Zealand, Switzerland, Ukraine, and the United States.

The distribution of the 357 Scottish petitioners by postcode is:

AB	47	KA	53
DD	3	KW	86
DG	18	KY	15
EH	35	ML	7
FK	10	PA	5
G	37	PH	15
HS	1	TD	2
IV	20	ZE	3

1.5. Validity of signatures:

388 names were entered into the e-petition database, and only five of these names had to be removed from the list of signatures due to duplication or clearly invalid names.

2. FULL E-PETITION TEXT

It is generally acknowledged that the introduction of Broadband technology is both desirable and essential to the development of business and the empowerment of individuals wherever they may live in Scotland. Yet the present situation is neither satisfactory, fair nor defensible in terms of both business and community development.

Despite recent announcements by British Telecom the fact remains that many communities, particularly in the rural areas, will still find it impossible to meet the targets levels, arbitrarily and often insensitively set by BT, or are too small to be ever given a target figure for Broadband installation. Alternative options, such as satellite broadband and wireless based networks, whilst technically feasible, tend to be expensive to operate and erratic in performance standards over varying geographical areas.

The present support of Scottish Enterprise in encouraging communities to take up Broadband is praiseworthy but in itself is not sufficient to overcome the problem. . Unless The Scottish Parliament grasps this issue and resolves it now we will simply further the division of the 'haves' and 'have nots' and perhaps fatally weaken the prospects of rural communities surviving and competing in society and business in the years ahead.

This petitioner seeks to request that the Scottish Parliament takes action to enable it to declare that it will, by whatever means are necessary, ensure the provision of Broadband facilities to all communities throughout Scotland by mid 2005.

3. ADDITIONAL INFORMATION PROVIDED BY THOSE RAISING THE E-PETITION

A summary of the additional information provided by the principal petitioner is: "BT have just announced in November 03 that 65% of Scottish households have access to Broadband. The majority of these tend to be in the central belt of Scotland and larger cities and towns elsewhere where user take up is higher. BT go on to say that this figure will rise to 70% in 2004 and could rise to 97% if these newly announced trigger levels are met.

However most users currently without Broadband will find it difficult to accept BT's optimism. 400 of Scotland's smallest communities, by BT's own admission, will still not have a trigger figure and indeed have little hope of ever getting one. Equally worrying is the fact that many small towns have had trigger figures set which appear to have absolutely no relevance to the particular circumstances of that community and are unlikely to be achieved within any foreseeable time frame, despite the efforts of Action Groups like mine.

If there is one thing that would enable Scotland to perform better in almost every aspect of community and business affairs both at home and abroad it is improvement in how we communicate. Broadband is a key tool to achieving this and we need to act now for everyone's sake."

The complete additional information can be found at <http://itc.napier.ac.uk/e-petition-scot/backgroundinfo.asp?TopicID=16>.

4. SYNOPSIS OF COMMENTS TO THE SITE

This section provides an analysis of the comments entered into the integrated discussion forum during the collection signatures. There were 12 comments related to the issue entered by 9 individuals.

The level of interaction between commentators can be seen from the fact that of the 12 comments, over half were made in reply to another comment. Commentators discussed a variety of issues surrounding broadband in rural Scotland, primarily highlighting their current problems in obtaining this service. Some commentators expressed concern that their remote communities will lose business presence because they could not offer broadband facilities. Others debated the viability of alternative broadband technologies, including wireless and Exchange Activate. A representative from Scotland BT also participated in the discussion, offering details about BT's strategy to wire all of Scotland by 2005. Finally, a commentator from the Ukraine noted that this issue extends beyond Scotland, and argued that the more developed countries such as the UK should commit to bridging the digital divide as an example for other nations.

The full text of the individual comments is available on the E-petitions webpage.

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PROCEDURES COMMITTEE

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19 March 2004

Dear Alasdair,

Inquiry on Timescales and Stages of Bills

As you may already be aware, the Procedures Committee is conducting an inquiry into the procedures and practices that determine the speed at which Bills progress through Parliament. I attach a copy of a Press Release containing further information on the inquiry.

My purpose in writing is to draw your attention to this inquiry and to invite you, as Convener of the Enterprise and Culture Committee, to submit written evidence. It indicates on the Press Release that the initial deadline for written evidence is 31 March 2004, although we have set a separate deadline for Conveners of Wednesday 5 May. We look forward to receiving any evidence you wish to submit by that date. You may also wish to draw this letter to the attention of the members of the Enterprise and Culture Committee.

If you have any questions or wish to discuss this please do not hesitate to contact me.

Yours sincerely,

Iain Smith MSP
Convener



12 February 2004

PROCEDURES COMMITTEE LAUNCHES INQUIRY INTO LEGISLATION PROCEDURES

The Procedures Committee is undertaking a major inquiry into the procedures and practices that determine the speed at which Bills progress through the 3-Stage process from introduction to passing.

Convener of the Committee, Iain Smith MSP said:

"This will be a major piece of work for the Committee. We plan to review the whole way that Bills are timetabled to ensure that there is sufficient time throughout the process for proper scrutiny of Bills to be carried out. The Committee is keen to get written evidence from as wide a range of people as possible who have experience of engaging with the Parliament in relation to a Bill."

In particular, the Committee will be considering:

- whether sufficient time is available for evidence-taking at Stage 1, particularly when more than one committee is involved;
- whether sufficient time is available during Stages 2 and 3 for members (and outside interests) to prepare amendments for lodging, to consider amendments lodged by others and to debate amendments at meetings of committees and the Parliament;
- whether the current minimum intervals between Stages are appropriate;
- whether committees involved in considering a Bill after it is first introduced have sufficient opportunity at later Stages to consider the impact of amendments; and
- to what extent the timetable should be determined by the Executive (or the member-in-charge of the Bill), the Bureau, committees or the Parliament as a whole.

The main focus will be on Executive Bills, which have generally been subject to more timetabling pressure. However, the scope of the inquiry extends to other types of Public Bill – Committee Bills and Members' Bills – and will also take into account the effects of any procedural changes that may be proposed on specialised types of Bill such as Consolidation Bills and on Private Bills.

Written evidence is invited from any MSP, person or organisation with an interest in or previous involvement in, the passage of a Scottish Parliament Bill. Evidence should be submitted, preferably in electronic form (MS Word preferred), to the Clerk to the Procedures Committee, procedures.committee@scottish.parliament.uk or at The Scottish Parliament, George IV Bridge, Edinburgh EH99 1SP. Please keep submissions to a maximum of 6 sides of A4 if at all possible. A brief summary of the main points at the beginning or end would be helpful.

Evidence submitted may be published by the Parliament, in electronic or paper form. If you do not wish your submission to be made public, please request this clearly at the start of the submission giving your reasons. Any such request will be considered by the Committee.

The initial deadline for written evidence is **Wednesday 31 March 2004**. Please indicate whether you would be prepared also to give oral evidence to the Committee if invited to do so. It is expected that oral evidence will be taken in late March and during April, with a view to completing the inquiry, if possible, before the summer recess.

For further information the Media Contact is:

Sally Coyne: 0131 348 6269 (RNID Typetalk calls welcome)
E-mail: sally.coyne@scottish.parliament.uk

For specific committee information contact:

Lewis McNaughton, Assistant Clerk to the Committee: 0131 348 5178
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For public information enquiries, contact: 0131 348 5000

For general enquiries, contact 0845 278 1999 (local call rate) Text phone: 0131 348 5415/ 0845 270 0152 (local rate) (RNID Typetalk calls welcome)
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