# TRANSPORT AND THE ENVIRONMENT COMMITTEE

Wednesday 3 November 1999
(*Morning*)

£5.00

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# TRANSPORT AND THE ENVIRONMENT COMMITTEE
## 5th Meeting

**CONVENER:**

*Mr Andy Kerr (East Kilbride) (Lab)

**COMMITTEE MEMBERS:**

*Helen Eadie (Dunfermline East) (Lab)
*Linda Fabiani (Central Scotland) (SNP)
*Robin Harper (Lothians) (Green)
*Janis Hughes (Glasgow Rutherglen) (Lab)
*Cathy Jamieson (Carrick, Cumnock and Doon Valley) (Lab)
*Mr Kenny MacAskill (Lothians) (SNP)
*Des McNulty (Clydebank and Milngavie) (Lab)
*Nora Radcliffe (Gordon) LD
Tavish Scott (Shetland) (LD)
*Mr Murray Tosh (South of Scotland) (Con)

*attended

**THE FOLLOWING MEMBER ALSO ATTENDED:**

Elaine Smith (Coatbridge and Chryston) (Lab)

**WITNESSES:**

Richard Atkins (Cellstructures International Ltd)
Nick Greer (Vodafone Ltd)
David Lumley (Department of Trade and Industry)
Patrick McDonald (Department of Trade and Industry)
Bob Perkins (Cellstructures International Ltd)
Richard Rumbelow (Orange Personal Communications Services Ltd)
Gordon Sleigh (Atlantic Telecom Group plc)
Roger Wilkins (Vodafone Ltd)
Nicholas Williams (Department of Trade and Industry)

**COMMITTEE CLERK:**

Lynn Tullis

**ASSISTANT CLERK:**

David McGill

# Scottish Parliament

## Transcript and the Environment Committee

*Wednesday 3 November 1999*

(*Morning*)

[THE CONVENER *opened the meeting at 09:07*]

**The Convener (Mr Andy Kerr):** I open this meeting of the Transport and the Environment Committee.

We have received an apology from Tavish Scott.

I suggest that we consider in private item 1 on the agenda, in regard to the questions that we will ask and the strategy that we will pursue in this morning's questioning of witnesses on the subject of telecommunications development. Is that agreed?

**Members** *indicated agreement.*

**The Convener:** In that case, I ask members of the public to vacate their seats. I expect that the private session will not last longer than 45 minutes.

09:08

*Meeting continued in private.*

09:48

*Meeting resumed in public.*

## Telecommunications Development

**The Convener:** I welcome the public, the press and the witnesses to this committee meeting. We shall move on to item 2 on the agenda, which is the beginning of our inquiry into telecommunications development and the consideration of evidence from the many organisations that submitted written responses, of which there were more than 100. Using those submissions, we decided on a number of oral evidence sessions. Today, we are taking evidence from the Department of Trade and Industry and from a panel of telecommunications companies.

We appreciate the effort that all the organisations have put in. We appreciate also the fact that they have managed to come before the committee at such short notice. I hope that we have a fruitful session this morning.

I welcome Nick Williams, Patrick McDonald and

David Lumley from the Department of Trade and Industry and I ask them to take their seats at the table. In this committee we operate on first name terms, and I hope that we will continue to do that in this morning's session.

We have a number of areas that we wish to discuss with you. Time pressure is always present, so I have asked questioners to be succinct. We would appreciate it if you were focused with your answers.

I invite Janis Hughes to kick off this session.

**Janis Hughes (Glasgow Rutherglen) (Lab):** Could you give me some information on the contribution of the telecommunications sector to the economies of Scotland and the UK as a whole?

**David Lumley (Department of Trade and Industry):** In our memorandum, we set out some statistics for the UK as a whole. Telecoms underpins the whole economy, because the whole economy is dependent upon it. The wider impact of the telecoms industry on the economy is more important than the contribution of the telecoms sector to gross domestic product.

**Janis Hughes:** Looking at the future development of the sector, I know that the universal mobile technology system will be licensed next year. Could you outline some of the anticipated future development trends of the sector, what the nature and the level of the demand is likely to be, and could you also outline the technology that will be needed to meet that demand?

**David Lumley:** This year, we are seeing explosive growth in the mobile telecoms sector. With the third generation of mobile telecommunications that you referred to, we will see a range of new applications using mobile technology, such as internet on the move and video delivery to mobile terminals.

We will also see wider developments, such as convergence across the various communications technologies and, indeed, convergence between fixed and mobile telecommunications. Mobile telecommunications now compete with fixed-line communications at some times of the day and for some telephone calls.

**Nicholas Williams (Department of Trade and Industry):** If I may briefly expand on what was said, from what I have read, it seems that the committee has a general interest in the growth of mobile telecommunications, which has led to the proliferation of masts and base stations. To give an indication of where those developments might lead in the near future, currently the penetration of mobile phones in the UK is 33 per cent. In places such as Scandinavia and Italy, the percentage

penetration ranges from the high 40s to the 50s, and is still growing. We expect that, within the next couple of years, the penetration of mobile phones in the UK could be as high as 50 per cent.

In terms of the type of usage, we are seeing movement away from using the phone for voice transmission to using it for data transmission. Some figures released by the industry suggest that 98 per cent of all traffic will be data by as early as 2003. Those figures underpin the explosive growth that David mentioned earlier.

**The Convener:** Is it fair to say that third-generation mobile telecommunications technology requires a mast system with more intense emissions?

**David Lumley:** That will depend on the density of coverage of cells, as one factor.

**Nicholas Williams:** On the technical side, it will operate at a slightly higher gigahertz frequency, so the signal will be able to travel less far. It is therefore possible that we will have more structures. Whether we have a proliferation of sites depends on whether existing sites can be used, but the network will probably have more base stations than the current network, which operates at 900 MHz.

**Robin Harper (Lothians) (Green):** Is the implication of what you are saying that a higher-powered system will have to be used if data as well as voice are transferred?

**Nicholas Williams:** I am not sure that I could say that before the committee; I would need to talk to a radio frequency engineer. I would be happy to do so.

**Robin Harper:** It is a question that needs to be answered.

**Linda Fabiani (Central Scotland) (SNP):** What are the sector's current obligations under the legislation and licensing arrangements, and what obligations remain to be met?

**David Lumley:** In licences granted under the Telecommunications Act 1984, there are conditions on the coverage and/or level of service. The current obligation on the mobile operators is that they should roll out their networks to cover at least 90 per cent of the UK population. That figure has already been well exceeded. The obligation in the proposed licences for third-generation mobile services will be to roll out to cover at least 80 per cent of the population by 2007.

If you wish, I can go on to talk about other obligations, but you will probably—

**Linda Fabiani:** Could you outline them for us?

**David Lumley:** In addition to those licence obligations, all the operators clearly have to comply with health and safety legislation and consumer protection legislation. In the case of the former, operators are expected in practice to be able to demonstrate that they can comply with National Radiological Protection Board guidelines.

Would you like me to talk about planning obligations?

**Linda Fabiani:** First, have the health and safety obligations been met in every case?

**David Lumley:** I believe that to be the case, yes.

**Linda Fabiani:** You mentioned that you had exceeded initial targets. Is that the case for all operators, or were you talking about the sector overall?

**David Lumley:** All operators have rolled out their networks to well beyond the 90 per cent level.

**Linda Fabiani:** Do you monitor that, to ensure that they are meeting their targets?

**David Lumley:** We monitor whether they have met their obligation to hit the 90 per cent target. To go beyond that is primarily a commercial decision for the operators, although, under the Telecommunications Act 1984, the secretary of state does have a general duty to secure the provision of telecommunications services to meet a reasonable demand.

**Linda Fabiani:** You mentioned that the next generation of mobile phones was coming. What is the likely future phasing of the licensing and obligations on the sector?

**David Lumley:** The auction of the licences will be held early next year. The information memorandum for the auction was published on 1 November.

**Linda Fabiani:** Will the obligations under those licences be the same as for previous ones?

**David Lumley:** The coverage obligation will be 80 per cent rather than 90 per cent, to be achieved by 2007.

**Linda Fabiani:** Will the health and safety and consumer protection obligations be the same?

**David Lumley:** The Health and Safety at Work etc Act 1974 applies anyway, regardless of what the licence says. That applies to all our obligations. I do not know whether Nick can add anything further on the timetable.

**Nicholas Williams**: Not usefully.

**Cathy Jamieson (Carrick, Cumnock and Doon Valley) (Lab):** Is there any responsibility for geographical coverage rather than population coverage? A huge number of areas do not have access to those services.

**David Lumley:** No, I do not think that there is. The competitive urge—"I can sell a mobile phone that will get you coverage anywhere"—will come in the long term. Currently, we do not have a geographic coverage requirement.

**Robin Harper:** Do you regard 80 per cent as virtually saturation point?

**David Lumley:** No, I do not think that it is. That is a minimum requirement that we want to reach. I am sure that, as with the current generation of mobile phones, the market pressure will be to achieve as near 100 per cent coverage as possible. When people buy a mobile service they want to know that they will be able to get access to that service wherever they travel.

10:00

**Mr Murray Tosh (South of Scotland) (Con):** I pick up on the point that Cathy made. One of the complaints that I hear from businesses in more isolated areas, which do not have these services, is that it is a material disincentive to trade and industry. That must apply to all sorts of social and personal uses. How could this committee, or the Parliament, establish a regime that would insist on a fuller geographical coverage? Given the current state of technology, what would be the physical implications, on the ground, of pursuing that line of action?

**David Lumley:** I will begin by talking about the universal service obligation. At the moment that applies only to voice telephony and to fixed telecommunications links. It requires the operators, mainly in the form of BT, to provide coverage, across the whole country, of a basic voice telephony service. The Office of Telecommunications is reviewing the universal service obligation.

Some of the issues that will arise in the context of that review, which is out to consultation, will concern whether the universal service obligation should be extended to broad band. There are arguments as to whether such an obligation, which is set by the Government, should follow social developments and respond to them or anticipate them. That issue is being raised in the on-going consultation process. If the committee wanted to pursue that matter, the universal service obligation might be something to consider, although it does not extend to mobile telephony.

**Mr Kenny MacAskill (Lothians) (SNP):** I am aware of the penetration, according to numbers per head in Finland. Are you aware of the geographic penetration of the service that is provided in that country? If it is better than here, why is that?

**Nicholas Williams:** I am not sure that I can answer your question on geographic coverage. In Finland, people tend to live in the south, near urban areas, and it is easy to build a network within that constraint. People often have a second home in the countryside, near the main conurbation. I suspect that geographic coverage is not 100 per cent, or even 80 per cent. If you want further information, I shall try to dig some out, but I do not know the answer.

**Mr MacAskill:** I would be obliged if you found out the geographic penetration in Finland. That would be useful.

**The Convener:** Do members have any other questions?

**Helen Eadie (Dunfermline East) (Lab):** I was interested in your reply to Linda Fabiani's question about the regulatory framework. Paragraph 12 of annexe C in your submission states that compliance with NRPB guidelines is not a condition of licences that are issued by the Department of Trade and Industry. Can you explain why that is so?

**David Lumley:** It is not a condition of the licences, because it follows from health and safety legislation rather than from the licences. In its guidance, the Government expects compliance with health and safety legislation to include the operator being able to demonstrate that he has complied with NRPB guidelines.

**Helen Eadie:** In paragraph 13 of annexe C, in your submission, you state:

"Further elaboration of how the precautionary principle in its widest context can be applied is being developed."

Can you tell us who is developing that, what the content of the guidance is likely to be and when it is likely to be made publicly available?

**Patrick McDonald (Department of Trade and Industry):** There are three levels on which the precautionary principle is elaborated. In the UK, the precautionary principle applies interdepartmentally to all Government activity. The European Commission is also considering the most appropriate way in which to apply the precautionary principle to its legislation. Mr Prodi announced last week that the Commission is reconsidering the way in which article 130r of the Maastricht treaty is worded and applied. Globally, the application of the precautionary principle is being reviewed following the Rio declaration. The precautionary principle is an ill-defined subject that is particularly difficult for policy makers to tackle sensibly and rationally. I cannot give much information on the timetable for guidance. Discussions are being held, and I am sure that the Government will try to produce sensible guidance as soon as it can.

**Helen Eadie:** Thank you. I have another

question. Is the thermal measure, which is used by the International Commission on Non-Ionizing Radiation Protection, linked to geographic limits on exclusion zones that surround telecommunications equipment? How, and by whom, are those limits determined? Will a reduction in the limits by a factor of five—as recommended by the House of Commons Select Committee on Science and Technology—have any impact on the geographic limits of exclusion zones that surround telecommunications equipment?

**Patrick McDonald:** Current levels are based on well-established thermal effects of microwave radiation. The limits are based on discussion between international experts on what constitutes an acceptable level of exposure, both occupationally and to the consumer. The issue of occupational exposure is broadly agreed, and there is little debate on acceptable occupational exposure levels. That argument includes the issue of exclusion zones around base stations, which vary in extent but are usually no more than a few metres.

The House of Commons Select Committee on Science and Technology has recommended that the industry adopt the ICNIRP guidelines, which include an arbitrary fivefold reduction in the limits of exposure to the general public. That reduction is generally agreed to be arbitrary. The World Health Organisation, ICNIRP and the NRPB make it quite clear that there is no scientific basis on which to apply that reduction. That is a sensible precautionary step, however, and we are discussing with the industry the potential impact of applying ICNIRP guidelines to its networks. I cannot say much more about that at this stage, as those discussions are still in progress.

**Nora Radcliffe (Gordon) (LD) :** When are those discussions likely to come to a conclusion?

**Patrick McDonald:** We will almost certainly be responding on this not to the House of Commons select committee but to Sir William Stewart's independent expert advisory group on mobile phones, which will be reporting in the spring. I anticipate that a response from Government and from the industry will come sometime in the summer of next year.

**Cathy Jamieson:** You mentioned that the fivefold reduction is an arbitrary figure. Am I correct in saying that that came about as a result of guidelines from the European Community? They would presumably have taken scientific evidence before arriving at their conclusion? Has there been discussion at a European level during which guidance on this matter has been issued to member states?

**Patrick McDonald:** No. The fivefold reduction came from the ICNIRP, which is an international

body but not part of the European Community. It is a body of experts. They are quite clear that the reduction is not based on scientific evidence; it is a precautionary, arbitrary reduction.

**Cathy Jamieson:** Has the European Community in fact issued guidance on this to its member states? That is the same as the guidance to which I was referring.

**Patrick McDonald:** Indeed, yes. The EC has issued a recommendation on the exposure limits, adopting the ICNIRP guidelines. That was done in full recognition of the fact that there is no scientific basis for doing that, but it is a precautionary step. It is also interesting to note that the EU recommendation came after very detailed consideration of whether the precautionary principle should be applied to it. With the exception of one member state, that was rejected as inappropriate.

**Robin Harper:** I would like to quote from paragraph 25 of the main part of the DTI's submission. It states:

"Whatever views there may be about the appropriateness of the application of the Precautionary Principle in respect of mobile communications equipment, it is clear that, because public exposure is so low, any arbitrary measure, whether in reducing exposure or in specifying a 'safe' distance from an installation, would be extremely difficult to justify, and by reducing network availability would restrict access to mobile communications services."

Is that the present position of the DTI?

**Patrick McDonald:** It is.

**Cathy Jamieson:** I have a few more questions on current planning control measures. The DTI submission seems to suggest that making mobile phone masts and so on subject to full planning approval would slow down the rollout of the network and would cause problems compared with the current system of prior approval. How much impact would the fact that such installations must be subject to full planning control have?

**David Lumley:** It is difficult to be specific about that. If the developments were subject to full planning control, we would expect two things: first, applications would take longer and there would be less certainty among operators as to where and when they would be able to locate their masts; secondly, the issue would become more dependent on local politics. There would therefore be extra uncertainty as to what each local authority will decide. That could lead to a rather more patchy coverage of communications networks across the country.

**Cathy Jamieson:** Are you suggesting that the main issues that you are concerned about are the length of time for planning approvals to be granted and a potential lack of consistency across the board?

**David Lumley:** That is correct.

**Cathy Jamieson:** Given that people are elected to local politics to represent local people, would it be a bad thing for local people to have a say in the process?

**David Lumley:** There is perhaps a slight difference between telecoms developments and other planning issues. There is a balance of local advantages and disadvantages for a lot of planning issues. Because telecoms is a national infrastructure, the balance between local advantages and disadvantages and national advantages and disadvantages may be different.

**Cathy Jamieson:** Why should people need planning permission to build an extension to a house, while there is no necessity for planning permission if a huge telecoms mast is to be built outside someone's front door? Why should not local people have a say in those planning decisions?

10:15

**David Lumley:** It is a question of balance between the desire for a national network that is effective throughout the country and local considerations, whether environmental or concerned with health and safety.

**Cathy Jamieson:** Do you think that the introduction of full planning control is likely to result in a pattern of problematic cases?

**David Lumley:** In some parts of the country, even under the permitted development rights, local authorities are being quite difficult about giving prior approval.

**Cathy Jamieson:** Is there a particular type of case in which that is happening?

**David Lumley:** There is no particular pattern. It depends on the characteristics of each local authority.

**Cathy Jamieson:** My final question is probably the most crucial. In your submission, you suggest that it would be unhelpful to have a variation in approach across the UK. Can you say why that is a problem? Why should not things be done differently in Scotland?

**David Lumley:** Any inconsistency in approach will entail an inconsistency in network coverage. That has a national impact and might also have an impact on the competitiveness of the local area.

**Mr Tosh:** I would like to follow up the point about local authorities being, as you put it, quite difficult. Planning matters do not end with local authorities, do they? If local authorities take arbitrary or perverse decisions, or even decisions that are slightly wrong, the industry has an appeals system. As appeals patterns build up, planners study appeal decisions, report on them to their committees and advise them on the likely outcome of appeals.

Is not it the case that the very existence of an appeals procedure means that changes in the planning regime would bed in quite quickly as people got used to the new rules? Could not the industry suffer a few disruptions until everyone was used to the new pattern of working? Is it really such a threat, given that the appeals system acts as a control on difficult councils?

**David Lumley:** It is possible that, if we had full planning control, we would end up in a few years' time in a situation not unlike the one in which we find ourselves now. The intervening period, however, would probably be one of high uncertainty for the industry, affecting investment plans and confidence. We could lose time and fall behind other countries in developing our telecommunications network.

**Nicholas Williams:** The other consideration that members might want to bear in mind is the Government's commitment to make the UK the best place to do business electronically by 2002. David has alluded to our concern that, if Scotland has what operators perceive as a slower procedure than is found in other parts of the country, they might develop their operations more quickly in other areas. As a result, other areas would see the benefits of this new electronic age, with the competitive advantage that it brings.

That raises the question of how operators will perceive their roles in our plans if they feel that implementation might take longer in one area, which might also regulate more than another.

**Nora Radcliffe:** Planning is about getting the right time and the right place. If that means that things take a little longer, so be it.

So far we have been discussing issues such as how planning will hold up rollout. However, if companies already have 90 per cent coverage, is there anything to discuss?

**David Lumley:** Although coverage is approaching 100 per cent, the increase in demand as more customers get on the network means that we have to split existing cells to allow the larger number of calls on the network. If there is slowdown, although we will maintain the almost 100 per cent coverage, calls will increasingly fail.

**Nora Radcliffe:** Although you are probably not the right people to ask, what measures are being taken by the industry to develop the technology? Can we do the same job with fewer masts?

**David Lumley:** That question is worth asking the industry. Operators' licence conditions oblige them to consider mast sharing or the sharing of

apparatus before they decide to install new apparatus.

**Nora Radcliffe:** How stringently would that condition be applied?

**David Lumley:** The local authorities have the right to ask whether operators have investigated sharing, and prior approval might be refused if operators have not made reasonable efforts to do so. However, we should bear it in mind that there is a trade-off between mast sharing and the size of masts.

**Linda Fabiani:** My question very much touches on what Nora Radcliffe was saying. As Murray Tosh pointed out, under the present system, operators can appeal if they do not get prior approval from the local authority. If an operator does not comply with the terms of the prior approval, what rights do local authorities have? Has the Department of Trade and Industry ever taken sanctions against an operator who has not met the terms of the licence?

**David Lumley:** In answer to your first question, in England and Wales, if an operator applies to a local authority for prior approval, the operator must have complied with the conditions of permitted development. If that has not happened, the local authority can refuse to give prior approval. Such conditions include protecting the amenity of buildings as far as is practicable.

The local authority might also wish to comment on the siting or appearance of apparatus, even if the conditions of permitted development have been met. In such circumstances, the operators would try to accommodate the planning authority's concerns, although there might be technical reasons why they could not do so.

**Linda Fabiani:** What if the operators felt that they could not do so?

**David Lumley:** It would be an issue for discussion between the planning authority and the operators. Those discussions often take place before prior approval is sought. If that cannot be resolved, the local authority must take the decision as to whether it refuses prior approval, and the operators must decide whether to appeal against that decision or seek an alternative site.

**Linda Fabiani:** If the local authority says, "You have not complied with what we asked, so we are not giving you prior approval," do the operators still have the right to appeal?

**David Lumley:** I am not sure. I think that they do. Please check that with the industry.

**Linda Fabiani:** What about sanctions from the Department of Trade and Industry if licence conditions are not met?

**David Lumley:** I am not aware that we have

identified any need to do anything under licence conditions.

**Robin Harper:** Do we know what percentage of masts is shared?

**David Lumley:** The figure that we have is about a third.

**Mr MacAskill:** We should consider the regulatory framework in comparable European nations, given the penetration in the market. I mentioned Finland. What are its regulations on both planning and thermal measures? Helsinki is a comparable size to Edinburgh.

**David Lumley:** Unless Nick Williams or Patrick McDonald can help me, that is something that we will have to take away—we will give you further information if we can get it.

**Mr MacAskill:** As we are considering international comparisons, should we not examine what is happening in Finland, the Netherlands and Germany, for example?

**Patrick McDonald:** I can help with the application of guidelines for thermal effects. All European countries have adopted either the ICNIRP guidelines or the European Union recommendations. Some countries have the same experience as the UK, which is that some local authorities are concerned that those guidelines are not stringent enough, so they are delaying planning applications. I am not familiar with the planning side.

**The Convener:** There are strong similarities between prior approval and full planning. Arguably, the only major differences are the number of days that the local authority has to consider the proposal and that if the authority does not respond, it goes ahead. What is the effect of having to apply for full planning approval on the slowdown of the rollout?

**David Lumley:** The main difference between the two approaches is that, under the prior approval regime, the generic issue of what the planning position might be on those developments has been considered, and guidance and codes of practice have been developed. Therefore, there is a presumption that the operators will be able to go ahead with their development if they comply with the conditions set out in the permitted development rights. With full planning approval, there is no such presumption.

**Nora Radcliffe:** The timing concerns me. You are saying that the outline for the third set of licences is out now. They are being bid for early next year, but those responsible for your own work on the impact of that arbitrary reduction on the industry are not reporting until spring and the expert committee is not reporting until spring. There seems to be a mismatch in the timing. Will

you comment on that?

**David Lumley:** Although the auction for the third generation of mobile licences will be early next year, the rollout of the networks will not start immediately. That is likely to happen in 2002.

**Nora Radcliffe:** What effect will the fact that the reports are not happening until the spring have on what is required of operators?

10:30

**David Lumley:** Any decisions, including those in the report from Sir William Stewart's committee, will be available before the third-generation networks have to be rolled out. In the meantime, the information memorandum that was issued on 1 November sets out fully the current position, including the fact that the Transport and the Environment Committee is considering the position in Scotland and that there have been proposals from the Scottish Executive. The industry knows what the state of play is and can make a judgment about the level of certainty.

**The Convener:** I have a question about the telecommunications code. What is the process for and purpose of granting the code powers? In what circumstances do you envisage that such powers would not be granted? The enforcement functions of the director general of telecommunications apply to the conditions and licences related to the application of the code. What are the strategic issues?

**David Lumley:** The Secretary of State for Trade and Industry issues licences under the Telecommunications Act 1984, which are enforced by the director general of telecommunications. The decision on code powers depends on a judgment that the person applying for the licence will develop a network that is in the public interest, or something to that effect—I cannot remember the precise wording. It depends also on the secretary of state judging that the granting of code powers is necessary to enable that network to be developed.

**The Convener:** Why would powers not be granted? Why would it be considered unnecessary to have the powers? Can you give an example of a time when that has occurred in the past?

**Nicholas Williams:** No, but I can give a theoretical example. Many networks are add-ons—for example, they interconnect with a BT switch and ride over infrastructure that is operated by someone else. There is a plethora of network operators, but many of them house only technology that interconnects with a network. We would provide code powers only to someone, such as cable and mobile operators, who was rolling out the hard infrastructure to which many others would connect their much smaller switch networks.

**The Convener:** Are there any other questions?

**Elaine Smith (Coatbridge and Chryston) (Lab):** Are masts the only way in which to provide the technology?

**Nicholas Williams:** Masts are only one part of it. Base stations or antennae can be placed on existing structures. There are ground-based masts, which understandably cause significant planning issues, but much of the coverage, particularly in major city areas, will be provided by antennae attached to the sides of buildings. A ground-based mast, one would hope, is a solution of last resort. We expect operators to attach antennae to existing structures, as that is what is economically best. We understand that 65 per cent of antennae are attached to existing masts or buildings.

**Patrick McDonald:** I do not know whether the committee is aware of this, but Sir William Stewart is holding a public meeting in Edinburgh next Thursday.

**The Convener:** I have made the committee aware of that.

**Helen Eadie:** Could mobile phone transmissions be done via satellite, as opposed to via masts?

**Patrick McDonald:** There are a number of problems with satellite infrastructure. The telephone handset would have to be more powerful, because the switch would be further away. With geostationary satellites, the time delay means that real-time applications such as video would not be possible. Satellites are not a complete solution.

**The Convener:** I thank you all for coming.

We will have a short break, during which time the representatives from the telecommunications companies can come to the table.

10:35

*Meeting suspended.*

10:41

*On resuming—*

**The Convener:** I welcome the witnesses from the industry who have joined us. They are Bob Perkins and Richard Atkins from Cellstructures; Gordon Sleigh from Atlantic Telecom; Roger Wilkins from Vodaphone; and Richard Rumbelow from Orange. We are aware of the importance of the industry from your submissions and those of other organisations. We appreciate your willingness to come here today, and we appreciate your written submissions of evidence.

Members of the committee will ask you

questions. Perhaps you could indicate to one another who will answer each question—if anyone wants to make supplementary points, by all means do so. I hope that that is a suitable way of carrying out business.

**Robin Harper:** I will kick off with a general question. How is the siting, appearance and size of telecommunications equipment likely to be affected by demand and technological development?

**The Convener:** I am sure that almost everyone will want to answer that one.

**Bob Perkins (Cellstructures International Ltd):** As members will have seen from our memorandum, we are an independent network provider rather than an operator. As well as being about public service, our perspective is about using leading-edge technology to achieve the delicate balancing act that is necessary in public life between the regulatory process and the need to generate income and wealth for, in this case, the Scottish nation, and, in the case of local authorities, the local environment. We—particularly Richard Atkins, our technical director—spend a lot of time researching how we can use the newest technology to reduce the environmental impact and introduce new and better-quality services.

As our colleagues from the DTI indicated, the industry is concerned not about coverage, but about capacity. More and more people are using mobile telecommunications—there are more and more applications for this technology—and the existing coverage cannot cope with the demand. Some of the demand is industry developed and some of it is local need developed; in Scotland, almost uniquely in the British context, sparsity is a factor. We, as providers of infrastructure, will look wherever possible to introduce the newest technology and the newest techniques both to develop the network and to reduce the impact that it will have on the environment and on health and safety. That is the best global answer that I can give you at the moment.

10:45

**Roger Wilkins (Vodafone Ltd):** The good news is that more and more people are buying mobile phones. As the DTI representatives said, we have to build more sites to accommodate the additional customers. One of our typical base stations will handle 120 simultaneous calls. It does not take much mathematics to understand that, as the number of customers increases, more sites are needed.

The good news is that, every time a site is added, it covers a smaller patch. Ultimately, we will be able to have sites that cover 100 or 200 sq

m—they will be discreet and low powered, because they will not extend over a large area. At the end of this, there is a good story—this is not about more and more big things, it is about more and more small things.

**Robin Harper:** I understand that, instead of using masts, you can disguise your equipment as things such as lamp posts and burglar alarms.

**Bob Perkins:** Lamp posts, chimney pots—

**Gordon Sleigh (Atlantic Telecom Group plc):** I am in something of a unique position. Atlantic is not a mobile operator, but it uses radio technology to deliver services.

On your specific point, we would rather not use masts at all; we much prefer to locate our infrastructure on buildings. In all the major cities in Scotland, we have agreements with the local authorities, and for about 90 per cent of the network we have utilised existing local authority buildings or buildings rented from private landlords. Where we have to use masts, because of the nature of our technology—which is very low powered—the masts have to be located relatively close to the area that we propose to serve. However, there is good news on that as well, as the technology that we operate is moving forward. At the moment, we are running tests on the next generation of technology, which will allow us to remove some of the existing infrastructure and replace it with new technology. In future we expect any masts or structures of that nature to be much smaller than those that we currently use.

**Robin Harper:** Does that mean that in a dense provision area you might be able to remove masts entirely and rely on the smaller pieces of equipment?

**Gordon Sleigh:** No, the masts would still be required. If no existing buildings are suitable as locations for the infrastructure, the ultimate solution would be to erect a mast. However, we would first check whether an operator, such as Vodafone or Orange, was already active in the area, and try to share existing infrastructure. We do that throughout Scotland.

**Richard Rumbelow (Orange Personal Communications Services Ltd):** Technical innovation will allow different mast designs to be brought forward. The industry in the UK is committed to pursuing that, as has been amply demonstrated by the steps that it has taken to disguise structures as flagpoles, trees and other forms of urban environment. The process of innovation will continue. From a network-operator point of view, in both the current generation of services and in the future generation that the DTI outlined earlier, there is a progression towards smaller-designed masts, which are more appropriate to different types of landscape and

different types of urban situation.

**Roger Wilkins:** I would like to follow on from the question about whether we take masts down. The implication appears to be that we do not, but in fact we do. I will illustrate that. There is a large mast at Winter hill outside Manchester—next to it was one of the first masts that we had in the area. Its coverage extends for miles—wonderful stuff. However, you can imagine that when the 120th conversation was going on, we needed more coverage. Eventually, there were a lot of smaller sites surrounding the original one, which we then took out of service. Our policy is to take the high masts out of service.

**The Convener:** Are environmental considerations high up on your planning agenda?

**Richard Rumbelow:** All the operators recognise the increasing number of environmental concerns. There are, therefore, certain processes that we at Orange will undertake. Our first preference is to look for existing structures—whether masts or buildings—at which to locate base stations. If that is not possible, we must look for alternatives, such as ground-based stations that are well disguised or designed to blend in with the environment. We are committed to the use of existing masts and structures.

We are also committed to technical innovation, particularly in relation to microcell technology using small lamp post designs and other street furniture. That shows a clear commitment to the environmental objectives to which we all aspire.

**Roger Wilkins:** Members might be aware that Vodaphone has produced an environmental handbook, which has been sent to all local authorities and which is readily available to any one. That handbook determines how we work.

We also have an extensive programme of building sites in the Highlands and Islands. That is clearly an environmental issue, more so than elsewhere, but the masts are part of our way of life.

**Linda Fabiani:** I am a bit concerned about all the hidden masts that are sprouting up all over the country. Who knows where they are? Is there any requirement to have some form of labelling on a site where there is a hidden mast?

**Gordon Sleigh:** I would like to answer that question on behalf of Atlantic. We have very few masts, but in every location at which we have one, we identify it as belonging to Atlantic, although we are not required to do so.

**Richard Rumbelow:** There are two answers to that question. The first answer is from Orange's perspective—we clearly identify all the sites that we operate and include on them contact numbers and addresses if people wish to contact us about

those sites. Secondly and more generally, local authorities are encouraged to keep a register of all forms of mast structure. This year, an industry initiative was announced—in conjunction with the company that operates the BBC's infrastructure—to start a national sites database. That will be updated monthly; local authorities will be able to examine and assess it. That database provides all the information about our network infrastructure, including location descriptions, size of mast and so on. That is a way forward that demonstrates our commitment to look for alternative sites to use existing masts and to ensure that people can, through their local councils, see where masts are located.

**Linda Fabiani:** There is no obligation, though.

**Richard Rumbelow:** The mast register is a voluntary commitment made by the industry this year. The only statutory obligation is for local authorities to keep a mast register of all radio communications sites in their jurisdiction.

**Roger Wilkins:** The only other place where such information is held is at the Radiocommunications Agency. That agency holds records on every radio transmitter in the country.

**Linda Fabiani:** So, there is there no obligation on anyone to ensure that folk living near or around a mast are told that there is equipment there.

**Robin Harper:** I would like to look at the regulatory framework and the obligations in it. How far have companies progressed in meeting existing licensing obligations, particularly in terms of coverage? What obligations remain to be met and what is the coverage in Scotland?

**Richard Rumbelow:** Orange has met its initial target of 90 per cent population coverage across the United Kingdom. We were to achieve that target by the end of this year—5 years after the start of our operation. Now that we have met that target, our next commitment is to ensure that we meet all reasonable demands for our services across the country. We have to maximise our population coverage and ensure that our geographic coverage is as good as it can be. Our United Kingdom population coverage is currently just over 98 per cent. Our geographic coverage is between 80 per cent and 85 per cent. Those figures reflect the coverage across Scotland as well.

**Roger Wilkins:** Vodafone is probably broadly in line with that. I will get the precise numbers if the committee needs them.

**Gordon Sleigh:** Our licence is different from those of mobile operators. As a fixed-line operator, my company has no specific coverage obligation in its licence. We are required to provide coverage for anyone in our licensed area who makes a

reasonable request for it, but we have no specific figures to meet. We are probably about three quarters of the way through building our networks in Scotland. We expect that they will be pretty much fully completed by the end of this year.

**The Convener:** What is the proposed coverage?

**Gordon Sleigh:** Our networks are primarily city based, covering Glasgow, greater Glasgow, Edinburgh and parts of the Lothians, Dundee and Aberdeen.

**Robin Harper:** Do you have any particular problems in meeting your targets?

**Gordon Sleigh:** We have certainly experienced a slow-down in the past six to nine months. As you heard from the DTI, some local authorities would, for different reasons, effectively ban telecommunications infrastructure. To give you a good example, we have been in discussions with North Lanarkshire Council for well over a year. We thought that we had secured access to 14 or 15 rooftops to locate equipment. After we have gone through various stages, access has been delayed and delayed. Unless there is a change in the attitude of the council, the only effective way in which we will be able to complete our network will be to build some tower infrastructure. That is the last thing that we want to do. We would far rather come to an agreement with the local authority and put our infrastructure on to suitable rooftops. All that has slowed us up in the past year. We now have an alternative plan to build towers, but we are still in discussion with the local authority and we hope that we can resolve matters.

**Robin Harper:** Are the objections to those rooftop installations visual or on health grounds?

**Gordon Sleigh:** We have been given no specific reason. Our understanding is that the objections are related to health and safety.

**The Convener:** Bob Perkins and Richard Atkins of Cellstructures, do you want to comment at this stage?

**Richard Atkins (Cellstructures International Ltd):** No—we are not licensed operators.

**Nora Radcliffe:** Part of what I am going to ask has already been covered, but it might be helpful if you could run through the different operational and sight requirements for fixed-line and mobile systems and for systems operating at different frequency and power levels. Will you also discuss the technical limitations on the development of networks, and the constraints of current and developing systems and technology?

**The Convener:** Who wants to kick off?

**Nora Radcliffe:** Can we have the idiot's guide please? [*Laughter.*]

**Richard Rumbelow:** Because we are dealing with a terrestrial radio-based network service, we are confined to the way in which radio signals propagate—in other words, how far and wide they can be broadcast from a central point. In that respect, Orange is no different from any other radio broadcast operator. We have a slightly higher radio frequency than that of, for example, Vodafone. That gives us an additional technical requirement because our signals do not travel as far from a central point as Vodafone's would from the same point. The higher you go in radio frequency, the less distance the signals will travel.

In planning a network, we have to ensure that we use the minimum possible number of base stations. To do that, we try to find the optimum site that provides us with the geographic or population coverage for the area that we want to cover. Then there are other factors to take into account, such as natural and man-made topography features that will influence the distance that radio signals will travel.

For example, in the fenland of England, which is relatively flat, the distance that the radio signal will travel is proportionally greater than in a hilly area of the Highlands of Scotland. We have to bear in mind the various features, man-made and natural, that will affect the radio signal.

We are not just rolling out the network to new areas; we are trying to provide additional capacity in areas where the network is already present. We have to re-engineer the network to provide the optimum coverage in those areas. In improving coverage, we have to deal with radio signals, which do not like too many natural or man-made features, and with a high radio frequency specification, which will impose additional constraints. We also want to ensure that we use the minimum number of base stations in planning the network—we aim for the optimum location of those stations to achieve that.

11:00

**The Convener:** Thank you, Richard, for that full answer. Do you want to add anything to that, Roger?

**Roger Wilkins:** I think that that is a pretty good answer. I would like to add a point that is sometimes missed about the operation of base stations. One cannot simply shove more and more power into a base station to make the signal go further, because what counts is the signal coming from the phone back to the base station. The operational range of a cell site is governed by how far the signal from the hand-held phone goes rather than by how far the signal from the base station goes. There is a sensible limit to the amount of power that we would put into a base

station to make it balance with the mobile phone signal coming the other way.

**Nora Radcliffe:** How far is that? It is quite short—hundreds of metres—is it not?

**Roger Wilkins:** No. As has been said, it depends on the landscape. In the middle of the city, it is a few hundred metres; in open country, it could be 30 km. It depends on the obstacles that are in the way.

**Gordon Sleigh:** As I said, our technology is totally different from the mobile phone technology and operates at a very low power level. Atlantic operates in a frequency band at 2.4 GHz, which is much higher than the frequency that mobile phone operators use. The band in which we operate is the ISM band—the industrial, scientific and medical band. We do not have unique spectrum, as mobile operators have. We have to share the band with other users. Other types of application in that band include industrial lasers and medical laser scalpels.

The most prominent use in the ISM band is probably a device called a radio LAN—local area network. Those devices are designed to work within buildings to connect one computer to another by radio without the use of wires. The guidelines that apply to them are, as one might imagine, very stringent, because they operate in buildings where people are working.

That is the type of technology that we use in an outdoor environment, so our base stations are limited to a maximum power output of 100 mW, which is a $10^{th}$ of a watt. A mainstream broadcast station typically operates at something like 500,000 W. That gives an idea of how low our power level of a $10^{th}$ of a watt is—the power level that we use is so insignificant as to be almost unmeasurable. Our network is a city-based network that operates to a 1 km radius cell. Because of the low power levels that we use, it is a very small radius indeed.

**Mr MacAskill:** Can you explain the planning principles on which networks are developed? How do you see them changing as technology and demand increase?

**Roger Wilkins:** When one begins a network, one's objective is to cover large areas with the least possible number of sites. If there are investment problems, one's instinct is usually to go to the highest points or to existing structures such as Independent Television Authority or BBC masts or high buildings. Winter hill, which I mentioned, is typical of that and covers a big area. One would aim to create an impressive coverage map so that one can sell the service and get customers.

As customers are taken on, capacity has to be added. As in the case of Winter hill, more and more smaller sites have to be added to provide local capacity. A provider begins with a small number of high sites and migrates to a large number of small sites.

**Mr MacAskill:** What sort of process do you use for network configuration? How much do you involve planning authorities in the early stages?

**Gordon Sleigh:** Atlantic Telecom involved the planning authorities even before we got to the planning stage of our networks. We have developed a good relationship with the officials of the local authorities.

When setting up a city-based network, we try to factor in the capacity from day one, so that we do not have to add infrastructure later. The design that we put forward to the planners at first is the design that we hope to end up with.

Each time that we request approval to site a base station, we give the planning authority the same information as we would if we were making a full planning application, which, in many cases, we are doing. The authority will make comments based on that information and we will try to take its points on board. We work very closely with planning authorities in Scotland, as, I am sure, the mobile companies have done.

**Richard Rumbelow:** Orange uses various computer models to work out our coverage needs in a local council area. Although there is no requirement to make any prior notification to councils about plans in their areas, we follow the code of best practice from England and Wales. That code sets out commitments for local authorities and network operators with regard to information, prior consultation on applications and negotiations about specific sites. We want to ensure that local councils are as well informed as possible about our plans for their area, so that they can properly consider them.

**Mr MacAskill:** How possible is it to be flexible in terms of the criteria that you use? Are the impediments primarily financial or technological?

**Roger Wilkins:** I go along with what Richard just said. A policy of prior notification, which exists in England and Wales, could be adopted in Scotland. When a planning application is received by a local authority, it does not come as a surprise; it probably arrives with a nod from the planning officer. There will have been discussions and the plans will have been agreed to. The paper submission is just a formality. The degree of flexibility depends on the circumstances. Everybody has to understand what everybody else wants.

**Bob Perkins:** There is another aspect to the matter. Cellstructures is working with a number of local authorities in England in an attempt to reach

global agreements with them. We have done so with many local authorities already.

Some of our business arises from providing for the network operators' needs, but we also believe that it is possible to work with a local authority to assess its needs and find the best way of meeting those needs, given the local criteria. We try to carry out a balancing act between public protection responsibilities and the need of every local authority to generate income, in this case from public buildings and public open space. We are developing expertise on that and are rolling out a number of seminars for chief executives of local authorities, at which we can explain their potential. We believe that that will be beneficial to the industry and to the local authorities.

As the committee knows, local authorities in Scotland have expressed some fears and, as a result, progress is fairly slow. We will be back in Edinburgh towards the end of this month for the Convention of Scottish Local Authorities seminar, in an attempt to address the local authorities' perceptions, but that will be a slow process.

Mr MacAskill's overall question can be approached in two ways. Our approach is not simply to try to provide the sites that the operators require at a particular time, but to encourage local authorities to plan their whole area in the longer term. The situation will change over time and, if only the current climate is taken into consideration, the result might be a piecemeal development, which might not be in anyone's interests. We try to take a balanced approach.

**The Convener:** I got the impression that you perceived a difference between Scotland and the rest of the United Kingdom. Is that correct?

**Bob Perkins:** There is a more heightened perception in Scotland at the moment, in particular on the public health aspect.

**The Convener:** Is that having an effect on development?

**Bob Perkins:** Colleagues have already said that it is affecting the rollout of certain networks. With certain local authorities, we have been involved in fairly advanced discussions that have now come to a complete halt until such time as the local authorities, collectively, feel that their questions have been answered reasonably. We hope that we will be able to make some progress towards that end at the end of this month, when COSLA convenes its seminar.

**Des McNulty (Clydebank and Milngavie) (Lab):** I have had some experience of mobile phone masts being erected in the area that I represented, where a variety of possible sites existed on which the masts could—technically—have been erected. In effect, it was easier—

financially and in terms of planning—to place the mast nearer to housing than on available alternative land. On such decisions, do the companies perform a cost-benefit analysis that includes public amenity consideration? From a purely business point of view, there might be an argument for putting the structure in the cheapest place where land is most easily available. Do you go through a process of considering alternatives and balancing other considerations against those of cost and ease of erection?

**Richard Rumbelow:** In planning coverage of a specific area, our first step is to find out whether any existing mast or structure is available to share. Our negotiations on sharing the site might take many a course—with the owner of the mast, the owner of the land where the mast is located, and the local authority. Those three elements are dealt with first. The existing operator might well find our approach acceptable, but the landowner might not. The local authority might consider that some issues connected with sharing the site—such as increasing the height or overall size of the structure—are not acceptable in planning terms. Any one of those three elements could easily fall out of the equation and, if that happens, one is left with little option but to look for a ground-based structure of one's own from which to provide the coverage.

Overall, our first commitment is to look for an existing structure or mast, but if that falls through for any reason, we have to look for an alternative solution, which will often be our own ground-based installation. The priority is to look for site sharing first.

**Des McNulty:** Presumably, everything in your business comes down to a cost-benefit analysis to some extent, as that is how business operates. I am interested in whether the easiest and cheapest solution always applies. To what extent are you prepared to examine environmental and social considerations and to adopt a more expensive solution rather than a cheaper one?

11:15

**Gordon Sleigh:** From Atlantic's perspective, we adopt pretty much the same criteria as those described by Richard Rumbelow. We always look first of all for an existing piece of infrastructure—a building or a tower. If there is nothing suitable, we are restricted because our technology operates at such a low power level that we have to be in fairly close proximity to the area that we want to serve.

Industrial estates would be the next type of area that we would consider. If we have to build, our first choice would be to build there. Absolutely the last choice would be to locate infrastructure close to a residential area. We have two or perhaps

three examples of that in the whole of Scotland—that is it. When it comes down to the cost-benefit analysis of such a mast, we do not consider it on a purely economic basis. We examine the site and we landscape it, to try to disguise the mast as much as possible so that it blends in with the landscape. I assure members that that is an expensive business. For example, we are transplanting trees on one site at the moment—we are planting a ring of mature trees round a mast.

**Des McNulty:** Is it possible for the companies to provide us with some examples of where such work has been done and an indication of the costs? It would be helpful for the committee to understand the criteria on which such judgments are made and what the implications are, as opposed to—

**Gordon Sleigh:** I can give you details of the example that I talked about straight away. That site is in the north of Aberdeen, on a farm at the edge of a residential area. We made an agreement with the landlord who owns the site and the tenant farmer, from whom we secured the rights. Then we consulted the local estates department on how best to landscape the site. We submitted drawings to the estates department on three separate occasions and took on board its comments about what it thought the site should look like. I believe that the final design is now going ahead. The cost to us, for landscaping, will be between £15,000 and £20,000.

**Roger Wilkins:** It is not true that cost is a massively significant feature of a site. We will pay what it costs to get a site to do what we want. If we have to take extraordinary steps to achieve something that is environmentally superb, that is what we have to do. The cost of renting the site does not represent much of its total cost to us. The choice of whether we go with this landlord or that landlord is down to which landlord is the most willing and not which is the cheapest.

**Richard Atkins:** From our perspective, as an infrastructure provider, site development is our core business. We will not go near any establishment or building. For example, given the public perception of masts, our policy is to keep well away from educational establishments such as schools and from hospitals. As far as possible, we go out of our way to attempt to develop sites in the most physically acceptable locations. We are developing a product that is saleable to the industry, if you like. We are looking at higher capital investment on a site to achieve minimal visual impact, by disguising masts and so on.

**Des McNulty:** Given what you said, one of the points that the committee might want to consider is a best practice code that highlights examples of good practice. Do you think that the industry will be willing to contribute its expertise to that process?

**Roger Wilkins:** I mentioned the environmental handbook that we produce, which gives guidance to staff in the company and to planners and potential landlords on what we are happy to do. I am supportive of such a process.

**The Convener:** Richard, can you sustain a network based on the philosophy and principles that you have just spoken about?

**Richard Atkins:** It is partially possible. Our colleagues in the Department of Trade and Industry pointed to a number of relevant sites. I would turn round and say that some situations demand that the operators have their own infrastructure. However, there is more mileage in existing developments and in third-generation developments.

The number of pieces of infrastructure will certainly rise, but we hope to offer a solution that will, to a certain extent, put a limit on proliferation. However, the operators will justifiably make a case that, under certain circumstances, they need a particular piece of infrastructure to provide a capacity coverage solution in an area. Given their network planning constraints, it might not be possible to use shared infrastructure.

**The Convener:** You mentioned hospitals and schools as an example of where you are listening. We can argue to and fro on the environmental and health impacts, but are you listening to what the public are saying? Do you have a perspective on high-rise flats, which are popular sites? The residents of those buildings are also concerned.

**Richard Atkins:** We are not involved in negotiating on any form of residential property at the moment, within our operational portfolio.

With regard to the health and safety arguments, there is nothing conclusive on the effects of radio communications on health. Unfortunately, there is a certain amount of popular misconception and, as a business, we have to be swayed by that.

**The Convener:** We will continue to focus on site selection and will deal with health in a moment.

**Nora Radcliffe:** There is much encouragement to share sites. Is it easier to share if you are at different bands? What percentage of your sites is shared?

**Richard Rumbelow:** When it comes to sharing a structure, several issues must be taken into account. First, is the mast structure in a location where we are trying to provide new coverage or capacity? Secondly, is the structure currently suitable for the attachment of additional equipment? Thirdly, is the landlord willing to have an additional operator on his land? Lastly, is the section of the local authority that deals with town

and country planning willing to have the site changed in some way?

Those are the four principal issues that we take into account when investigating a site share. However, the height or shape of structures that we would erect would have to be changed to accommodate other operators' equipment. Very few changes are made to substantial structures more than 100 m high, such as radio and television broadcasting installations.

**Nora Radcliffe:** But technically?

**Richard Rumbelow:** That is not an issue, as operators place their own equipment on the structures.

**Nora Radcliffe:** Do the installations interfere with each other?

**Roger Wilkins:** There has to be some space between antennae, because there is a risk.

**Nora Radcliffe:** What proportion of installations is shared?

**Gordon Sleigh:** From Atlantic's point of view—

**The Convener:** We will not hold you to these figures; we know that they are just approximate.

**Gordon Sleigh:** No, the figures are exact. Of 125 operational base stations in Scotland, Atlantic has 16 towers, of which seven are shared.

**Roger Wilkins:** My colleague has advised me that 30 per cent of Vodafone's installations are shared.

**Richard Rumbelow:** Similarly, 30 per cent of Orange's installations are shared.

**Mr MacAskill:** What regulations are there for operators in comparable European Union nations, such as Finland or the Netherlands?

**Roger Wilkins:** Vodafone has a number of European interests. Vastly different planning regimes are in operation across Europe, but I do not know the details. For example, the Netherlands regime will be different from the Greek regime.

**Mr MacAskill:** I meant more social democratic, northern European countries.

**Richard Rumbelow:** Orange has limited experience of overseas operations. We have only recently begun to operate networks in Belgium, Switzerland and Austria. I would be more than happy to supply more detailed information on planning matters. The town and country planning procedures are vastly different among those three countries. Where Belgium is relatively relaxed, Switzerland is very regulated as regards planning issues.

**The Convener:** I want to establish a baseline of understanding. Do you acknowledge current advice that mobile phone masts do not affect health?

**Roger Wilkins:** Vodafone is comfortable with the outcome of the report on the issue by the House of Commons Science and Technology Select Committee.

**Richard Rumbelow:** The Science and Technology Committee report gave a balanced and objective view. Its recommendations were fair. The industry supports the notion that further research needs to be done and that it can play a responsible part in that process, by independently funding research or by providing mechanisms for research to happen.

**Gordon Sleigh:** Again, because of the power levels on which we operate, I have to differentiate my company from the mobile phone operators. We are comfortable with our technology. Our power levels fall within all known guidelines and well below the prudent avoidance levels as advocated by such organisations as Friends of the Earth, which has investigated levels across Europe, Australia and New Zealand.

**The Convener:** Are we all comfortable with the findings of the House of Commons and with the European Union advice on reductions and limits?

**Richard Rumbelow:** Discussions are on-going between industry and the Department of Trade and Industry. In light of the Stewart inquiry, which is due to report in the spring of next year, a decision on how the United Kingdom wants to take forward the adoption of the European Union recommendation or the much stricter full ICNIRP compliance will be forthcoming.

**Roger Wilkins:** As I mentioned earlier, Vodafone is now a Europe-based company. We took the decision prior to the publication of the select committee report to fall in line with the EU recommendations, which are based on ICNIRP.

11:30

**The Convener:** Do the limits that are being discussed have an impact on the geography and unique aspects of the Scottish landscape? Will there be any effect on the rollout and service levels?

**Roger Wilkins:** No.

**Robin Harper:** The EU may ask for levels to be reduced fivefold. Is it not the case that the inverse square law applies to radiation? For example, if the distance was 8 m and it was doubled to 16 m, that would achieve a 64-fold reduction. Therefore, only a modest increase in safety distance is required to achieve a fivefold reduction.

**The Convener:** Is there any impact on exclusion

zones around masts?

**Richard Rumbelow:** At Orange, we are still assessing the implications of moving to the EU recommendation or to full ICNIRP compliance, which will mean assessing the location of the sites that we have. One aspect of meeting either of the two new guidelines will be to examine the exclusion zones that apply to our sites, particularly in locations to which the public have unrestricted access or where we do not have full control over certain types of installations. Exclusion zones are present now and will be required in the future.

**The Convener:** Are there any issues to do with physical protection in sensitive areas, such as schools, hospitals and high-rise flats? Does industry have any views on the matter?

**Gordon Sleigh:** We have secure compounds around our towers, because we do not want people to enter and damage either themselves or the equipment.

**The Convener:** What is the view of Cellstructures International?

**Bob Perkins:** As infrastructure providers, we place a requirement on ourselves to ensure that our installations are totally secure. The network operators require it of us too, but even if they did not, we would ensure it, because it is the way in which we operate. We build appropriate additional space into the initial plans for any site to ensure that sites are totally secure. As some of the installations that we are currently considering are in places such as professional sports grounds, they need to be—and are—well protected.

**Des McNulty:** We are talking about an evolving planning framework and protocol for how operators site their facilities. If we were to move to an arrangement of exclusion zones for future planning applications, would it be possible to review existing installations? What implications would that have? Are there installations that have been sited in areas that might now be in exclusion zones under current or future procedures?

**Roger Wilkins:** We stated in August that all base stations that we bring into service from now on will conform to EU requirements—if I understand the question. Although we believe that all our existing sites conform to those requirements, they will be checked and those that infringe the regime will be modified by the end of 2000.

**Richard Rumbelow:** I just want to clarify what your definition is. If you are referring to exclusion zones as primarily the distance around the antenna to which someone can gain uncontrolled access, then exclusion zones are generally around a few metres. For example, in the case of a ground-based 15 m mast, that means that nobody

could gain access to that exclusion zone.

If you are referring to a more general precautionary principle about the siting of base stations hundreds of metres away from certain types of installations or residential land use, such zones would have an impact on the ability of operators to provide service to some places.

**Des McNulty:** There might be locations where it is difficult to disinvent the past, but I got the impression that you would examine your existing pattern of installations and review those instances where what is in place would not meet the planning criteria that you now consider appropriate.

**Gordon Sleigh:** I do not believe that any of our current installations would fall foul of the exclusion zones you describe but, if they did, we are in a different position from mobile operators, as we are a fixed-line operator. To remove a base station would disrupt service to customers, to whom we are obliged to provide service. We might fall foul of the regulatory system if we attempted to do that.

**Roger Wilkins:** I am still slightly confused about the nature of the question—I am not being rude. If you are suggesting that a precautionary principle could be introduced with an arbitrary figure of hundreds of metres, that would have a significant effect on our activity. However, if we are talking about the kind of exclusion zones that arise from the proposed legislation—a few metres or tens of metres at most—there is not an issue.

**The Convener:** You talked about the effect of a 200 m exclusion zone. In terms of technology, why would that have such a detrimental effect?

**Roger Wilkins:** Because one would be that much further away from the customers one is trying to reach.

**The Convener:** It is all about proximity.

**Roger Wilkins:** If there were a site for this building that was 200 m away, one can imagine all the stonework the signal would have to get through. It just makes life so much more difficult.

**Richard Rumbelow:** Principally, what would happen is that large areas of city centres would not have any coverage at all, as one could not use existing structures of any description to locate stations. There is a misconception that we are able to provide coverage from a base station on the periphery of a city: it does not work in that way. We need base stations in the heart of cities to provide coverage. A precautionary principle that introduced a limit above 100 m or so—even 50 m—would mean that a lot of people would be unable to use mobile phones in city centres.

**The Convener:** Is it fair to say that the microcells technology that is coming may resolve

some of those issues?

**Roger Wilkins:** That is true in the sense that the more there are, the lower power they are, but that would mean filling the place up with microcells.

**Nora Radcliffe:** Can I ask an idiot question? How big is a microcell? We are talking about filling the place up, but is a microcell something that could be plonked on top of a lamp post and nobody would notice, or is it the size of a suitcase?

**Richard Rumbelow:** It is typically the size of a burglar alarm. It can be located on the side of buildings. It can be disguised as streetlight furniture or located on top of existing streetlights.

**Richard Atkins:** I would add the rider that, although microcells certainly represent part of the solution, the important issue for us is that the industry is dynamic. Subscriber numbers are rising. Therefore, at some stage further down the line, there will arguably be a need for additional capacity. A larger cell may become desirable to obviate the number of small boxes.

**Helen Eadie:** Would any of the witnesses like to add anything to the answer that I received to my question to the DTI about satellites? Do you concur with its view, and see that technology coming into being?

**Roger Wilkins:** Satellites offer a valuable service. At least one commercial satellite service is up and running, perhaps two. However, we have 5 million customers in the United Kingdom, and I cannot conceive of the technology that would get 5 million users through a satellite link.

**Nora Radcliffe:** Am I right in saying that the limiting factor on the whole service provision is the mobile phone itself and how far it can send a signal?

**Roger Wilkins:** Pretty well, yes.

**The Convener:** Let us move on to planning issues.

**Mr Tosh:** The DTI evidence earlier brought out the likelihood that, as the cells were split and demand increased, many more masts would be needed and your business would have to develop. How will the pace of that development be affected in practice by the move to prior approval and, beyond that, by the suggested move to full planning controls? How will that affect the future of your industry, your market and your consumers?

**Richard Rumbelow:** To answer your first point, permitted development has been an essential element of the ability of UK networks to roll out in the time that we have done. The reason it has been essential is, first, to allow us to meet the obligations in our licence to fulfil the initial coverage objectives that were set and, secondly,

to allow us to provide coverage for the expanding market of customers.

Orange alone has probably spent in the region of £1.5 billion on the network. That figure has, I am sure, been replicated by the other three networks. Providing a network is a serious financial business; it is the core of what we do. There needs to be some process by which the development of the network can meet the coverage expectations of customers. We would not have been able to meet that 90 per cent minimum coverage figure without permitted development rights, and prior approval as part of that, being an integral part of the planning system in which we work.

We have said—and this was our response to this committee and to the Scottish Office in the original consultations on this issue—that we are more than happy to work, in Scotland, within the prior approval process that is now in place in England and Wales. That process gives the certainty of greater public involvement in consultation than there is at present, and it gives local authorities 42 days to consider an application, in terms of both planning consideration and public consultation. It also keeps the important premise of permitted development. As the DTI outlined earlier, the licensing of third-generation systems is now underway. Networks for that will not be rolled out until 2002 at the earliest. If we are to meet the coverage figure of 80 per cent—sorry, if the licensees are to meet the coverage figure—

**Mr Tosh:** Come on. Surely the future is bright. [*Laughter.*]

**Richard Rumbelow:** There will have to be some mechanism in the planning system to ensure that we meet that target. Otherwise, it will be very difficult to do so.

**Roger Wilkins:** I go along with that. I would welcome the amendment in Scotland to include the prior notification and all the benefits of that. It works fine. It is a short cut that you can take after you have made all the decisions, reached all the agreements, and are wondering how to get through the final process. The local authority is comfortable because it has been involved in less effort but is happy with what you are doing. The alternative is to slow things down.

11:45

**Gordon Sleigh:** I concur with my colleagues, but I will add that it would be detrimental to the industry—particularly to a Scottish-based company such as Atlantic—if planning regulations in Scotland were different to those in the rest of the UK. The licences by which we operate are issued by the UK Government.

Over the past few years I believe that we have been doing exactly what is being advocated in terms of permitted development rights. We have consulted planning and estates people and we have taken their views into account in all the developments in which we have been involved.

**Mr Tosh:** In following on from that answer, if full planning control were to be introduced it would slow development down and companies would have to live with that, but how significant an additional burden would that be?

**Gordon Sleigh:** Undoubtedly it would be an additional burden, but at the end of the day how significant that would be would depend on the guidelines that were issued by bodies such as the Scottish Parliament to local authorities, and on how those guidelines were interpreted by local authorities.

One of the problems that we have faced over the past year or year and a half is that there have been various sets of guidelines relating to what planning officials and planning committees should or should not do. That is true particularly in relation to health and safety concerns. Interpretation has been different from authority to authority. What is required is a clear set of guidelines that we, as operators of both fixed and mobile phones, can understand and can operate within. It is also important that planning authorities in local authorities can understand them and operate within them.

**The Convener:** Would anyone like to come in on that?

**Roger Wilkins:** I would like to defer to my colleague in the public gallery, if it is possible for him to answer.

**The Convener:** He will need to join you at the table.

If you use a microphone, that will allow you to become part of the process. Please give us your name.

**Nick Greer (Vodafone Ltd):** My name is Nick Greer and I am the environmental and planning manager for Vodafone.

I can provide anecdotal evidence to answer the question. Vodafone has, since 1994, written to all local planning authorities in the UK because we experienced difficulties as a result of planning officers' understanding of the legislation, and—as the committee has heard from some of my colleagues—with some of the technology. That is one of the reasons why I encouraged the company to produce an environmental handbook, which I will plug because I wrote it.

When the handbook was distributed last in April 1999, the best response was from the 32 Scottish local authorities, from whom we had a 50 per cent response rate. Most of the responses thanked us and said that the handbook was helpful. They felt that it explained many things that they either did not understand or that they had no guidance on. The response rate for the whole UK was 15 per cent.

The issue is not one of full planning, although I echo my colleague from Orange's comments to the effect that greater public consultation is long overdue in Scotland. Full planning will, in my opinion, slow the process down. It will give more time to local planning officers who are overworked, under-resourced and overstretched, but it will not enable them to do a better job. What is needed is an education and information campaign.

I sit on the telecommunications working group for England for the Department of the Environment, Transport and the Regions and the Department of Trade and Industry. We have been advocating the same process because this issue is not relevant only to Scotland, but applies to every local planning officer in the UK.

There are other mechanisms that could be brought in that would be more beneficial than giving greater time to the process.

**Mr Tosh:** I am sure that planning authorities would accept to a degree that they are deficient in skills and expertise in areas in which they do not currently have to regulate. I am sure that it is equally true that, if they were charged with regulation of the development of the industry on a full planning basis, they would gear themselves up to do it. They would do as good a job in that field as they do in any other.

I am trying to establish what it would mean for your companies and your consumers. You say that it would make things more difficult for the planning authorities, but they could live with that; many of them seem to want controls. I want to know what difference it would make to the overall delivery of the service. How would it affect your businesses? Would it disadvantage them, and would it disadvantage your consumers? You said that it would slow things down. What does that mean?

**Richard Rumbelow:** If full planning permission is required for every application that is made in one part of the UK, in order to meet coverage requirements, particularly for third-generation technology, we will concentrate on areas of the country where we can achieve the targets more quickly. I do not want to end up in a situation in Scotland where some local authorities are very good at dealing with full planning applications, but others are not. The result would be that a technological desert would appear in certain parts of Scotland and there would be a dearth of

modern mobile telecommunications coverage.

It is sometimes easy to forget that mobile telephony is not just an issue for the individual consumer or for businesses in Scotland, but a global industry. When businesses consider investing in a location, they want to see what infrastructure is in place there: roads, education and so on. If they see that mobile telephony in its new sense is absent, they may decide to invest away from that locality. If the Government wants to ensure that this country becomes the e-commerce centre of the world—certainly of Europe—and the home to a knowledge-driven economy, mobile telephony will have a part to play. If full planning permission is advocated in certain areas, those areas may not receive the modern telecommunications coverage that they want within the same time frame as everyone else.

**Nick Greer:** Under the current regime of permitted development rights in England and the 42-day process, a majority of general permitted development order applications are considered under delegated powers; in other words, they are dealt with under the planning legislation, taking into account the technical limitations. I must echo the comments that were made this morning by my colleagues at the DTI. In my experience—and we may be able to supply evidence of this subsequently, if that would be helpful—once a full planning application is decided on, the matter moves outside the control of the planning officer, operating within the siting-and-appearance or planning policy framework, and becomes more of a local political issue. I think that we are all honest enough to acknowledge what the implications of that can be in certain circumstances. The decision can become one based less on good planning policy and guidance than on local politics.

**Mr Tosh:** I want to focus on a related issue, because you have answered the question that I was going to ask about the effect of varying the regime in different parts of the UK. I do not know whether this is possible, but if we in Scotland could insist on a different service obligation that took into account geographical as well as population coverage, what effect would that have on the development of the industry in Scotland?

**Richard Rumbelow:** Because our initial obligation is to provide population coverage, clearly our initial efforts are to ensure that we do that. However, having met that obligation under our current rollout programme, the focus has shifted to providing geographical coverage. We, as an operator, are now concentrating on that. In future, geographical coverage will play a part but, in the first instance, our efforts will be directed towards maximising population coverage, because of the licence obligations that we have to meet. However, geographical coverage is important, and

that is evident from what Orange is now doing in Scotland.

**Mr Tosh:** How can we or the Westminster Parliament promote the widening of geographical coverage? What is the mechanism for that?

**Roger Wilkins:** Vodafone and Cellnet are collectively engaged in a programme to roll out coverage in the Highlands and Islands. The programme involves a certain amount of funding from the EU, which is accompanied by an obligation to provide 90 or 95 per cent coverage of all A and B roads.

**Mr Tosh:** Ninety-five percentage coverage of what, sorry?

**Roger Wilkins:** All A and B roads in the Highlands and Islands Enterprise zone. It was assumed that the population would live along those roads, and that they would therefore enjoy that coverage. I do not have a problem with that kind of definition, but I would have a problem with the definition of complete acreage coverage, which strikes me as tricky and expensive to do with not much return.

The Office of Telecommunications is doing a comparative trial of four networks across the country. Such trials can be organised on a "go anywhere" basis as opposed to along prescribed routes. It is perfectly feasible to do that and measure the effectiveness of a company's coverage by specific trials. People make calls anywhere they want. We do not say to them, "Here's our coverage map. You can only use our phones here." We say to them, "Here's a phone. Go anywhere you want to with it." Every time that they fail to make a call, it clocks up against us. By that, we can measure ourselves against our competitors, and the pressure to drive the business forward is competition-driven.

**Nick Greer:** On covering A and B roads, as described earlier, radio waves are not confined by anything apart from terrain. Those radio signals will travel many miles from a high point. By virtue of the way the technology works, large areas of countryside will be effectively covered.

**Helen Eadie:** I am slightly concerned about that answer. If your answer was hinged purely on your obligations as they stand at the moment, I can understand where you are coming from. I can appreciate that, if the obligations were changed to provide for the scenario suggested by Murray Tosh, it would be done on a geographical basis.

Part of our agenda is to address issues of social inclusion. I was once a candidate in Roxburgh and Berwickshire. That area has attracted a lot of attention recently because of the dire economic problems there. The coverage was very poor when I was a candidate. The geographical

argument would, in my view, stand up to scrutiny, and I would like you to comment further on how that would help us to accommodate our policy objectives for social inclusion for the areas that are in greatest need, if your obligations change.

**Richard Rumbelow:** The question is more difficult for an operator to answer. It is more a concern of central policy making. The Government's objectives will be set out in terms of how it wants the third generation of mobile telephony to be advocated and advanced. It did that in the document it published. Its priority is to ensure that, within a reasonable time frame, the population of the country is covered as speedily as possible. If you seek an obligation based on geographical coverage, it is up to colleagues in the DTI and other parts of Government to advocate that in the licences that they issue.

Geographical coverage will come anyway with meeting population coverage. As I mentioned earlier, that is already happening. Having met and now greatly exceeded population coverage, we at Orange want to ensure that we try to get as much geographical area covered as is reasonably possible. We want to reach over 90 per cent geographical coverage within a reasonable time frame. How that happens depends mainly on how the licences are issued and which criteria are set within that.

Your colleagues in the National Assembly for Wales have recently secured EU funding for regional development work to improve information and communications technology across the principality. That includes both mobile and fixed infrastructure. I do not believe that there is any distinction between population and geographical coverage. You could look in other directions for encouragement and investment, for example, EU funding for geographical coverage in areas such as that which Helen Eadie mentioned.

**Linda Fabiani:** If we agreed that in Scotland full planning controls were not necessary, and instead decided to beef up the prior approval system so that local authorities had a statutory right to take action against you if you did not comply with what they laid down in the approval, would you have a problem with that?

I see that you would not.

**Nick Greer:** May I add to that? I do not think that it came out of the discussion earlier, but local authorities have the right to take enforcement action, so that if an operator puts in infrastructure which, in the opinion of the local authority, does not comply with the conditions or the site appearance criteria—that is, minimising the visual impact as much as possible—the local authority has the option to take enforcement action against the operator.

**Linda Fabiani:** But you can appeal against that.

**Nick Greer:** Yes, we can.

12:00

**Robin Harper:** I will return to the technical question that I asked at the beginning, about the use of microcells vis-à-vis masts. As I understand it, you did not feel that you could expand the system using microcells alone. Suppose you wanted to expand in the Highlands. The easiest way to do it is by using masts, because you can put them high up so that they cover a wide area. On the other hand, that approach is most likely to raise most objections, because the masts will be visually intrusive. Is the objection to using microcells economic, or is it a technical impossibility? I am thinking along the lines of small is beautiful.

**Roger Wilkins:** There are microcells and there are microcells. Microcells in the city cover 100 m to 200 m. If you walk along the high street and go around a corner, you cease to be covered by the microcell, so your call has to be maintained somehow. It is done by handing that call back to the big site on a rooftop somewhere, which searches round and says, "Here is a new microcell. Hand it back down there." That is how microcells work in a town.

In the Highlands and Islands, for example, we have quite a lot of sites—we have had to use 200 to cover the roads—but there is not a lot of traffic there to make us build more sites for capacity reasons. However, let us assume that a popular tourist destination overloaded the nearest cell. In such a situation, we would be looking to install something that was quite small and discreet for that tourist location. In a sense, that is a different kind of microcell: it is a rural cell.

**The Convener:** Does anyone else wish to comment?

**Nick Greer:** Are you asking why we cannot have lots of microcells every 200 m along the road, as opposed to some large masts?

**Robin Harper:** Yes.

**Nick Greer:** To take up Roger's analogy of going around the corner and losing coverage, another factor is that microcells in city centres are for slow-moving traffic, that is, people who are walking. As a person walks between one cell and another, the signal between the phone and the base station is handed off to each cell as the phone moves along. The switch between base stations takes approximately 400 milliseconds, and when you are walking, the system has time to cope. If you took the A82 to Loch Lomond and you were driving at 50 mph, and there was a base station every 200 m, the system would probably

drop you out at the third radio base station, because the system would not have had time to hand off between the stations. That is the technical argument.

**Mr Tosh:** For the sake of absolute clarity, I want to raise two matters. Although our planning regime deals with complex and important issues, I think that the view of the industry is that planning policy needs to be developed at a Scotland-wide level and that it should not be significantly different from UK policy. Secondly, is it a fair assessment to say that you do not believe that local authorities have any role other than as regulatory agencies?

**Roger Wilkins:** Not all sites go down the general permitted development order route. As soon as masts are higher than 15 m, operators are obliged to apply for planning permission. The local authority has a massive role to play. For example, full planning permission is required for an area of outstanding natural beauty or special scientific interest. That is why I referred to the general permitted development order system as a short cut. Do we want to overload the planning authorities with all this work, when all that is involved is a 15 m pole like all the others? Planning authorities should be able to say, "We are happy with it there, so we can just tick the box." That is not to denigrate the role of the planning authority; we value its role in the system and want to discuss matters with it. I support the route that enables straightforward matters to go through more quickly.

**Richard Rumbelow:** I agree with the first part of what Mr Tosh said but disagree with the second part. He is right to say that the consensus in the industry is that we would like Scotland to move in line with the procedures in England and Wales. That does not lessen the role of the local authority as the arbiter of planning issues. The prior approval process requires us, as an operator, to demonstrate the need for a new development—we must show why an additional site is needed and why the benefits of mast sharing may not be relevant. We must go through a number of sequential tests in support of a permitted development application before the local authority can determine it.

That is not a rubber-stamp exercise. There is public consultation and an extended period of notification, which means that, through the prior approval process, local authorities have better control over permitted development than they have had for some time. We are happy to go through those hoops to demonstrate the need for a mast. It is incorrect to suggest that the local authority's role is that of a rubber-stamp agency— it is right that local authorities should exercise control in Scotland.

**Nick Greer:** Contrary to Mr Tosh's suggestion,

we would encourage local authorities to play a more active role, which we believe is long overdue. If we were intransigent, we would be adopting a short-term approach. We are not here just for a year; we are going to be here in five or 10 years time, so it is incumbent on us to build a long-term relationship with each local planning authority. That is why we have been trying, since 1994-95, to encourage every local authority to meet us and have pre-application discussions. It is extremely difficult to get the time and attention of local authorities, because of their work load. I am defending the local planning offices in this scenario. We can ask them to come to a meeting, but we cannot make the meeting happen. We would encourage them to become more involved with the telecom operators.

**Bob Perkins:** In the notes that we submitted to the committee, we set out various issues on which a continuing dialogue between the industry and local concerns can be set in motion. That requires commitment and involvement on both sides, but we believe that it will be beneficial—it will be better for local interests, as represented by the local authority, and for the industry. It will mean that situations do not suddenly arise where a site causes problems and everybody expends time and energy trying to get what they want out of the matter.

If there is continuing dialogue, the operators will, as far as they feel able to, have shared with the local authority well in advance their view of how things will develop in the area. The local authority will have garnered views from the local communities, councillors, local commerce and so on. That will enable it to have more than a vague policy on telecommunications or a few local guidelines that are capable of multiple interpretation and that depend for their interpretation on who happens to be in the chair of a sub-committee of three on a wet Wednesday night—members will see that I spent 30 years in local government. Continuing dialogue will give rise to a climate of working together in which both sides know pretty well what is acceptable to the other and what each other's objectives are. In that way, we can make progress.

As our submission indicates, the telecommunications industry moves and develops very quickly. Without an awareness of the future or an ability to think laterally about national guidelines for local communities set by the Scottish Parliament, the pace of technology will overtake those authorities that are not up to speed with the implications. Everything has a cost, but if one were to start the process of general dialogue early—now, for example—one would reap the benefits in two or three years' time.

**Mr Tosh:** I think that we have established,

convener, that the industry welcomes the development of policy at a local authority level, as long as that is done in a clearly understood climate.

Some people have suggested that we should give local authorities power retrospectively to examine existing facilities. How would that affect the industry, given the confidence that you have just expressed on how the industry can work with local councils?

**Bob Perkins:** That is not a matter for Cellstructures, convener; at this stage, it is a matter for the usual operators. We are the new kids on the block.

**Gordon Sleigh:** In terms of existing infrastructure, and of examining it retrospectively, our licence obligations require us to provide coverage to individuals who reasonably request it. Once that service is in place, we are required to continue to provide it. It would be almost impossible for a fixed operator if that retrospective examination of the infrastructure required the infrastructure to be moved in some way—I think that we discussed that issue earlier.

We have worked closely with local authorities, and with the planning and estates people in particular, on our existing locations and on how we can disguise and landscape sites to make them environmentally acceptable. We are happy to talk to people and to consider whether further improvements can be made to the sites. For the fixed operator, relocating sites would be difficult, if not impossible, to achieve.

**Richard Rumbelow:** The application of retrospective planning would be extremely damaging for the network. On what basis would one advocate retrospective planning? Whether people like the approach that is currently used is one thing, but we are doing everything in accordance with what we are required to do, in a legal and regulatory sense. Orange and the other operators have, for 18 months, advocated the introduction in Scotland of guidelines similar to those in place in England and Wales, which shows our commitment and the fact that we are willing to work with the new regime.

We can work only within current legislation. It would be particularly damaging to the network as it is provided in Scotland suddenly to suggest that the legislation was totally wrong and that we had to review it, both in terms of its meaning and its application.

**Nick Greer:** Retrospective legislation could have horrendous implications for the networks and the services that are provided in Scotland. For a mobile operator, each site does not stand on its own. Each site links into a network like part of a jigsaw puzzle—if one piece is taken away, several others are affected.

It may be blowing our own trumpet to mention this, but we have operated a voluntary code since 1994-95. If someone tells us that we could have done better with a site that is not as good as could be expected, we will put up our hands and admit that, between 1992 and 1995, we sometimes did not get things right. I have revisited problematic sites and about 40 sites have been moved. In the past three or four years, we have not had to do that—we have been learning all the time and will continue to learn.

We have already responded to voluntary requests and I welcome that approach. I have answered letters from MSPs, MPs and members of the public. We are happy to make improvements where we can, so I welcome that approach.

12:15

**Des McNulty:** What are the benefits of participating in the telecommunications working group in England and Wales? Do you feel that establishing the code of good practice has been a valuable exercise, and how do you see it developing over the next two or three years?

**Richard Rumbelow:** The establishment of a code of best practice was a welcome development for the industry and for national Government and local government in England and Wales. It set out the technical background to the industry. Planning officers, especially those who have other planning issues to deal with, do not necessarily have time to understand thoroughly the details of how a network is planned and what considerations and constraints are involved. The code set out some of those criteria in layman's terms.

The code set out the framework according to which operators have to deal with local authorities, how we approach them and how they expect us to approach site-specific issues. It also set out how local authorities should deal with applications, the criteria that they should consider and the information that they should ask for and receive. Overall, it has set out a valuable framework. We hope that it does not collect dust on a planning officer's desk somewhere; we hope that it is actively used and appreciated. It is currently being revised in accordance with the changes that have taken place. We would welcome a publication of such a document for Scotland, because it would give local authorities the assurances that they seek. It would also encourage overall consistency in developing the industry.

**Gordon Sleigh:** As a fixed operator, Atlantic is not party to that code. However, we have agreed a code of working practice with each local authority in Scotland. That is a matter of public record and

anyone can have access to those documents.

**Des McNulty:** We have mentioned the rate of technological development and the operational implications that it might have for local government and national Government. How can we maintain effective communication about the changes and about their implications for the process of regulation?

**Roger Wilkins:** There should be on-going dialogue, but perhaps it could be arranged more informally than at a committee meeting such as this.

**Nick Greer:** After our experiences in England with the telecommunications working group, we feel that on-going dialogue would be beneficial. One gets to know the individuals concerned, so that they are quite happy to pick up the phone or send an e-mail for clarification rather than wait for a formal meeting.

**Gordon Sleigh:** At the most recent meeting but one of the Scottish Advisory Committee on Telecommunications, it was suggested that a liaison group be set up between the Scottish Parliament and the telecommunications operators in Scotland. I understand that that is moving forward, although I do not know who the contact is. That is probably the best vehicle for communication in Scotland.

**The Convener:** I draw this part of our meeting to a close. I appreciate the effort that all of our witnesses have put in. Your evidence has been interesting and informative. It may be a good idea to meet again in a less formal environment. We may have to follow up some of the issues that have been raised and take up several offers of further information. We appreciate your visit, which has been of benefit to our work this morning. Thank you very much.

## Invitations

**The Convener:** Item 3 on the agenda concerns the invitations that have been received by the committee. Members will be aware that we have received three invitations. One is from British Energy, inviting us to Torness power station. I appreciate that that would not fit in with our work load and our agreed programme of work. If members agree, I shall keep that invitation on hold, so that, when we begin to consider that subject, we can make that visit. Is the committee agreed?

**Members** *indicated agreement.*

**The Convener:** Fenwick Community Council has asked to meet the committee. Bearing in mind the nature of the announcements that may be made tomorrow, it may be wise to keep that suggestion on hold as well. Is the committee

agreed?

**Members** *indicated agreement.*

**The Convener:** The Scottish Forum for Transport and the Environment wants to meet the committee to discuss its document "Transport Policy Options for a Sustainable Scotland: 2000-2002". We note the invitation, and that document has been circulated.

**Lynn Tullis (Committee Clerk):** The document was circulated individually to members some time ago.

**The Convener:** I remember it. We can discuss it later. I am sure that members will have it in their files at home or in the office. We will revisit that issue when it is more appropriate to the committee's work programme.

## Scottish Utilities Forum

**The Convener:** Item 4 on the agenda is the Scottish utilities forum nomination from the Transport and the Environment Committee. The Scottish Executive is establishing a utilities forum for Scotland to address major utilities issues such as customer service, investment, the environment and growth opportunities. A paper has been circulated to members and the committee has the opportunity to nominate a member of that forum.

**Des McNulty:** I suggest that we nominate Andy Kerr.

**Helen Eadie:** I second that.

**The Convener:** Thank you very much. I would be happy to take on that responsibility.

That nearly completes our business. We have laid out a work programme for our inquiry and we know what is to be discussed at the next meeting. Do we know the time of that meeting? Will it be 9 o'clock again?

**Lynn Tullis:** Yes. The time for the next three meetings will be 9 o'clock. Andy Kerr will seek the committee's permission to go into private session. Questions will then be put to the witnesses at 9.30 am as the committee proceeds to evidence taking. Andy Kerr must propose that they are taken in private.

**The Convener:** What must I propose?

**Lynn Tullis:** That the areas of questioning to witnesses over the next three meetings should be taken in private.

**The Convener:** During private sessions at the beginning of meetings, we must agree a line of questioning with which all members are happy.

**Des McNulty:** I suggest that we call them informal sessions, rather than private sessions.

**The Convener:** I do not know what they are. I think that there are rules in standing orders.

**Lynn Tullis:** The committee is developing. The guidance will state that, before meetings at which evidence is to be considered, the committee could meet formally in private. That is why we have followed that route. I suggest that we do that, unless we receive further guidance from the clerks.

**Helen Eadie:** To avoid doubt, we should make it clear that the meeting is to go into private session following the legal advice that we have received.

**Lynn Tullis:** Yes.

**Mr Tosh:** I wondered how much of what took place in the earlier meeting needed to happen in private. The justification for having private sessions was that we would save on official report and broadcasting time. However, the official reporters and the broadcasting people were present throughout that session. I do not think that we would have been remotely damaged if the briefing by Stephen Curtis had been delivered in public. We did not need to have it written down. I am not sure what the point of this morning's privacy was. I do not say that in a disputatious or combative way—the reason was just not obvious to me.

**The Convener:** We must agree our line of questioning. To do so in public, before those who are submitting evidence to us arrive, is a bit daft. I wanted to highlight that aspect rather than matters of presentation and so on—it was more to do with the scope and direction of our questioning.

**Helen Eadie:** Such sessions are surely more about discussing tactics.

**Robin Harper:** I would pursue the course of sending witnesses our questions in advance. We want the best answers to our questions—we do not want to catch them out. What would be the point of that?

**The Convener:** To be fair, Robin, we let them know what the scope of the questions would be. They would have expected all the questions we asked them today. In the private session, we are more involved in sorting out the question structures.

The clerk and I will consider further the rules that govern the process. We need to organise ourselves prior to witnesses coming along.

**Linda Fabiani:** We should have a time scale for that. If we took only 10 or 15 minutes, it would not look like we were meeting in private.

**Robin Harper:** I have one more question. Now that we have all the details, could we send questions to Lynn Tullis, the clerk, in advance?

**The Convener:** There would be no problem with that, if you think that certain areas should be addressed.

Lynn suggests that we could meet for 15 minutes before opening the meeting at 9.30, to allow us time for housekeeping. Would that be acceptable?

**Members** *indicated agreement.*

**The Convener:** I thank members for their hard work this morning.

*Meeting closed at 12:25.*

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