



The Scottish Parliament
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Official Report

INFRASTRUCTURE AND CAPITAL INVESTMENT COMMITTEE

Wednesday 7 May 2014

Session 4

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INFRASTRUCTURE AND CAPITAL INVESTMENT COMMITTEE
13th Meeting 2014, Session 4

CONVENER

*Maureen Watt (Aberdeen South and North Kincardine) (SNP)

DEPUTY CONVENER

*Adam Ingram (Carrick, Cumnock and Doon Valley) (SNP)

COMMITTEE MEMBERS

Jim Eadie (Edinburgh Southern) (SNP)

*Mary Fee (West Scotland) (Lab)

*Mark Griffin (Central Scotland) (Lab)

*Alex Johnstone (North East Scotland) (Con)

*Gordon MacDonald (Edinburgh Pentlands) (SNP)

*attended

THE FOLLOWING ALSO PARTICIPATED:

Nigel Don (Angus North and Mearns) (SNP)

Robert Madelin (European Commission)

Jamie McGrigor (Highlands and Islands) (Con)

Gil Paterson (Clydebank and Milngavie) (SNP) (Committee Substitute)

CLERK TO THE COMMITTEE

Steve Farrell

LOCATION

The David Livingstone Room (CR6)

Scottish Parliament

Infrastructure and Capital Investment Committee

Wednesday 7 May 2014

[The Convener *opened the meeting at 09:30*]

Digital Infrastructure

The Convener (Maureen Watt): Good morning and welcome to the 13th meeting in 2014 of the Infrastructure and Capital Investment Committee. I remind everyone to switch off their mobile devices, as they affect the broadcasting system.

I welcome Gil Paterson, who is substituting for Jim Eadie.

Agenda item 1 is on the European Union's digital agenda. I am pleased to welcome Mr Robert Madelin, director general for communications networks, content and technology at the EU Commission. Mr Madelin has a busy schedule during his visit to Scotland, so we are delighted that he has made time to speak to the committee this morning on European and Scottish digital matters. We anticipate that this will be an interesting session, in light of the wide range of developments that are taking place in Scotland on digital connectivity. In advance of the meeting, the committee sought submissions from stakeholders on the types of questions that they would like to be addressed. We are grateful to the stakeholders who proposed questions for consideration, and we drew on some of them in setting our approach to evidence taking today.

I welcome Jamie McGrigor, who is a member of the European and External Relations Committee.

Mr Madelin, I invite you to make some opening remarks.

Robert Madelin (European Commission): For me, it is perfect not only that I can meet the committee but that the meeting has been prepared in the way that you describe, because the purpose of having somebody such as me wandering around Europe is for us to get away from the ivory tower in Brussels and find out what is going on and what we are missing at the European level. I am therefore very pleased to have the committee's time.

The digital agenda for Europe was launched in the first year of the Barroso 2 college, which is now at the end of its five-year mandate—the new team will be in place on 1 November, I hope. This is therefore a moment when we look at what has happened, what has surprised us and what we are missing. In the area of most concern to the

committee, which is infrastructure, what is happening is that connectivity is improving across Europe. However, what we are missing is a sense that the speed of infrastructure roll-out in almost all the member states is fast enough to meet growing business and societal needs. On the one hand, we are getting there rather slowly but, on the other hand, the question that emerges is whether there is now a measurable gap between where any society or community in Europe needs to be to attract new investment to build jobs and a strong society, and where it is.

Europe, not uniquely in the world, is underweight in spending on electronic infrastructure, as it is in every other area of infrastructure spending. In the golden age of rail, in the late 19th century, a lot of the riches of Britain were invested in railways, some of which survived for only 20 or 30 years and were vanity projects. We could argue, taking a Treasury view, that money was being wasted, but actually the infrastructure was there. If you are growing a garden, you want to allow things to grow a bit, and then you prune them back, and that is what we did in those days. Coming forward to today, I argue that we are billions short of the rate of investment that we need. That does not necessarily mean that taxpayers' money should be used to bridge the gap, although that model is being used in places such as South Korea and Australia, but we need to be conscious that there is a gap.

The question that then arises is whether we should wait until the need is demonstrated or build it so that they may come. That is an economic strategy challenge. One choice is to build the infrastructure and see what grows around 100 megabit connectivity, rather like what happens with a motorway; another choice is to be more cautious and leave it to the market.

The difficulty with the market in this field is that, as we all know, we have a market that is not competitive. Electronic communications is a rootedly uncompetitive market. That is why we have organisations such as the Office of Communications across Europe and why we have ex-ante and not ex-post competition rules. It is hard to generate market-led investment at sufficient levels in a market that is not fully contestable. On the infrastructure side, we can say that we have more to do.

More broadly—this is my second big message—when I took this job in 2010 and we launched the strategy, a lot of people in Europe said, “We know digital is nice to have, but it's interesting that it is coming first in the strategic initiatives of this college.” People were a bit surprised about that. In subsequent years, as can be seen from the positions of the Organisation for Economic Co-operation and Development, McKinsey &

Company, the Boston Consulting Group and so on, the idea that digital is crucial to the survival of any society has gone completely mainstream. There has been a shift with regard to recognition that digital is everywhere and we need to have it in our mindset, whatever our core business is.

Even given that situation, however, we can highlight some lacunae that we need to work on. One is skills. Digital literacy is still inadequate, whether we are talking about retired and old people or the under-10s. That can be addressed through establishing coding clubs, having programming as a core part of the curriculum and having a clear map of where business needs are not met by our education system.

The second lacuna concerns the need to get small and medium-sized enterprises to be information technology ready, which does not mean buying them a new computer. Most SMEs need to change their business model, which will enable them to sell to more new markets. That can work right down to the microenterprise level. For example, in rural Connemara, we have had some interesting experiments that have shown that a few hundred euros here or there can help people to understand how their cottage enterprise—some are literally run from a cottage—can get online in a way that can transform their prospects.

The third lacuna concerns the individual consumer and citizen angle. It is that neither e-government nor e-commerce is growing as a proportion of the way in which we live our lives as fast as we think that they could, or as fast as we see them growing in countries where the infrastructure is stronger, the skills are in place and self-confidence is higher, such as Norway.

My sense is that the next college of commissioners will need to have not only a strong digital commissioner in Brussels but a digital college and, I hope, a digital president of the college of commissioners so that, in every area, the digital aspects of the transformation that we need, whether it is in education, infrastructure or business strategy, will come first. That would mean that, in 2015, we will quickly level up some of the areas of policy that have been lagging in the past four or five years and in which we hope to do better.

Everything that I have said is directly relevant to Scotland, which is a European leader in some areas, such as e-health. I mean that literally, as Scotland helps to lead and co-ordinate work across Europe in those areas. Similarly, the information and communications technology team in the University of Edinburgh is a global, as well as a European, beacon.

My sense is that many of the policies that are being rolled out in Scotland are pretty much in line

with what I am saying, so I do not have a sense that I am coming to teach anybody anything. However, seen from the European level, those are the strengths and weaknesses that we have discovered in our journey over the past three or four years.

The Convener: Thank you. Alex Johnstone will start off the questioning.

Alex Johnstone (North East Scotland) (Con): You made it clear in your opening remarks that you are here to listen to the experiences of people in Scotland. However, will you briefly tell us what the key priorities are on your side with regard to the development of the digital agenda?

Robert Madelin: The first priority is the infrastructure conundrum—I am not saying that just because I am before this committee. In the past three or four years, we have got to 96 or 97 per cent coverage for basic broadband—that means achingly slow connectivity—and we have set out a model in which satellite fills the gaps. The next step, which is 30 Mbps, is extremely complex from both the investment and the technological points of view. There are well-understood controversies, including in Scotland, about whether the copper infrastructure will allow us to get to 30 megabits per second if the distance from the cabinet to the home is more than three quarters of a mile. That area is really difficult.

The political will was tested in the budgetary debate last year, when we proposed a €7 billion novel financing instrument to help member states and regions to plug the gaps, and we got zero. We have not given up; we have put in €150 million of our independent research money from a different heading to try to show through pilot projects that the area is worth funding, although not necessarily out of the European Union budget. That remains a major theme.

At the other extreme, the other major theme is the whole digital citizen and skills agenda. If the people get it, the politics at local level will change in favour of the sort of infrastructure and IT transformation that we need. If I had to give just two pillars, they would be getting it right for people and getting the infrastructure right.

Alex Johnstone: The committee has discussed both issues. How is Scotland measuring up against those priorities?

Robert Madelin: On the infrastructure side, my sense is that the broadband delivery UK Highlands and Islands schemes are pushing in the right direction. The answer in every town depends on the length of the copper wire, how old it is and how many people want to use it, so a degree of deep knowledge is needed, which is probably not available to public authorities anywhere in Europe in a perfect way. I do not even know that the

incumbents have done their homework in that degree of detail. The big challenge, especially in a country that has sparsely populated areas as well as densely populated ones, is to get a map that is detailed enough to enable people to make public policy choices about exactly where the money should go.

If I look across the structural funds programming agreements for the UK, which are under discussion, I think that what is being funded under Scottish and UK schemes is all pushing in the right direction. However, people from the west of Scotland whom I have met on previous visits and in Brussels say, “Yes, but we’re due to come last every time, and people then go back to the beginning and start a new piece of technology, so we’re still lagging.”

At the other end of the scale, there are examples of bottom-up community schemes on some of the islands, where the existence of high-speed public access fibre has enabled individual villages to connect themselves at 100 Mbps at very low cost per household. There are different models out there. In that sense, we might say that Scotland is a laboratory.

Alex Johnstone: Are we in Scotland doing the right things to support progress through the mechanisms that are available to us, including the actions of Government? Are there areas where we could do more?

Robert Madelin: In my previous job I dealt with health, and it struck me that Scotland was just the right size to have strong community roots for a vibrant policy, with people understanding what was going on. In the e-health field, we can see that strength coming through in IT. I do not know whether that is the case in relation to e-communications infrastructure. I do not see a signal that the incumbent providers and the IT teams in the Scottish Government are working on the rural end as hard as they are working on some of the lighthouse projects around, for example, Glasgow and Edinburgh.

As is often the case in public policy, the picture is one of light and shade. If there is an aspect that I think a country such as Scotland needs to look at carefully, it is rural connectivity. As the *Financial Times* said this morning, proximity to big cities is still important. Scotland has big cities—the chart in this morning’s *FT* shows that Edinburgh has the second highest wealth rate after London—but there is a need to use the new infrastructure to ensure that distance becomes a zero handicap in future, which it can do, and not a heavy handicap, as it used to be.

09:45

The Convener: Do you believe that digital infrastructure should be viewed as a utility, like water and energy provision?

Robert Madelin: Yes. It is clear to me that communications infrastructure is a public good. Whether we run it as a utility that is owned by the state, financed by the taxpayer and open to all or we find some other mixed economy solution for provision is a different question. The treaty of Rome and every treaty since has said that we should leave that to people outside Brussels to choose. However, it is definitely a utility, and it is a crucial public good for the survival of our societies in the future.

The Convener: I was thinking about new housing developments. Digital infrastructure almost always goes into new industrial developments, but that does not always happen in the case of new housing developments.

Robert Madelin: Precisely. We have legislated on that in the life of the current college at the European level and it will be rolled out in the year ahead. We finished just before Christmas. I refer to reducing the costs of civils and infrastructure within the overall broadband cost structure. Typically, 80 per cent of the cost of putting a kilometre of fibre in the ground is for digging holes, getting access to ducts and so on. We have agreed among all the member states to require mapping of where the ducts are and to require that new builds are, by default, open to high-tech infrastructure, including fibre cable.

That is still not self-evident, however. Even in a country as well managed as Norway, which I visited recently, every province has a different rule about how deep the cable has to be buried. It is not possible to calibrate the digging machines in the same way when running a cable from the south to the north of the country. I guess that similar narrow differences on issues such as how wide the road is and where the ducts are create handicaps in Scotland, too. There are problems.

Increasingly, it is acknowledged that houses will sell better and be more attractive if they have good connectivity. They might be up to 20 per cent lower in value if they do not have good connectivity to the infrastructure.

Gil Paterson (Clydebank and Milngavie) (SNP): How do you think Scotland is performing compared with other European countries?

Robert Madelin: We can look at that at the county or the regional level. Broadband infrastructure coverage goes from 90 per cent to 0 per cent. Everybody has a telephone but, if we look towards 10Mbps, 20Mbps or 30Mbps, there are still areas, mainly in the Highlands and

Islands, where in general nobody gets those speeds, although that might not be true of some businesses with leased lines or some hospitals or schools. It is fine, however, for Dundee, Perth, Glasgow, Aberdeen or Edinburgh. You need to consider it at that granular level.

The average of a series of experiences between 0 and 90 per cent does not tell us much. Overall, we can say that, as an average, Scotland—or even the UK—is more or less in the middle. It is not Romania and it is not Norway. However, there are bits of Scotland that are like Romania and bits that are like Norway. That is the important point. The range of experience is the biggest that it can be.

Gil Paterson: What about the general picture? Are we catching up or slowing up? Is there something that you can tell us in that respect?

Robert Madelin: Civil servants are forever failing to give the clear answers to such questions that political decision makers need.

There are things that you are doing in Scotland that are absolutely the best in class—for instance, trying out affordable, high-speed infrastructure in every flat in a high-rise block in a poor part of Glasgow or Edinburgh. That is huge when it comes to what you can learn about getting disadvantaged people connected to real opportunity. At the other extreme, if you cannot even get functional dial-up access to the BBC website when you are staying at a hotel somewhere in the north-west, that is a drag on the market. Some people will say that that makes it a very quaint place to go to; other categories of people will find that a problem.

As I said, the good stuff is the best in class, while rural connectivity is a challenge for every part of Europe with rural problems. If we look at the countries with an even higher proportion of sparsely populated territory than Scotland, such as the Nordic neighbours, the only way in which they can fix those connectivity issues is by putting in more public money at the municipal and national levels.

Gil Paterson: How can the connecting Europe facility be used to support Scotland's digital agenda?

Robert Madelin: The connecting Europe facility was in two parts. First, we made a budgetary proposal in the previous multi-annual financial framework round in Brussels. We proposed around €6 billion or €7 billion for the infrastructure roll-out. As I said, the answer to that was near to zero funding.

We proposed a second thread on collective e-government public service infrastructure—which we call digital service infrastructure—and we got

pretty much what we wanted, which is €3 billion-worth of funding. That thread was not to provide e-government across the whole of Europe but to provide a common hub, with common hosting and a common toolbox, so that people can offer e-procurement, e-identity and e-health services across borders, at the lowest possible cost. In addition, because that is done together, across borders, it ends up with the best practice from around Europe being shared more quickly. On that part, the digital agenda for Europe is served by part of the expenditure that is new in this EU budget compared with any previous planning.

Gordon MacDonald (Edinburgh Pentlands) (SNP): I will continue the discussion on broadband infrastructure funding. Last year, the Carnegie UK Trust produced a report, "Going the last mile: How can broadband reach the final 10%?", whose author stated:

"it must be recognised that supplying the final 10% ... with NGA"—

that is, next generation access—

"services of an equivalent level to those available in urban areas will cost several billion pounds ... this cost is unlikely to be met through normal market forces".

Assuming that a straightforward grant-funding mechanism is unaffordable for most states, what solutions are emerging to finance the provision of digital infrastructure connections to the most remote areas in Europe?

Robert Madelin: I will start with technology. You will get there faster with 4G mobile than by tweaking the copper. The roll-out of 4G is starting rather slowly in the UK as a whole, largely because of spectrum allocation, but we are assured that the UK will catch up. That is one way in which you can begin to build solutions. The second is to concentrate the public money not on the last mile, but on the backbone, so that you get access backbone into the local community and then you allow people in the local community to do it themselves: they dig out from the backbone and, through radio or other solutions, build their own local network. The difficulty with that approach is that the commercial backbone is not generally made available—that is a commercial choice—to such collectivist approaches. However, when such approaches are properly done, they are extraordinarily cost effective, they work and they act as good community building. There are great examples of that around the Isle of Mull—I have mentioned the Tegola system.

If you cannot simply throw taxpayers' money at the whole solution, part it will be about pushing faster deployment of the newest technologies, and part of it may mean going into the backbone level and making sure that a point of contact exists relatively close to each community, so that the

community can begin to decide whether that or replacing the school bus or whatever is the priority.

Gordon MacDonald: Are there any lessons that Scotland could learn from the likes of Iceland, Norway and Sweden, which all have higher rates of internet uptake than Scotland does, despite having lower population densities?

Robert Madelin: Those countries are very rich and have quite a strong municipal budget layer. They have not done what South Korea and Australia have done—they have not put up satellites or paid for all the fibre at taxpayer level—but they have deeper pockets than public authorities in this country do.

What is striking in Sweden is the fact that the offer has been very attractive to consumers. Music streaming has been a huge success in Sweden, where most royalties that music copyright owners make from people listening to their music are made from streaming services rather than from people doing things such as downloading from iTunes or buying CDs. The bundling together of content services with phone subscriptions has not quite taken off yet in other markets.

It is hard to judge why something sells better in one market than it does in another, but the Swedish regulator always says to me that part of the reason for the success of that model in Sweden is the fact it gets dark there earlier than it does in Brussels. Therefore, some of the features that drive that model might work in Scotland as well.

Gordon MacDonald: You said that the countries that I mentioned were richer. According to the Royal Society of Edinburgh's report, "Spreading the Benefits of Digital Participation", which was published in April, Iceland, Sweden and Scotland all have the same level of gross domestic product per capita—\$41,000—so I do not think that that should be a factor.

Is there any European funding available to assist with the provision of broadband infrastructure in hard-to-reach rural and island areas such as those in Scotland?

Robert Madelin: In relation to your comment about the GDP per capita figures, it might be the case that they are not the same if relative household incomes are taken into account. It is necessary to net out the mineral resources wealth.

As regards what Europe can do, I am sad that we did not get the new line specifically for broadband. Despite not having that, one of the operational objectives under the structural funds relates to information and communication technology. I think that any bid that comes from Scotland and London as part of the programming

discussions that are going on would include ICT as an area on which there would be a desire to spend the money.

As you will know, the negotiations are awkward, in that the country makes the bid but my colleagues in the Commission get to complain about it. It is a matter of public record that Commissioner Hahn, who is the guy in charge, does not want to spend the structural funds on infrastructure; he wants to spend them on skills and other stuff. We have not supported that line, but it is not possible to win all the interministerial fights, even in Brussels. As of today, it is not clear what the outcome of that negotiation will be, which means that there is everything to play for. I am sure that your colleagues in the Scottish team on Rond-Point Schuman are fighting that battle quite hard.

Jamie McGrigor (Highlands and Islands)

(Con): I represent the Highlands and Islands—I am an MSP for the Highlands and Islands region, which goes from the south end of Kintyre to the most northerly Shetland island. It covers more than half the land mass of Scotland but has a population of only half a million people; the population is very scattered. In some areas, we face significant population decreases, which are extremely worrying. On Friday, I will attend a summit about population decrease in Argyll.

I happen to live in Argyll, which is one of what you described as the Romanian areas of Scotland, and I know how desperately difficult it is to get broadband there and to run a business, especially a tourism business, in which it is necessary to get back to people straight away.

My first question is on something that you may have covered. How can the EU help to get reliable broadband to the most remote rural communities, which still face a wait of years? Is there anything that can be done for those people to stop the depopulation that I am sure is related to that?

Secondly, what is your view on rural constituents having to pay significantly more for satellite broadband services than the rest of the population?

10:00

Robert Madelin: I will start with the second question, because that is news to me. I guess that it is a commercial decision, because companies will charge you more to send the man to screw the satellite dish on to your house. That I could understand a bit but I think that the refusal to supply is a real problem even for parcel post-type deliveries in your region—I have friends who live there—and it is not clear to me that it should be okay to refuse to supply within a territory. After all, if it is a community, people should supply it.

If a difference is also being imposed on consumers because they have no choice—for instance, if somebody providing satellite is charging a higher subscription just because they know that they are not competing against a BT package—I would say that that is probably a matter for the competition authorities. It is a political matter if the consumer is vulnerable and that vulnerability is being exploited. I do not know the facts in order to judge whether it is one or the other or both, but it seems clear that there should be a fair price for satellite services, as for everything else.

I gave a list of the issues that we have not yet fixed, which was short, but one issue on which we have not focused sufficiently is the specific characteristics of the digital consumer problem in all its areas. Being a consumer in the digital age is difficult in different ways from being a consumer in the bricks-and-mortar age, and the consumer policy and consumer protection models that we tend to apply are still very bricks and mortar. Your satellite example is an interesting case study and I would like to look at it a bit more.

On your first point, I do not have so much to add. Because I have never been responsible for territorial connectivity, I would hesitate to say, “This is the answer.” However, it would probably be a fruitful road of inquiry—and we would be happy to put people together—to compare what happens at the local level in the northern bits of Norway or Sweden with what happens in your region and to see how they managed. It did not all come down miraculously from Stockholm and Oslo; a lot of it comes from the political and practical actions at the middle levels.

It may well be that making the case much more strongly for some specific roll-out, such as putting a piece of fibre between one place and another in return for another party doing something else, would unlock financing decisions that tend to be put immediately into the too-difficult category when you are looking at the overall large numbers. There may be lessons to learn from the successes and problems of different rural communities in Scotland and in neighbouring countries.

Jamie McGrigor: I sit on the European and External Relations Committee, which looked into horizon 2020 a while ago. You mentioned Commissioner Hahn not being keen on spending money on communications. Having looked at the issue, I know that it appeared that the budget for communications had been cut. Has it actually been cut and, if so, by how much?

Robert Madelin: Horizon 2020, for those members of the committee who have not looked at it in detail, is the new framework programme for research and innovation. In my department, I am responsible for spending the ICT chunk of

research money, and the trend is still relentlessly upwards. It is one of the success stories of the European budget decisions last year that, at a time of austerity and cuts, overall research grew.

Within that growth, ICT continues to grow. This year—2014—is a lean year, as there is a little dip, which is traditional in the budgetary cycle. We tend, over seven years, to start low and build up, so 2013 was the highest year of the previous framework programme and we are starting a little bit lower, but the long-term trend is still up. Crudely, that means that we are spending a good bit north of €1 billion a year in part funding projects that are worth, more or less, €2 billion a year across Europe.

Within that, our spending on the next generation—5G connectivity, the internet and so on—remains a big theme for us. We think that the way in which e-connectivity will affect not only communities but the factories and design value chains of the future requires a lot of work. However, we can win in those areas, as Europe still has some really world-class strengths. I have mentioned the University of Edinburgh, but there is also gaming in Dundee, and there are other real strengths in neighbouring countries around semiconductor chips and so on.

We did not get everything that we asked for. Our dream—including the connecting Europe facility—would have been to get about €16 billion and we got about €12 billion, so we got less than we asked for but more than we have been spending in the past.

Alex Johnstone: The subject of competition has been raised briefly. Does anything need to be said on that subject? I only recently discovered that BT has a dual pricing policy for broadband provision, with one price for areas in which it is the monopoly infrastructure provider and a different pricing structure for areas where there is competition. Is such practice a positive or a negative when it comes to the development of infrastructure and services?

Robert Madelin: The first thought that goes through my head is that in some areas there is local scrutiny from the competition experts and I am not sure that Ofcom has a strong presence north of the border. It may be that there is a problem, because the granularity to which you refer is probably invisible from where Ofcom sits on the River Thames. I think that, overall, Ofcom and my competition colleagues would take the view that it is a market, so if you think that you can sell for more in the town than in the country or vice-versa, you can do that up to a point—the question is whether that point is passed. In competition terms, that means asking whether you are abusing your dominant position. If you are, that would be a problem. I would say, not as a

competition expert but instinctively, that if the situation is as clear as you describe it, a competition authority should be taking an interest in the matter.

However, at the other extreme, we have learned that price fixing by bureaucrats is probably not an efficient way of getting services to customers. This is a colossally difficult area. We are asking ourselves, not only in my bit of the Commission but more generally, whether the new technologies—beyond just connection services; there is also the Google story, for example—are creating new forms of distortion of consumer and business to business competition that need new forms of attention. That is currently a very hot political debate among competition authorities.

My competition opposite number recently made a speech in which they said, basically, that the way that we have tackled the Microsoft browser monopoly and the Google search monopoly shows that the fundamental structure of competition law is fit for purpose. I am still thinking about whether that is entirely true.

I do not think that we need to change the fundamental concepts of dominance and abuse of dominance. However, for example, at the moment, we take current market share, which means last year's market share, as the dominance indicator. If the market share is growing sharply, a company may become dominant before people notice. Slightly more agile techniques—to say the least—are therefore required and, as your example shows, it is also necessary to dig deeper to have a definition of the market that is narrow enough to enable us to capture companies' practices.

Adam Ingram (Carrick, Cumnock and Doon Valley) (SNP): You mentioned the horizon 2020 project and your support for its connectivity element. Can you expand a little on what is being done to support innovation and emergent technologies that could complement broadband coverage? You hinted that 4G could be of particular benefit in relation to enhancing mobile internet access. I have to say that my constituency, although it is not in the Highlands and Islands, has quite a number of not-spots when it comes to mobile phone coverage. Is there anything by way of support from Europe to deal with such issues?

Robert Madelin: One of the areas that all member states, the UK being no exception, want to keep very subsidiaire—very much in national hands—is spectrum management. It is one of the tragedies of the common agreements in Europe that we have extremely diverse and slow management and deployment of spectrum. Spectrum is a limited resource and the needs for it are changing. At the moment, we have vast overmonopolisation of spectrum in relation to need

by the public services—including the armed services—in all member states, so there is a lagging inefficiency there.

We also probably have extra costs across Europe because the 3G and 4G spectrum allocation is at different stages in different countries. That led, for example, to the iPhone 5 being sold everywhere except Europe for six or 12 months because the manufacturers could not be bothered to put antennae in the phones to make them work in Europe.

Starting with spectrum management, I believe that we could do a lot to enable more rapid deployment of the best available mobile technologies if we had the courage to manage this extremely delicate resource together. There is a proposal on the table in the European Parliament and Council as we speak to make a push in that direction. The resistance is predictably huge. We will see where we get to with that after the European Parliament elections. It is one of the rare cases in which we have not yet achieved an efficient balance as regards managing a borderless resource in a co-ordinated way.

We have to win the game with the next technologies—with 5G. We won one round: the current technologies—the specifications in the phones that we use today—were built in Europe and every time we buy a phone with those technologies, royalties trickle back to European coffers. It is not the same for 4G technology, which was more or less invented elsewhere by an essentially Asian coalition. In the case of 5G, we want to win. Nobody knows what 5G will be; it is the next, more efficient, mobile transmission technology and we are putting a lot of money into it. We have a strategic partnership between public and private research institutions and companies, so let us see what happens with that. Everybody is trying to find the next big thing.

The other way to go is to say that maybe the answer is radically different—we will not have mobile telephone connection or fixed lines; we will have small cell wi-fi solutions. That would enable different configuration and different cost structures, which might mean that it would cost less to put a high-speed network in a village in a sparsely populated area—maybe. That requires experimentation. Across the water in the Republic of Ireland, they are saying, “Come to us, we have sparsely populated areas—we can be a living lab for deployment of new approaches.” Given that there are sparsely populated areas in Scotland, Scotland could also be a living lab for some of those approaches. Those are just three ideas.

Adam Ingram: Is there any European support for the living lab proposals?

10:15

Robert Madelin: Yes. As part of our spectrum use research—I am talking about horizon 2020, not the regulation of the current spectrum—we will have opportunities within the partnership. We do it by call. People can respond to a call by saying, for instance, that they have a coalition of people researching 5G and people who are able to build an experimental something across a vast empty tract of hill country and islands, and who think that that is an efficient way to advance the research.

When discussing research in ICT, people do not talk so much about pieces of metal any more. At the top end, there is a lot of research on the next generations of chips. I am not talking about the big production chips, but about the more specialised stuff. We think that Europe can win there, and research has been carried out around the 5G technologies.

Downstream, a lot more attention will be paid in research and innovation to how the internet of things can be configured and made to work. It is not all about someone's fridge talking to the supermarket; it might be more complicated. What is a smart community, whether it is a village or a city? What does e-health really mean in specific situations?

The need to have embedded research—research with real people in real places—is a strong thread in the new approach that we are trying to roll out. It means that the authorities that own the territory become the missing partner in the research landscape—that is the case, concretely, in the European innovation partnership on active and healthy ageing, where Health Scotland and research institutes in Scotland are leading actors. That was the breakthrough of the past three years that brought regional health authorities and hospital managers into the picture, so that we were not inventing things in laboratories without paying any attention to whether they would work in real life. The same will be true for mobile connectivity.

Adam Ingram: This is fascinating stuff.

I will perhaps change tack a little. Given the significant financial contribution by the Scottish and UK Governments, do the state aid rules have consequences for the work that is being done on expansion of the digital infrastructure in Scotland?

Robert Madelin: The answer is that the state aid rules always get in the way—although I have never worked in that field. You may have followed the case of Birmingham from afar. Over the past three years, the application of the state aid rules was one of the obstacles to the success of a roll-out plan in that city. In practice, the system was so slow to give a clear answer that Birmingham and London policy went down another route. We now

have ICT vouchers for SMEs, and BDUK schemes are now in place, including in Scotland.

The revision of the state aid guidelines over the past two years has gone in exactly the right direction, and we were very pleased with that from a user perspective. The risks will be lower in the future than they have been in the past. There are ways to avoid problems, although not all member states make use of them. Some member states—the UK is not one of them—have an up-front strategy about support for infrastructure, which they get approved by the competition and state aid people in Brussels. Then, everything that is just an application of the strategy is easily ticked through. If one presents ad hoc proposals, not only is the resource that is available to study them inadequate, so they pile up in somebody's in-tray, but they are each scrutinised with rather more attention than is the case for proposals that sit in a preordained strategic framework.

That goes back to what I was saying about having leadership close enough to the territory. If there were a Scottish vision of broadband priorities, backed up by stakeholder support, that said that certain things were priorities, and if that was approved by Mr Almunia's successor, the individual applications of such a vision would be much more readily managed from a state aid perspective than they would be if an individual proposed something for the Highlands and Islands, then something for smart cities and then something for the gaming industry, for instance.

The Convener: How did the UK Government get into a situation in which it was breaching rules in relation to superconnected cities? Edinburgh is trying out the voucher scheme. In Aberdeen, it is not viewed as being the best way of helping businesses in the city, and the timing has slipped.

Robert Madelin: I may hold a British passport, but it is more than my life is worth to give a direct answer to such a question.

Part of the answer is what I would sometimes caricature as administrative sociology. With the existence of BDUK, the mandate of the Department for Culture, Media and Sport and the location of state aid expertise in the Department for Business, Innovation and Skills, there are quite a lot of actors in this area around Whitehall. The piece of advice that we can distil from the experience is the one that I have just given: that you need a strategic view up front, and a political vision that you enunciate and that you adopt in order to get through the state aid obstacles or jump over the hurdles. Then, it becomes much easier.

Part of the problem has been the speed of action. When it came to the initial political statements of vision, there was perhaps a missing

link in the engagement with the state aid authorities. That said, if we consider the UK as a whole as well as Scotland, compared with other countries across Europe—as I was saying earlier—it would not be accurate to say that, because one particular episode resulted in lost time, everything is going badly. Some things are going well, too.

The Convener: We will move on to digital participation, on which we have a number of questions. We will need to speed up a bit, because we have less than half an hour left.

Mary Fee (West Scotland) (Lab): I wish to explore the balance between building the infrastructure and building the skill set. Last year, the Scottish Government published the report “Scotland’s Digital Future: Supporting the transition to a world-leading digital economy”. The Government is committed to ensuring that business and individuals have the skills that they need, and that we have a thriving digital economy. Has too much attention been given to building the infrastructure, to the detriment of building the skill set, or have we got the balance right?

Robert Madelin: You need lots of both. I do not think that I can make a fine-tuned judgment as to whether the balance in Scotland is right or wrong. The good and the bad news on the skill-set side is that even the sorts of countries that we think are tremendously efficient find it very hard. For example, Singapore is small, very government driven and quite successful in this area. On the one hand, it has a strong top-down vision that digital literacy is “the fourth R”, as people there put it, and that it must be a priority.

On the other hand, when we talk to the officials who have been responsible for that, they say the things that everybody else says: that the teachers may not get it and do not want to be forced to do it. It requires a clever, attentive and sustained effort to teach the teachers and train the trainers. It requires incentivising while making it safe for people in age groups that do not necessarily get it—mine and beyond—and helping them to look good in class. It is probably always scary being a teacher, but if the kids all get it and the teacher does not get it, but is expected to teach coding or programming, that is really scary. If there is one area where we have not bitten the bullet, it is that.

I think that Finland is the only country—it was definitely the first—that has gone in depth to integrate IT into the curriculum beyond, “How do you use PowerPoint, boys and girls?” We have not really engaged at the teacher training level. It is not rocket science; we could say, for instance, that over the next year every teacher will do one of their training weeks on IT stuff, and we could take it from there.

One of the great strengths of the ICT faculty at the University of Edinburgh is that it goes out into the community and its post-doctoral students run coding clubs. That sort of thing—the multiplier effect—is also important. The people who know how now need to get back into the community.

I am neither a programmer nor a musician, but another thing that I perceive strongly is that what makes IT work in people’s minds is similar to what enables them to understand music. Scottish communities have strengths in relation to making music seem aspirational, easy and accessible to everybody; we could apply the same community-based approaches to making IT about more than just video games and PowerPoint.

Mary Fee: Are there measures that people can use to assess their digital literacy for gaps in their skill sets?

Robert Madelin: I do not know whether there are such online diagnostic tools, although I am sure that there are, because we can find everything online.

That raises a more important question, which is this: what is the skill set? It is not a block. It is like reading, writing and arithmetic at its basis, but we must overcome the notion that being digitally skilled means either being able to use PowerPoint or being Steve Jobs.

At every level of educational attainment and in every job, a particular digital literacy skill set is needed. Employers—start-ups, SMEs or big companies—tell us that they find gaps at every level. That is why we have to start at the educational foundations—that is, with the teachers—because it is not just about teaching the people who are good at maths to become programmers; it is about teaching even those of us who are not good at maths to be digitally literate.

That tells us something about the answer to the question, “What are my gaps?” Everybody will have a gap. It is not like we are trying to preselect the next generation of Alan Turings.

Mary Fee: So, it is horses for courses.

Robert Madelin: Yes, but it really means that digital literacy is for everybody. The leaders of society need to say that that is the case—that is the first thing that Singapore has done that we have not done. They need to say that it is not only nice to have or aspirational; they need to say that it is not like a driving licence, but like reading.

Every country in the developed world has much more illiteracy than we like to admit, so we are not saying that we can snap our fingers and fix digital illiteracy. Everything will flow from political leadership and from the vision that digital literacy is for everybody, and not just for the bright people,

for those who are good at maths or for those who go to university.

Mary Fee: That leads nicely to my last question. What responsibility should Government have to drive the development of digital skills? Should it be an assistance role or a more controlling role?

If we examine the use of digital infrastructure in SMEs, we see that about 60 per cent of Scottish SMEs use the internet. Voluntary organisations more often than not provide support to people who are excluded and disadvantaged, so should more support be given to SMEs, voluntary organisations and similar organisations?

Robert Madelin: I believe that digital literacy—not just the hardware, but the skills—is a public good and that the Government must therefore make it its business to ensure that such public goods are in the hands of all citizens, although not necessarily always through state provision. However, that vision is not yet clear. We have a digital agenda for Europe, but it is not yet at the heart of everything we do.

Everybody has needs that have to be met; voluntary organisations are a great example. To be efficient, they need to have digital platforms that are easy to use. Perhaps it would help if they were to federate their needs so that big solutions would be available. Cloud technology and a bit of corporate social responsibility after-hours help could deliver transformative support for the voluntary sector.

Equally, the voluntary sector is part of the solution to the skills gap. Whether we are talking about apprenticeship colleges in Malta, old people's homes in Norway or boy scouts in Poland, it is striking that the vehicles for bridging the digital skills gap often come out of the voluntary or social services sectors.

10:30

Mark Griffin (Central Scotland) (Lab): In Glasgow, broadband uptake is well below the national average. Are other cities in Europe in a similar situation, regardless of the technology issues?

Robert Madelin: I assume that in Glasgow the low uptake is among medium-sized companies and households—

Mark Griffin: It is about households, in particular.

Robert Madelin: It is partly about price. The experiment that I talked about, in which high-quality broadband was brought in at lower cost, showed what can happen to use in a single housing development. That was an important and interesting experiment.

In Malta, which is a rich country that has some very poor parts, in a telco-led experiment the higher-speed service was provided for no extra cost for a year. That was good for society, but it was also colossally good for the telco, because a lot of households understood that the value was worth paying for. As I understand it, experiments are going on in Glasgow and Edinburgh to ascertain whether, if the subscription is £5 per month instead of £25 per month, people will ultimately think, "That extra £20 is only a couple of rounds of drinks; it is worth paying."

That is one part of the solution. We have to let people come into contact with the service, so that they regard it as relevant to them—and not just as something that is aspirational and middle class.

There are places in Europe where uptake is low. It is the same with any social phenomenon. In a healthy society, the gap between rich and poor will be narrowed, but it will always be there, so there will always be hard-to-reach pockets at the bottom. What can we do about that? We have to tailor offers, which might involve not just providing lower-cost services but experimenting with hand holding and support to help people to see how a service can serve their community.

I have talked a lot about Norway and the Nordics. I think that at this end of the problem, quite soon—and it is already the case in some respects—Africa will teach us what to do. There are venture capitalists in America who are making a lot of money because they picked up some very cheap Bangladesh-developed e-health applications and used them in Colorado or Harlem, where they work. If we are trying to deal with the problem of inner-city deprivation or exclusion, the solutions that we need to think about might be as much in emerging economies as they are in our rather rich neighbours.

Mark Griffin: You mentioned price; another aspect is skills and people's confidence about using services. Is funding available to help people in inner-city areas where there are high levels of deprivation and inequality, through training to build skills and confidence?

Robert Madelin: Again, that can be part of the structural funds model. It is the sort of thing that Europe does rather tentatively, because we are so far away that we cannot see how to target support at the need, but there is scope to do some work in that regard.

There is a lot of willingness to share inclusion learning across Europe. I have modest teams who do research on e-inclusion issues. Likewise, such work goes on over in the social employment part of the Commission. However, we would not claim to be the big experts.

I am not a tourist guide, but I suggest that you could say to the Scottish office in Brussels, “Find me, through the Committee of the Regions and the European Economic and Social Committee, people who are facing this problem in other countries, because I want to come and meet them.” In the European space you can have such conversations, where the lessons might be worth more than the cheques that you will get from the Commission—but it is a bit of both.

Mark Griffin: Finally, are there any cyber-security issues that Scotland will need to address as we keep developing and expanding our digital infrastructure?

Robert Madelin: Cyber threats are everywhere. I do not think that there is any Scottish-specific threat. The really interesting question, whether it is about cyber security, hacking or privacy, is whether we worry so much about it that we do not take advantage of the good things that this new set of technologies can offer. The answer has to be no. If you wait until it is safe, you will never go out.

We need to develop good security in parallel with developing our IT-enabled society. This issue is second only to spectrum as an area where the responsible authorities at national level want to talk among those that they trust. Typically, that would mean the UK, the French, the Germans and the Dutch but not the Bulgarians or the Romanians. That is a problem, which is why the European Union has proposed that we have co-operation among the 28 member states.

On bioterror and pandemic threats, it took 10 years, but we have reached agreement that we should share even sensitive, intelligence-related stuff. Peculiarly, we have not done that on the cyber side. I sometimes wonder whether the Snowden situation reveals why it is harder on the cyber side than the health side, but we need to do that.

I do not think that there is anything that should make us think, “The water’s too cold; I’m not jumping in.” We simply have to be aware of the risks.

The Convener: Obviously there is a push for more and more things to be done online, such as people claiming welfare benefits. There is a danger that more people will feel excluded if we do not catch up on digital participation. There are people who would rather deal with a person face to face than fill in a form electronically, or who simply cannot fill in a form electronically. There is a balance to be struck in the move towards everything being done online. We could also talk about procurement and SMEs not being up to speed on how to access contracts. What is your view on how we strike a balance?

Robert Madelin: In a healthy society, you have to allow people the choice. It is okay to be digital by default, but you have to have options. If we put the right effort in, the technology itself can reduce the risk of exclusion. Consider the things that a smart phone can do for a blind person now—it can guide them around a city if the lamp-posts have the right chips on them, talk to them and turn text into voice. That technology is amazing, but it is not yet available to everybody at low cost. The technology that we develop for blind people, who, thankfully, are a minority in our population, helps the illiterate as well.

The work on the user interface is increasingly developing really easy-to-use approaches but, again, they tend to be rolled out first as glitzy corporate solutions, then the public sector develops something else that is more or less unusable or not fit for purpose—I know that, because we do it to ourselves in the Commission as well.

We need to gain the efficiencies, but we have to always allow people the choices and make sure that the safety net is functioning. Things such as online welfare and banking systems are a big change in our societies, so everybody has to rethink. For example, we need to give our attention to allowing people to say, “I can’t manage.” How do we make it easier, in a non-stigmatising way, for people who cannot work their way through a form to get help? At the other extreme, how do we adjust our acceptance of risks? If people have to click in to claim their welfare, who is to say that it is the correct person and not their mother-in-law because the person is in Barbados? The authorities have to worry, too.

We have to work through the changes, just as we worked through the change from horses to motor cars. It will take 10 to 100 years, but we should not let it stop us—that is the point. We have to understand the worries and make it clear as a society that we intend to deal with them and will not just say, “You have to run faster.”

As with the cyber-security question, the key is not to say that, because everything is so terrible, we are not going to do it. As I have said, at the top level, one of the missing ingredients in success is a vision that says that we are going to do this, we are going to win and it will actually make us a stronger society, whether in Scotland or in Europe. When we were building railways, we believed that we would make a success of it and that it would be good—and it was, although not all the railways were built in the right place. IT is a bit similar. We will make mistakes, but we have to advance in any case.

The Convener: In the meantime, in that 10 to 100 years, is it incumbent on public authorities to task voluntary organisations working in

communities, for example, with providing the support for people who are not up to speed?

Robert Madelin: Yes—absolutely. I fully believe that. As I say, each society will pick the authorities and institutions that do that. I gave examples of extremely successful approaches. The granny in rural Poland does not understand how to use a computer, and the boy scouts get a badge if they teach her. Then the local library—there still is one—gives her access to the computer, because she cannot afford a personal computer at home. That works for rural Poland, but something different will work in the towns and countryside of Scotland.

The Convener: I want to go back to the digital roll-out. The Highlands and Islands project has the aim of covering around 84 per cent of homes and businesses in the area and, for the rest-of-Scotland project, the figure is about 96 per cent. If I understood what you said correctly, in Norway, they would just go ahead and do that other small percentage with fibre. Should we say that, in the Highlands and Islands and the rest of Scotland, we must ensure that the remaining homes are covered by satellite or other means, or should we just wait until everybody can be connected with fibre?

Robert Madelin: In Norway or rural Germany, they do not have what people call fibre to the farm. Even in Norway, I do not think that everybody is getting such a good solution. However, there is a commitment to giving everybody access, although perhaps it will be 30 megabits rather than 100 megabits. I do not know, because I have not gone to those municipalities and discussed that. However, the notion that 95 per cent is enough is not good enough.

In the past 18 months, we have faced that problem in relation to the goal in the digital agenda of basic connectivity for 100 per cent of people. We had got to 96 per cent, so we had a discussion about that. Some of my colleagues said that we should declare victory, but others said that 4 per cent is a lot. In the end, we said that, for the 4 per cent, there is a one-stop-shop solution to find out how that gap can be bridged with satellite. The offer is there, but at European level, we are not taking on the responsibility for delivering connectivity to all those homes, which might be scattered in little pockets.

I do not believe that people who live in remote areas accept that they will never get this good thing. That is the question. When people live a long way away and have no telephone, they know that there is a distance that they have to travel, and they can travel it more or less quickly. When they have the telephone, they at least have voice communication, until a tree falls on the line. With this stuff, there is no reason why people should be

disconnected. If there is no reason, do we want a society in which 5 per cent are still disconnected, or do we want to say that we will map that 5 per cent and find out whether we can fix it?

10:45

In modern society we do not say that we will look hard at an issue and try and fix it and then come back and tell people; rather, all the time we are wondering whether to commit to 100 per cent or whether 95 per cent is enough. Leading a debate will get the community to fix some of the problems itself.

The Convener: Do you have any final messages for the committee? What should we be pursuing and pushing Governments to do?

Robert Madelin: As I have tried to say throughout, I would not be confident that I have messages that you should be listening to. The point that I started with is my strong belief that what is needed is a mixture of society's assets in intangibles and human skills, and the infrastructure over which society can exploit those assets. If we have both those points very strongly in our political vision and a vision of solidarity in which no one is left behind, most other things follow.

My second message is that Europe is sometimes a funding source, although as I had to say in response to questions, the funding is never quite enough or it is not provided in the right way or fast enough. However, Europe is also a source of examples from elsewhere. The European space as a place where decision makers from different territories can meet is colossally effective. The strength of people such as the University of Edinburgh team is that they have understood how to use the European space to strengthen their existing networks. Through the Scottish representatives who are based on Rond-Point Schuman in Brussels, there are opportunities to pick very specific problems and find out who in other countries is tackling the same problems. If something remains a problem, that is often because a problem that exists only in one constituency in one country is too small. However, when you discover that it is a problem in one constituency in 28 countries, suddenly it is a problem that needs a solution. Therefore, time spent making new links people to people with decision makers elsewhere in Europe can be transformative.

The Convener: Thank you very much, Mr Madelin. The evidence has been very useful and interesting and it provides material that we can incorporate into our discussions on digital participation and connectivity.

10:47

Meeting suspended.

10:52

On resuming—

Petition

A90/A937 (Safety Improvements) (PE1236)

The Convener: We come to agenda item 2. PE1236 is on improving safety on the A90 by constructing a grade-separated junction where the A937 crosses the A90 at Laurencekirk. We will discuss a letter and report from Transport Scotland on the evaluation of safety measures at Laurencekirk. Members will see that other correspondence is annexed to the background note.

I welcome Nigel Don, who is the local member, to the meeting. I invite comments on the petition.

Alex Johnstone: I am grateful for the further correspondence, but I am concerned that the level of understanding of the needs of the area and the use that is made of the junction are not as good as I would want them to be. Having the local member in front of the committee is a tremendous opportunity to hear both his views on the subject and about the latest consultation that he has had.

The Convener: As no other member wishes to comment, I hand over to Nigel.

Nigel Don (Angus North and Mearns) (SNP): Thank you for the invitation to be here—it really is appreciated. I welcome BEAR Scotland's analysis simply because any data is useful. I also welcome, as I am sure that we all do, the reduction in the total number of accidents in the area over the period analysed. Regardless of how that has happened, that must be welcomed.

I note that the north junction seems to have been particularly affected, but I am not surprised by that. Since a merged lane was added, apparently no accidents have happened, which is perhaps not surprising. That situation is welcome and I hope that it remains.

However, as I am sure that members will recall, the petition is about the south junction—it is about the A937 as it comes up from Marykirk and Montrose. The information to which I draw particular attention is to be found in paragraph 4.10 of the analysis, which indicates that, before the road safety measures were put in, there were three accidents in which slight injuries were sustained and that, since then, there have been only two. However, immediately underneath, it is stated that while there were seven damage-only accidents before the measures were implemented, there have been eight since then. I do not want to overstate the significance of small numbers, but if you add those figures together, you find that there

were 10 minor accidents before the measures were put in and there have been 10 since then. That gives a reasonable indication of what the situation at the junction is like.

Although I welcome the general reduction in the number of accidents in the area, I do not think that the data in front of us indicate that there has been a particular improvement at the south junction. It might just be the case that people who drive in that area are now more aware of the issues, which is likely to lead to an improvement.

As members are, I am aware of the access to Laurencekirk study that the north east of Scotland transport partnership is undertaking. I very much welcome that, as I think that it gives us an opportunity to come up with the right answer and to encourage the Government to find the money to implement that right answer. In that regard, I think that we are still going in the right direction, and I hope that members will feel able to keep the petition open. We might just be beginning to see light at the end of the tunnel.

There is an additional point that members who have been on the committee for a while will recall. I occasionally hear people—not members of the committee—say, “I drove past that junction at half past 8 this morning and it was fine,” as if, somehow, that deals with the matter. I again put on record the fact that, if people want to see what is happening at the junction, they need to be there between 6.30 and 7.30 in the morning. That is when the rush-hour traffic comes up from Marykirk, and that is when the situation is at its most dangerous, as can be seen in some of the videos that are on the internet.

I am sure that the convener is aware that, when it comes to traffic leaving Aberdeen, there is an extended rush hour on Friday afternoon, which starts at lunch time. Quite honestly, it continues all afternoon, more or less. On the Fridays when I do a surgery in Laurencekirk in the late afternoon, I do not attempt to come across that junction. Instead, I return to Brechin through Fettercairn, which is twice as far, but it is plainly the safest thing to do. I think that that comment will resonate with most of my constituents, who understand that the junction is one that they would just rather avoid. Quite frankly, it is dangerous and it needs to be sorted.

Alex Johnstone: Of course, the accidents continue. I have reported my experiences on the road at previous meetings. As I drove home in the early evening last Thursday, there were a number of police cars in attendance at an accident on the south-bound carriageway. At the point at which the traffic slows down for the 50mph limit, there had been a concertina accident. That illustrates the fact that, regardless of the other issues that we have experienced or heard about in relation to the

junction, the fact that a 50mph limit is necessary on one of the busiest parts of our trunk road network is, in itself, a disadvantage.

The Convener: I think that there is absolutely no doubt that there is a need for a grade-separated junction at Laurencekirk. The report is welcome. The Government has always said that such a junction must be funded through developer contributions and I do not think that there is any getting away from that, but I was immensely encouraged by something that I heard at the Nestrans meeting that I attended on Friday. Instead of one developer having to fund such a junction, there is to be a development bank, which a number of developers will pay into. In other words, there will be a fund; it will not be just one developer who has to pay. That is an extremely positive step forward.

However, Angus Council needs to come on board, too, because although the junction is in Aberdeenshire, traffic from Angus is making a significant contribution to the amount of traffic on the Marykirk road. It is incumbent on Angus Council to get on board, but I think that the work that Nestrans—and, to be fair, Transport Scotland—are doing is, as others have said, a reason for keeping the petition open.

Since the last time that we discussed the matter, a lot of progress has been made, albeit that, in the eyes of some people, progress is far too slow. As things are moving in the right direction, I agree that we should keep the petition open.

11:00

Alex Johnstone: We should do so not least because, in his letter, the minister makes it clear that he will continue to update us on progress.

The Convener: There are still many issues to think about, such as whether any new junction should be to the south or to the north of Laurencekirk; if it should be to the north, whether there should be a link road; and what the effect on traffic through Laurencekirk would be. All those matters should be taken into consideration.

Nigel Don: I echo what you have said, convener. That is an important point that people need to understand; I suspect that many people are beginning to do so. We do not necessarily need a flyover at the south junction. If there is to be only one flyover, it needs to be in the right place, which might well not be at the current location of the south junction. That is what the current study needs to work out, because the last thing that we want is everyone having to go up Laurencekirk High Street, which those who can visualise it will know is a slalom run.

The Convener: Okay. Do members agree to keep the petition open?

Meeting closed at 11:01.

Members *indicated agreement.*

The Convener: At our next meeting, we will begin our stage 2 consideration of amendments to the Housing (Scotland) Bill. I remind members that the deadline for lodging amendments to parts 1 to 3 of the bill is 12 noon this Friday.

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