



OFFICIAL REPORT
AITHISG OIFIGEIL

DRAFT

Meeting of the Parliament

Tuesday 8 October 2019

Session 5



The Scottish Parliament
Pàrlamaid na h-Alba

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Scottish Parliament

Tuesday 8 October 2019

[The Presiding Officer opened the meeting at 14:00]

Time for Reflection

The Presiding Officer (Ken Macintosh): Good afternoon. Our first item of business today is time for reflection, for which our leader is the Rev Gordon Kennedy, who is the minister at Craiglockhart parish church, Edinburgh.

The Rev Gordon Kennedy (Craiglockhart Parish Church, Edinburgh): Presiding Officer and members of the Scottish Parliament, thank you for this opportunity to share this time for reflection with you.

Words are important. Benjamin Franklin spoke of changing the world with the 26 lead soldiers of his typewriter. In my faith tradition, we believe that God created everything that there is—all that is seen and unseen—with words. We believe that God came among us as the word made flesh.

At best, we use words to express compassion and care, to effect positive change in the world, and to reveal something of ourselves that, without words, would remain hidden. However, we too often use words to demean and diminish, to obscure and confuse, and to wound and harm. We live in a world that is overwhelmed by noise. We are drowning in discourse. Words are spoken cheaply and thoughtlessly and, as they multiply, they mutilate language and deafen our ears to what should be precious words. Words are spoken insistently and proudly and assert their value but, without any foundation, they become fake words.

When we reduce our words to the seven-word soundbite—the advertising slogan—we demean those who we hope will listen to our words. Do we really think that the great issues of life—justice and mercy; love and grace; hunger and consumption—can be adequately expressed in a headline?

Our words should be gifts. Words of promise should be commitments that we at least intend to fulfil. Words of hope should be backed up with deeds of courage to give life to the hope that we have expressed. Words of community should be kind, generous and patient. Words of challenge should, of course, be passionate without being rude or disrespectful.

The business of this hall represents the lives of the people beyond these walls. However, within these walls, your business is conducted with words. What kind of words will the people of

Scotland and beyond hear today? The political challenges that you address—issues that affect the wellbeing of communities and the survival of our environment—are of such magnitude that a better quality of words and a more respectful sharing of words are required of us all. May your words be gifts of beauty and hope in our world today.

Thank you.

Business Motion

The Presiding Officer (Ken Macintosh): The next item of business is consideration of business motion S5M-19312, in the name of Graeme Dey, on behalf of the Parliamentary Bureau, setting out a revision to tomorrow's business.

Motion moved,

That the Parliament agrees to the following revision to the programme of business for Wednesday 9 October 2019—

delete

6.40 pm Decision Time

and insert

8.00 pm Decision Time—[*Graeme Dey.*]

14:04

Neil Findlay (Lothian) (Lab): I appreciate that business is packed and a bit chaotic this week, but I wish to raise concerns about the business motion. I do so reluctantly but with no option, as I have exhausted all other parliamentary options to force the Cabinet Secretary for Health and Sport to be held to account on an issue on which she previously made a statement in the Parliament.

On 26 June, the Cabinet Secretary for Health and Sport made a statement to advise members that she welcomed US surgeon Dr Veronikis's offer to come to Scotland, and she said that we were looking to bring him here as soon as possible. The intention was for him to work with clinical services in a complementary fashion, and to provide treatment, expert advice and training.

Since that date, there has been little or no progress. At the weekend, via the media, we learned that Dr Veronikis has withdrawn his offer because of the appalling way in which he has been treated by senior Scottish Government officials who report to the cabinet secretary. All offers that Dr Veronikis has made to meet surgeons and have them observe his practice as part of the process have been rejected or cancelled. He attended a conference in Gothenburg that was also attended by Scottish surgeons who were supposed to liaise with him, but they made no effort even to speak to him. He offered to meet them in London when he was in this country, but no one took up his offer.

In the interim, we have seen Scottish patients having to use their life savings, to crowdfund, or to rely on benefactors to allow them to travel to the US for surgery performed by Dr Veronikis on a pro bono basis. Each of those women has it recorded in their national health service notes that they have received full mesh removal, only for them to

go on to have up to 15cm of mesh removed from their bodies.

How on earth can that happen? Those women need answers. At every turn, Dr Veronikis's offers to come here with the only motive of helping women who have been horribly injured and disabled by mesh have been blocked. Why do some surgeons here not want to learn pioneering mesh removal techniques? Why do they not want to improve their practice? Why do they not want to help women who are desperate for help and who are in excruciating pain?

This is the biggest medical scandal in the history of Scotland's NHS. The cabinet secretary has known since last Monday that Dr Veronikis will not come here, but she has made zero effort to advise Parliament or the women of Scotland of that. Why?

We need to end the games. The cabinet secretary made a statement when she had good news to tell Parliament. She must do the same and be held to account when there is bad news.

The Presiding Officer: Thank you, Mr Findlay, and thank you for the advance notice. I call Graeme Dey to respond on behalf of the Parliamentary Bureau.

14:07

The Minister for Parliamentary Business and Veterans (Graeme Dey): The Parliamentary Bureau has taken a decision about the scheduling of business. I acknowledge that the subject that the member raises is extremely important, but I am not going to comment on behalf of the Government or the Parliamentary Bureau on allegations in the media.

As the member has acknowledged, the scheduling of business, particularly the stage 3 consideration of bills, has to take account of a variety of factors, and the situation means that we are extremely constrained this week.

Other options are available to the member beyond seeking a statement. There are a range of opportunities to ask questions, although I recognise that that is a matter for the Presiding Officer to determine.

The Presiding Officer: Thank you, Mr Dey. Mr Findlay, there are other opportunities, including at First Minister's questions this week.

The question is, that motion S5M-19312 be agreed to.

Motion agreed to,

That the Parliament agrees to the following revision to the programme of business for Wednesday 9 October 2019—

delete

6.40 pm Decision Time

and insert

8.00 pm Decision Time

The Presiding Officer: I draw members' attention to the fact that tomorrow's decision time will be at 8 o'clock. That is because of the huge number of amendments that have been lodged to the Transport (Scotland) Bill.

Topical Question Time

14:08

State of Nature Report: Scotland 2019

1. **Claudia Beamish (South Scotland) (Lab):** To ask the Scottish Government what its response is to the report, "State of Nature Report: Scotland 2019". (S5T-01828)

The Minister for Rural Affairs and the Natural Environment (Mairi Gougeon): We take the decline in biodiversity seriously and we do not underestimate the challenges that lie ahead. We are already examining what we are doing to improve biodiversity, where we need to do more, and what we might need to do differently.

Our performance in delivering international biodiversity targets compares favourably with the global picture, but we understand that there is more to do. We are involved in developing a new international post-2020 biodiversity framework, including hosting an international biodiversity workshop next spring. Our new programme for government included a further £2 million for the biodiversity challenge fund.

Claudia Beamish: I thank the minister for her answer and her acknowledgement of the challenges. The "State of Nature" report highlights that we are failing to get to grips with the biodiversity crisis, with 11 per cent of Scottish species being classified as threatened with extinction. As the minister said, the Scottish Government is not on track to meet the 2020 international biodiversity targets: 13 of the 20 targets are unlikely to be met.

Could the minister give more details of the arrangements that are in place for devising a new post-2020 biodiversity action plan to fully address the environment and nature emergency?

Mairi Gougeon: Although we are undertaking a power of work on the issue, we recognise, as Claudia Beamish highlights, that there is an awful lot more to do. We are making some progress on the Aichi targets—we are on track to achieve seven of them and are working to achieve more.

In the latest programme for government, we recognise the importance of biodiversity and the complexities and challenges that tackling its loss presents. We have demonstrated our continuing commitment to an ambitious programme of actions to protect and enhance Scotland's biodiversity. We continue to deliver the biodiversity strategy and to work towards achieving the 2020 Aichi targets. We are working with communities on projects that will benefit ecosystems and waterways and open up Scotland's natural environment to more people.

We talk about biodiversity on land, but biodiversity is also important in the marine environment. In that regard, we have consulted on the creation of four new marine protected areas. Early next year, we will designate the sites, which will contribute to the protection of biodiversity—in relation to species such as Risso's dolphins and minke whales—and geodiversity, and to Scotland's marine geomorphology. Later in the autumn, we will consult on a United Kingdom-wide dolphin and porpoise conservation strategy. We are taking forward work on the seabird conservation strategy, and we will consult on our proposals and adopt the final strategy next year. We are also in the middle of consulting on a deep-sea marine reserve.

I hope that my answer outlines some of the actions that we are taking now, and those that we will take in the immediate future, to tackle the challenges that we face.

Claudia Beamish: Quite rightly, the minister highlights issues relating to land, air and sea. The report shows that Scottish species have decreased by 49 per cent since we began recording Scottish data in this way, in 1994. As a species champion for the Forester moth, I am particularly concerned that moth numbers are down by 25 per cent. We need to protect and enhance vulnerable ecosystems and support moths and other species.

I ask the minister for more detail on how she will ensure that the Scottish Government's agencies and other organisations will be adequately resourced. Specifically, will she give more detail on how the new biodiversity plans will be taken forward post-2020?

Mairi Gougeon: I am happy to meet Claudia Beamish or any other member who is concerned about the issue and wants to discuss the action that we are taking. It is important that we work together and with other public sector bodies to do our best.

We committed to writing to the Parliament this year, and we will write to the Environment, Climate Change and Land Reform Committee by the end of this year, outlining the actions that we are taking and are looking to take, so that they can be scrutinised.

We are looking at specific measures in relation to the species that Claudia Beamish mentioned. As the report says, about one in 10 species is threatened with extinction. The Scottish Wildcat Action project is working to address threats to wildcats, such as hybridisation, by developing captive breeding and release schemes in order to strengthen wildcat populations in the wild. Through the Working for Waders project, a broad range of land managers and conservationists are doing

practical work to support curlews and other wading birds. Work is under way in the forests of the Cairngorms national park to research the cause of declines in capercaillie numbers and to develop practical measures to support them. Many other species benefit from work that is done through the agri-environment climate schemes under the Scottish rural development programme and projects to control non-native species. A lot of such projects will be long term.

Again, I invite Claudia Beamish to meet me or the Cabinet Secretary for Environment, Climate Change and Land Reform to discuss how we can improve on the work that we are doing and take it forward.

The Presiding Officer (Ken Macintosh): Three members would like to ask supplementaries.

Mark Ruskell (Mid Scotland and Fife) (Green): One of the best ways to reverse the catastrophic decline of nature on our farmlands since the second world war would be to convert more farmland to organic production. Is the minister aware that in Denmark, 60 per cent of publicly procured food is organic, which provides a strong driver for conversion? Will the minister consider setting similar targets for public procurement for organic farming in Scotland, particularly under the new provisions in the Climate Change (Emissions Reduction Targets) (Scotland) Bill?

Mairi Gougeon: I absolutely recognise the point that Mark Ruskell makes about the organic sector. The fact that the amount of land that is farmed organically in Scotland has reduced has been of huge concern to me. We must tackle that and do something to improve the current situation. We have already committed to working on an organic sector plan, and I am actively looking at what is happening in other countries to see what we can learn from those examples. I would be more than happy to discuss with Mark Ruskell how we can progress that work in the future.

Maurice Golden (West Scotland) (Con): What plans does the Scottish Government have for promoting and enhancing Scotland's island biodiversity, particularly that of Arran in the west of Scotland, as well as protecting it from key drivers of change, such as invasive non-native species?

Mairi Gougeon: I recently appeared before the Environment, Climate Change and Land Reform Committee in relation to invasive non-native species, because we absolutely recognise the catastrophic damage that the introduction of such species can cause. If there are particular issues that the member wishes to raise with me in relation to Arran or any other specific areas, I would be more than happy to look at those and to pay them particular attention.

I reiterate that, along with Scottish Natural Heritage, we are undertaking a great deal of work to tackle invasive non-native species. Again, I would be happy to discuss that with the member.

Dr Alasdair Allan (Na h-Eileanan an Iar) (SNP): As was alluded to by the minister in her response to Ms Beamish and by the authors of the “State of Nature” report, comparisons between the countries of the United Kingdom cannot easily be made. Can the minister expand on how statistics are gathered and whether it is accurate to compare them?

Mairi Gougeon: Dr Allan raises an important point, because some of the media reporting of the “State of Nature” report was inaccurate. The Scottish report is based on a separate data set and a different time period. The UK and Scottish reports cannot be compared to show that Scotland’s wildlife is declining faster than wildlife in the rest of the UK. The UK report makes it clear that it is “not appropriate” to compare the species abundance indicator trends between countries, because data from different taxonomic groups has been used. Last week, Scottish Natural Heritage and the RSPB contacted the BBC to highlight the error in the reporting.

It is important to recognise that we welcome the groundbreaking collaboration that has led to the “State of Nature” reports. It has never been more important for us to work together in the face of the growing evidence of biodiversity loss around the world. The joint news release that was issued on the Scottish report includes messages saying that it is not too late to act.

Notwithstanding the fact that some of reporting of the “State of Nature” report was inaccurate, I highlight that, although we are undertaking a lot of work, we recognise that there is always more to do, and we are working to achieve that.

Prestwick Airport Service Fees

2. Mike Rumbles (North East Scotland) (LD): To ask the Scottish Government whether it will confirm the amount of service fees reportedly waived by Prestwick airport for the United States military. (S5T-01831)

The Cabinet Secretary for Transport, Infrastructure and Connectivity (Michael Matheson): Glasgow Prestwick airport operates at arm’s length from the Scottish Government on a commercial basis. That is essential to ensure compliance with state aid rules. Decisions on specific commercial deals are made by Prestwick without any involvement of ministers.

Prestwick has provided military handling since the 1930s, and that continues to be an important part of its overall offering. The management of the airport continues to look for opportunities to grow

the business, including offering fixed-base operation services to a number of customers. All that has been done on a commercial basis and at market rates.

Generally speaking, all airports seek to package fees and charges in a way that ensures that they remain competitive. That is entirely standard practice, and is consistent with Prestwick’s business plan and its aspiration to grow and to continue to play an important role in the wider Ayrshire economy.

Mike Rumbles: It is not good enough for the Government to hide behind the fact that Prestwick is operated as an arm’s-length commercial company or behind commercial confidentiality. According to the US Defense Logistics Agency’s website, the US military has spent more than \$17 million dollars on fuel at Prestwick over the past three years, and *The Scotsman* reports that, over the same period, hundreds of flights had their service fees waived by the failing Government-owned company. When was the cabinet secretary made aware of that situation?

Michael Matheson: I am sure that Mike Rumbles recognises the strategic importance of Prestwick to the Ayrshire economy and the Scottish economy as a whole, which was partly why the Scottish Government decided to intervene and purchase the airport in 2013. Since then, the financial provisions that have been made available to Prestwick have been on a commercial basis.

However, to suggest that the Government is in some way hiding behind state aid rules is nonsense. In order to comply with state aid regulations and law, Government ministers cannot be involved in the commercial decisions that Prestwick makes. Providing fixed-base operation services to a range of parties, including the military, has been part of Prestwick’s work over many decades. Its recent success with the United States Air Force is a reflection of its business plan to target increased growth in provision of services, and it has been successful in doing so.

I must emphasise that the Government is not hiding behind anything. It is meeting the requirements that are set out in regulations on state aid. I will not compromise that for Mike Rumbles, nor will I disregard the jobs that are associated with Prestwick, which are crucial to the Ayrshire economy.

Mike Rumbles: The cabinet secretary did not answer my question. I want to know when he knew about the situation, and I want him to answer that when he responds again. Prestwick has not made a profit in the past ten years. The Scottish Government has pumped £40 million into a company that, according to Companies House, owes creditors £44 million, but has assets of only

£10 million. Does the cabinet secretary know the difference between bailing out a company with taxpayers' money in the short term, in order for it to become successful, and continuing to bail out a company that continues to fail?

Michael Matheson: Mike Rumbles' disregard for the importance that Prestwick has in the Ayrshire economy is breathtaking. It is clear that the Liberal Democrats have no political or other interest in that. As I already stated to him, decisions on agreements that are entered into by Prestwick and its management concerning services that it provides to operators are commercial matters to which ministers are not party.

This afternoon, it is very clear that the Lib Dems do not care two hoots about the Ayrshire economy and Prestwick's importance to it.

The Presiding Officer: There is degree of interest in this topic. Four members wish to ask questions. They should be concise questions and answers.

Edward Mountain (Highlands and Islands) (Con): The importance that the Conservatives place on Prestwick cannot be doubted.

The other week at the Rural Economy and Connectivity Committee, I asked the cabinet secretary which company he was offering for sale at Prestwick. At that stage, he did not know. Does he know now?

Michael Matheson: As things stand, those matters are commercially confidential. I also committed to updating Parliament in due course, should progress be made on them. I am sure that Edward Mountain will recognise the importance of the commercial confidentiality relating to those issues.

Edward Mountain: On a point of order, Presiding Officer. My problem is that I am looking for an answer to a question. There are six companies related to Prestwick airport. The cabinet secretary must know which company he is offering for sale. I do not believe that that is commercially confidential. I seek an answer. Is there a way that I can, as a member, get an answer, because I could not get one at committee, either?

The Presiding Officer: I recognise the point that the member is making. However, on the point of order, there are many ways to ask questions and pursue the matter. Three other members wish to ask questions. The member himself could ask further questions, lodge a written question or write to the minister, or his party could lodge a motion in Parliament. There are any number ways of pursuing the matter, if the member is unhappy with the response.

Patrick Harvie (Glasgow) (Green): I find the "nothing to see here" attitude rather disturbing. In a week in which Scotland's Kurdish community will be protesting outside the US embassy about withdrawal of US troops, which will leave their comrades vulnerable to attack by Turkey, and at a time when US democratic procedures are investigating conflicts of interests and potential breaches of the US constitution in relation to dealings with Prestwick and Trump Turnberry, is not it offensive for a Scottish publicly owned asset to be, in effect, subsidising the military operations of a dangerous far-right regime?

Michael Matheson: The airport does not provide any subsidy; it operates on a commercial basis.

Colin Smyth (South Scotland) (Lab): Does the cabinet secretary accept that, given that Prestwick is a Government-owned airport, in the interests of transparency the Government should publish the full extent to which the airport relies on US defence refuelling for its income, not least because overreliance on that would raise real questions about the airport's future sustainability and its apparent financial recovery in recent months, especially given the current US inquiry, which might well lead to a reduction in use by the American military?

Michael Matheson: Glasgow Prestwick airport provides the relevant information in the public domain through its published accounts. Colin Smyth will acknowledge that the airport operates in a competitive environment, so there will always be information that is commercially sensitive—information that would, were it to be placed in the public domain, put the airport at a disadvantage compared with its commercial competitors. I am sure that the member would not seek to undermine Prestwick airport's commercial viability. The airport meets all the necessary requirements by publishing the relevant data on its income from its records, as part of what it publishes annually through its accounts.

Jamie Greene (West Scotland) (Con): I acknowledge that Prestwick airport is vital to the Ayrshire economy. The airport has been in public ownership since 2013. When is it likely to return to profit and to private ownership? Is the Government happy for income from military purposes to form part of the airport's future success?

Michael Matheson: A key part of trying to do the best thing for Prestwick airport is to resist the temptation to do what some members seek, which would undermine the airport commercially and affect its ability to improve its financial situation.

Since the Government took ownership of the airport in 2013, we have been clear that our desire is to return it to the commercial sector. That

continues to be our focus. Jamie Greene will be aware that the management board has published an invitation of expressions of interest from those who might wish to purchase the airport. That process is being undertaken and considered. As I said, once we have reached a decision on those matters, I will keep Parliament informed of the issues. I intend to do that once we are in a position to furnish Parliament with further information.

Mike Rumbles: On a point of order, Presiding Officer. Five members have just asked specific questions of the cabinet secretary, but none of those questions was answered. I asked when the cabinet secretary knew about the situation, but he would not answer. When the *Official Report* is published, it will show that he did not answer any of the five questions. How are we supposed to proceed if the Government will not respond to members?

The Presiding Officer: My response is similar to the one that I gave to Edward Mountain's point of order. I accept that Mike Rumbles and several others are unhappy with the minister's responses, but it is up to members and the viewing public to make what they will of questions and responses. If the member is still unhappy, it is up to his business manager to pursue the matter, perhaps by seeking additional time, or he can lodge further questions. There are other ways to pursue the matter.

No-deal Preparations

The Presiding Officer (Ken Macintosh): The next item of business is a statement by John Swinney on the Scottish Government's overview of no-deal preparations. The Deputy First Minister will take questions at the end of his statement.

14:28

The Deputy First Minister and Cabinet Secretary for Education and Skills (John Swinney): This statement is being delivered just 23 days away from the possibility of a catastrophic no-deal Brexit. Scottish ministers have always been clear that Scotland did not choose to leave the European Union and that it is wrong to take us out against our will, which is a view that is shared by many across the parliamentary chamber. We have also consistently done as much as possible to achieve the least damaging Brexit outcome. That work has been and continues to be made unnecessarily difficult by the approach of the United Kingdom Government. Our offer of compromise, made in December 2016 and repeated since, has been rejected out of hand.

The new proposal that the Prime Minister tabled last week is a step backwards from even those of the previous Conservative Government and appears designed to fail. The UK Government has not put forward a realistic plan to secure a deal; the proposal is instead part of a political tactic to shift the blame on to Ireland and the European Union. The UK Government is making demands of the EU that it knows that the EU cannot accept.

Further, we now know that the UK Government wants a much more distant long-term relationship with the EU, which would mean a harder, more damaging Brexit, in which previous commitments to remain aligned with EU regulations would be abandoned. We find ourselves in a position in which, while the House of Commons has legislated to prevent a no-deal Brexit and the UK Government has told a court that it will send a letter to the European Union to request an extension, the UK Government has also indicated that it will go out of its way to thwart that process. In short, if the UK Government does not correct its current disastrous course, the UK is at significant risk of crashing out of the EU at the end of this month, and Scotland will be dragged—unwillingly—with it.

As a responsible Government, we must do what we can, here in Scotland, to prepare for the impact of exiting the EU without a deal or a transition period. That is why, today, the Scottish Government is publishing an overview of its assumptions and mitigation measures, and the

analysis that underpins its approach to handling the impacts of a no-deal EU exit.

Any EU exit would have negative impacts on our economy and living standards, but the impacts of a no-deal exit without a transition period would be particularly severe and should not be underestimated. The document that the Scottish Government has published today is the product of an extensive programme of work across Government and with our partners. The First Minister chairs weekly meetings of the ministerial group on EU exit readiness, which oversees cross-Government activity to prepare and improve readiness for leaving the EU. The Scottish Government is working extremely closely with its resilience partners at the national level and locally across Scotland. That includes work with Police Scotland and other partners through the activity of the multi-agency co-ordination centre. We have also been working closely with local government and the national health service, as well as providing advice and support to businesses, individuals and the third sector. If the UK leaves without a deal, more than 200 legislative instruments will be needed to ensure that the Scottish statute book is ready, and the vast majority of those are now in place.

A no-deal EU exit at this time of year would present additional challenges. There is an increased risk that, as a country, we would also need to address concurrent resilience events such as severe weather, which are more common at this time of year than they might have been in March, when a no-deal Brexit was previously a possibility.

However, it is important to be clear that no amount of preparation could ever make us ready, in any real sense, for the needless and significant impact of a no-deal outcome. In February, the Scottish Government's report entitled "No Deal Brexit—Economic Implications for Scotland" set out that such an exit would have the potential to generate a significant economic shock that could tip the Scottish economy into recession. If all other factors were to remain constant, the 5 per cent increase in prices that a no-deal EU exit might bring could push an additional 130,000 people into poverty. Even in a scenario under which a free trade agreement with the EU could be secured, our economy would be worse off than it would be under membership of the single market. Our modelling indicates that, under a free trade agreement, by 2030 Scotland's gross domestic product would be around £9 billion lower than if we stayed in the EU, which is equivalent to £1,600 per person in Scotland.

The Scottish Government is putting in place a range of measures that will help to mitigate the worst economic effects of a no-deal exit. In the

event of increased traffic flows between Northern Ireland and Scotland, we will seek to deal with potential disruption by repurposing the disused port at Stranraer to hold up to 300 heavy goods vehicles. We will support our food and drink sector by helping small and medium-sized enterprises to prepare for EU exit. We have plans in place to enable suppliers and public sector caterers to operate more flexibly, and we will continue to support food suppliers with their planning. We will provide online information and support on areas of concern to the public, such as the rights of EU citizens after exit. We will also make available £1.5 million in grants to help small and medium-sized enterprises to prepare for exit.

The Scottish Government has also been working with Scottish Enterprise to reinforce the Scotland-wide prepare for Brexit programme, which includes an information campaign, a guidance website and call centre, roadshows and grants. The Convention of Scottish Local Authorities is working with a number of enterprise agencies, in conjunction with the Scottish Government, on how to support businesses as they prepare.

Scottish communities are already under pressure. Last year, we invested more than £1.4 billion to support low-income households, £100 million of which was to mitigate the worst effects of UK Government welfare cuts. Tomorrow, we will publish an online tool and an accompanying report that highlight the areas in Scotland of greatest vulnerability to EU exit, whether with or without a deal. The analysis, which is the first of its kind in the UK, tracks various factors that make communities vulnerable to the impacts of exiting the European Union.

As a result of that analysis, we are putting in place a plan to establish a £7 million rapid poverty mitigation fund. In the event of a no-deal exit, the fund will be allocated to local authorities so that the people who are most in need can get support quickly and efficiently. That may be through the Scottish welfare fund, discretionary housing payments or particular help with food insecurity or fuel poverty.

We are also giving the farming community and the crofting community the certainty that they need to plan and to invest in their businesses. We have already—on Friday of last week—paid farmers and crofters £327 million of nationally funded basic payment scheme loans to support them if we leave the European Union on 31 October.

Marine Scotland will continue to enforce fisheries legislation to ensure stock sustainability, protect the marine environment and comply with our international obligations. Marine Scotland is working with its partner agencies and counterparts across the UK to prepare for the range of possible

challenges following a no-deal Brexit. Specifically, it will work with the Scottish Environment Protection Agency to protect environmental standards through continued application of current regulatory regimes.

We are also preparing for the possibility of disorder at sea that goes beyond fisheries offences, which might seriously threaten the safety of marine users. The UK Government is responsible for safety at sea, the enforcement of the UK's borders and defence against any hostile or illegal activity at sea. Marine Scotland will be a responsible partner and will work closely with Police Scotland and UK Government agencies to provide monitoring and support as appropriate. We expect the UK Government to confirm its capacity to respond to any serious incident and to say how it will work with Scottish partners to deliver on that.

A significant proportion of medicines, medical devices and clinical consumables are imported from the European Union, and the risks surrounding that area were highlighted recently by the National Audit Office. We have set up a Scottish medicines shortage response group, which will review evidence and intelligence and recommend action on such issues, should they emerge.

In our universities and colleges, we have guaranteed the continuation of existing funding arrangements for eligible EU students who enter further or higher education in Scotland up until the 2020-21 academic year. We continue to discuss the impact of Brexit with universities, colleges, students and the Scottish Further and Higher Education Funding Council, which published advice for universities and colleges last week on the actions that they should take.

Our partners in Police Scotland are preparing for the potential impacts of a no-deal exit. A flexible resource of 300 public order-trained officers has been operational since the beginning of August and is ready to deal with any Brexit-related civil contingency issues that may arise. That flexible public order resource is supported by around 60 officers who are based at the Brexit co-ordination centre in Bilston Glen. We have pledged £17 million to ensure that our police force has the capacity to respond to EU exit-related issues, particularly around ports and borders.

Local government is another vital partner in preparing for EU exit. Following discussion with COSLA on local authority requirements, the Scottish Government gave councils an additional £1.6 million for EU exit preparation. That is the same proportion of additional resource for no-deal preparations as has been made available to councils by the Conservative Government in England. As I stated, a further £7 million to support

vulnerable people will be immediately available if a no-deal Brexit takes place on 31 October.

The document that we have published contains a significant number of further actions. I will not set them all out in my statement, but I urge all members to familiarise themselves with the relevant detail.

However, I must stress that much of the responsibility for tackling the issues that we identify in the overview that we have published today rests with the UK Government. That is not a political statement; it is a fact. The document includes information on the actions that we understand the UK Government intends to take. We are reliant on the UK Government, for example, to resolve any issues that are connected to goods crossing the Channel, where the flow of goods is expected to reduce to 40 to 60 per cent of the present flow.

We will continue to push the UK Government for further action, clarity and information in the event that we are to leave the EU without a deal in place. However, the level of engagement from the UK Government in that respect has been inadequate, and our planning has been made unnecessarily difficult by the UK Government's failures to engage and share information. For example, we have not seen any update of the yellowhammer planning assumptions since we received on 7 August those dated 2 August.

Today, the UK Government is publishing a new report on no-deal readiness, which presents a complacent and entirely irresponsible attitude towards no deal. The paper conveys the additional requirements on businesses and long lists of tasks that businesses would have to undertake to continue to trade. It is no wonder that, yesterday, Her Majesty's Revenue and Customs assessed the cost to business of additional red tape from no deal as £7.5 billion or that, today, the Institute for Fiscal Studies said that no deal would

"push national debt to levels last seen in the 60s".

There is a range of actions that we believe that the UK Government must take now in order to further mitigate impacts in Scotland and across the UK. It must put in place plans to ensure that the supplies of essential imports, such as medicines and medical devices, are not disrupted due to border issues, and it must also share the information that we need on delays and other issues at the border. The UK Government must confirm whether arrangements that avoid additional tariff or non-tariff barriers on exports of food and drink produce with priority countries will be in place. It must continue to share data on the continuity of supply of medical supplies and radioisotopes and make sure that regulatory frameworks are in place for their continued supply.

The UK Government must act to minimise as far as possible the worst effects of an economic shock. It must provide urgent clarification on future immigration policy, and it must be able to guarantee financial support to local economies and communities through continued or guaranteed European funding. It must take account of the differences in the separate criminal justice systems in any no-deal planning and tackle the loss of access to key EU law enforcement tools. It should take action now to support households to manage the increased cost of living and prevent more people from falling into poverty.

There are significant financial consequences of planning for and responding to a potential no deal. Of the £98.7 million consequentials from Brexit preparation funding that we have received from the UK Government, we have now committed £98.25 million before the outcome of EU exit is even determined.

In August, the UK Government announced further funding, of which Scotland will receive £40 million in consequentials in the spring. However, the costs of EU exit are expected to far exceed the consequentials that we have received from the UK Government. The finance secretary has requested an additional £52 million from the UK Government's £1 billion operational contingency fund to help us prepare for a no-deal outcome. A portion of that is to support maritime safety and security, as it is clear to this Government that the resources of Marine Scotland, Police Scotland and the navy will not be sufficient should there be increased activity around fisheries or illegal activities. That is the minimum requirement for operational activity, but the real costs of a no-deal exit will massively outweigh that amount, and further funding will be required.

I have outlined the issues that we face, the range of measures that we are already taking and will take if they are required of us, and the resulting costs to the Scottish public purse. Despite the differences in view between us and the UK Government, we remain committed to ensuring that effective preparations are in place. However, there is only so much that any Government could do to tackle the worst impacts of a no-deal Brexit.

To even countenance no deal as a realistic prospect has always been illogical, and economically reckless. Now, under the Benn act—the European Union (Withdrawal) (No 2) Act 2019—it is also illegal. We therefore call on the UK Government to rule out the possibility of a no-deal exit, as is entirely within its gift to do. The UK Government should instead act to secure from the EU an extension to the article 50 negotiating period, to enable a general election. The Scottish Government would support a future vote on EU

membership that includes an option to remain in the EU.

There is no doubt that a no-deal outcome would have profound consequences for jobs, investment and living standards across Scotland and the rest of the UK. The UK Government should do the responsible thing and rule it out now.

The Presiding Officer: The cabinet secretary will now take questions.

Donald Cameron (Highlands and Islands) (Con): I thank the Deputy First Minister for advance sight of his statement. From the outset, it is important to state that although preparing for a no-deal outcome is of course right and proper, Conservative members remain committed to the idea that leaving the EU with a deal is the best way to avoid a no-deal exit. We continue to believe that securing a deal is best for protecting our economy, and that that is where our efforts should be concentrated.

I agree that any responsible Government should undertake no-deal preparations. Medical supplies will plainly be a matter of concern to many people in Scotland. The Deputy First Minister's statement made reference to a shortage response group, which will recommend actions on medical supply issues. Can the Deputy First Minister give any further details of the work that the Scottish Government has already done to enable the NHS to manage shortages and ensure continuity of medical supplies?

John Swinney: It is not terribly credible for Donald Cameron to say that leaving with a deal remains the position of the Conservative Party, either north or south of the border, given that the Prime Minister has constructed a proposition that, to any reasonably minded person, looks like a proposition that is designed to fail, because it cannot be agreed by the European Union. The second reason for that not being credible is that Mr Cameron's interim leader in Scotland has made it expressly clear that the Conservative Party in Scotland would countenance and accept the leaving of the European Union without a deal to enable Brexit to happen. That is a complete volte-face on the Conservative position in Scotland, which ignores the democratic wishes of the people of Scotland; the people of Scotland will not forget about that.

I turn to Mr Cameron's substantive question about medical supplies. There has been extensive dialogue between the Cabinet Secretary for Health and Sport and the national health service in Scotland with many of our suppliers in the medical supply community to enable the stockpiling of supplies to provide reassurance in the short term. There has also been dialogue with the UK Government on that issue. We anticipate that

there are six weeks' worth of supplies available as a consequence of stockpiling. However, the information that I have conveyed to Parliament today of the potential disruption to supply routes casts doubt on whether we would be able to sustain that position in the medium term.

The purpose of the shortage response group is to ensure that we have intelligence and information available to us at the earliest possible opportunity, so that we can take practical action in dialogue with suppliers and the UK Government to ensure that we have all the medical supplies in place that members of the public will want to be assured about. Mr Cameron is correct: the issue will cause unease to members of the public. That is why we want to avoid a no-deal Brexit at any cost.

Alex Rowley (Mid Scotland and Fife) (Lab): I, too, thank the Deputy First Minister for early sight of the statement. The Deputy First Minister's statement reaffirms the severe and unnecessary harms that would result from a no-deal Brexit. We can agree who would be held responsible for bringing about such grim consequences: the Tories, including those who sit in this chamber. It has been utterly disingenuous of Tory MPs and MSPs to tell us that they are seeking to agree a deal with the EU, when all that has been put forward are unworkable solutions.

The scale of planning that has been laid out by the Scottish Government today is welcome. However, it is based on a no-deal Brexit going ahead. Given that measures—namely, the Benn act—have been put in place by the UK Parliament to avoid no deal, what is the Scottish Government's most up-to-date legal advice on the scope for no deal going ahead? Does the Deputy First Minister agree that the best way to avoid the disastrous outcomes of no deal is to bring the country together and get rid of the reckless Tory Government and Prime Minister in Westminster, and to allow the people to decide between a credible deal and remain?

John Swinney: I agree with Mr Rowley that a no-deal Brexit represents the inflicting of unnecessary harm on individuals in Scotland. I am aware of Mr Rowley's long-standing—if not lifelong—commitment to tackling poverty in the communities that he represents, and it would be those selfsame people who would suffer most acutely as a consequence of a no-deal Brexit.

I agree with Mr Rowley that the measures that the United Kingdom Parliament has undertaken through the Benn act should provide the necessary legal protection. Mr Rowley will forgive me if I am not permitted to talk about matters concerning legal advice, but I will reflect on the legal issues that have been discussed recently.

In his judgment at the Court of Session yesterday, Lord Pentland made it very clear—I will summarise his judgment—that the Benn act provided a legal obligation to avoid a no-deal Brexit and that the Prime Minister had given assurances of the status that he needs to give to the court to assure it of his good faith in implementing that act. However, I read press reports suggesting that some other person speaking on behalf of the Prime Minister had suggested that there are ways to avoid doing that. We are dealing with matters that fundamentally question the integrity of the office of the Prime Minister. The Prime Minister should act within the law and follow the Benn act. That would give us all a great deal more reassurance about the conduct that we could expect from the Prime Minister.

I agree that we should take every step to avoid a no-deal Brexit, and I have set out the measures that the Scottish Government is taking to respond to those circumstances. The UK Conservative Government is reckless and damaging. Mr Rowley and I may agree on the necessity of the public exercising a choice on these matters. However, when it comes to exercising that choice, I want the people of Scotland to be able to protect themselves from future reckless Tory Governments by deciding on their Government for themselves through Scotland being an independent country.

Bruce Crawford (Stirling) (SNP): Does the Deputy First Minister agree that the hospitality and tourism industries are vital components of the Stirling area and Scotland's economy? Like me, does he have local tourism-related businesses telling him that access to the EU is essential to ensure the sustainability of that industry? How does he think that at a no-deal chaotic Brexit might affect businesses such as the Real Food Cafe in Tyndrum, which can have about 70 per cent of their workforce made up of EU citizens?

John Swinney: My heart sank when I saw at last week's Conservative Party conference the joy that was expressed about the Home Secretary's ending of free movement for individuals. I found that chilling and stomach churning. We need to encourage migration into our country. It makes us a better society and it boosts our population.

I agree with Mr Crawford that our tourism businesses rely substantially on the many people who have chosen to come to this country and make their future here. I, too, represent many of those people and many of the businesses in those sectors. Mr Crawford referred to the Real Food Cafe in Tyndrum, which is one example of a business that has substantially prospered because of the contributions of individuals who have come from other countries to be based here. We need to counter the messages that the current uncertainty

and chaos signal to some of those individuals, because we need them to feel welcome, to stay here and to make an economic contribution. Ideally, we need to get to a position in which we do not have to suffer the loss of free movement of individuals, because free movement is an economic, social and moral enhancement of our country.

Patrick Harvie (Glasgow) (Green): I, too, thank the cabinet secretary for the advance copy of the statement. In a similar vein to the previous question, I will ask about EU citizens who are already here, whose lives have been subject to such uncertainty and anxiety and whose valuable contribution to our society has, frankly, been demeaned by the UK Government and those seeking to end the freedom of movement.

If a no-deal Brexit at the end of October can be prevented—as, of course, it should be—they will still face the prospect of future vulnerability, not least if a subsequent general election leads to the implementation of a Conservative manifesto whose central mission is to throw those people's lives under a bus in a more brutal no-deal Brexit to come.

Will the cabinet secretary tell us what the Scottish Government is doing not only to give information to EU citizens living in Scotland but to identify their support needs? The impact of this current situation on their emotional and mental wellbeing is surely up there with anything that the brutal anti-immigrant hostile environment has inflicted on anyone.

John Swinney: Mr Harvie raises a serious issue, and I agree fundamentally with the concerns that he has expressed about how the individuals who have chosen to come to live in our country must be feeling in all of this uncertainty, and the impact on their wellbeing is an issue that is of great concern to the Scottish Government.

Mr Harvie will be aware that, in April, the Scottish Government launched our stay in Scotland campaign, which was expressly targeted at those individuals in order to encourage them to stay and to let them know that they are welcome here and that the Government welcomes them. I see that Mr Ruskell is sitting beside Mr Harvie, and I know that he and Mr Crawford have co-operated on events in the Stirling area to get that message out to EU migrants—I have undertaken meetings of that type in my constituency with my Westminster parliamentary colleague, Pete Wishart.

Ministers have also engaged in correspondence on the issue. For example, the Cabinet Secretary for Health and Sport has written to members of staff in the health and social care sector who are from other countries in order to reassure them of

the importance that we attach to their presence. I hope that a combination of such measures will give a signal to those individuals that they are welcome.

People will still have to navigate their way through the settled-status scheme. One thing that concerns me is the relatively low take-up of that scheme in Scotland. Clearly, the current uncertainty will be having an effect on that, but I commit today to ensuring that the Government puts all energy and industry into ensuring that we encourage individuals to take part in that scheme.

Of course, fundamentally, the answer to Mr Harvie's question is to have an immigration system that is appropriate to Scotland. The immigration system that has been talked about by the Home Secretary is, frankly, hopeless and counter-productive for Scotland, and we wanted to have nothing to do with it.

Emma Harper (South Scotland) (SNP): The cabinet secretary has responded to a question about medical supplies. Many anti-seizure medicines and insulin need to be refrigerated, have short shelf lives and are not made in the UK. I register my interest in the issue, as I have type 1 diabetes.

Can the cabinet secretary clarify that, as Scotland is forced to leave the European Union, the Scottish Government is doing everything that it can to support those people who are in need of vital life-saving medicines?

John Swinney: Medicines of the type that Emma Harper refers to are defined as category 1 goods, which will have priority in transportation across the short straits at Dover. *[John Swinney has corrected this contribution. See end of report.]* In my statement, I said that the United Kingdom Government expects capacity to be at 40 per cent to 60 per cent of existing capacity. Obviously, in any situation in which capacity is diminished, greater priority will be given to essential medical supplies that are defined as category 1 goods. I hope that that provides some assurance to Emma Harper.

However, we should not dismiss that lack of transportation capacity, because there will be an effect on items that many individuals in our society believe to be essential, and, once a prioritisation exercise is undertaken, not all of the essential goods that people would expect to see in our country will be able to reach here. In that regard, however, I reassure the member that the work that we take forward under the medicine shortage analysis will identify any concerns about the issues that she has raised, and the Government will do all that it can to address those issues in dialogue with the UK Government and suppliers.

Alex Cole-Hamilton (Edinburgh Western) (LD): There is no Brexit deal that is better than the deal that we enjoy as members of the European Union.

No deal will be devastating to all the people, across the whole of the United Kingdom, and we must do all that we can to stop it.

Will the Deputy First Minister talk about the extent to which no-deal planning has led to the deprioritisation of other Government activity? How much Government effort is being consumed, and what areas of Government activity have suffered because of the preparations?

John Swinney: The Government is having to redeploy resources to take account of the planning that is required. A developing number of staff are being allocated to these priorities as we get closer to the possibility of a no-deal Brexit, and the finances and costs involved in that are recounted in the paper that I published today.

The Government is having to provide for a significant financial undertaking, and we are required to make constant decisions, daily, about what work can be taken forward to support these efforts. The situation is monitored on a regular basis by the permanent secretary; she takes operational decisions in that respect, to ensure that all the needs of Government can be met as a consequence of our taking all the steps that we can to deal with a no-deal Brexit.

The Presiding Officer: Members on the front benches of all the parties have had a chance to ask an extended question. I ask the remaining nine members who want to ask a question to keep their questions concise—and I ask for answers to be kept similarly so.

Stuart McMillan (Greenock and Inverclyde) (SNP): Just hours ago, the UK Government published a further no-deal planning document, with further Yellowhammer information. Will the Deputy First Minister say what awareness, if any, the Scottish Government had of the document? When was it informed that the document was being published?

John Swinney: Late last night, Scottish Government officials were given a copy of the report that the United Kingdom Government is publishing this afternoon, as I understand it.

We have taken part in a number of no-deal Brexit planning meetings with the United Kingdom Government—albeit that ministers have taken part in a minority of those meetings. I will take part in two such meetings this week and Mr Russell took part in one last week.

Our officials were given a copy of the UK Government's paper late last night and ministers'

comments today reflect the benefit of our having had a brief amount of time to consider it.

Graham Simpson (Central Scotland) (Con): Twelve days ago, I asked the First Minister about funding for councils to deal with Brexit. I said that there were Brexit consequentials of £93 million—at that time; the figure might have gone up. Councils have so far received £50,000 each, to employ Brexit co-ordinators, and are expecting about £7 million extra.

Councils in England have just been given all the money that they need—[*Interruption.*] Councils in Scotland have to make business cases; has that approach changed, and if not, why not?

John Swinney: It is laughable for Graham Simpson to come to the chamber and say that local authorities in England have been given all the money that they need by a Tory Government. If he just has a look at what has happened to local authority services in England, he will understand the decimation that the UK Government has inflicted on local government in England.

We have given an allocation to local authorities. I announced today that, in the event of a no-deal Brexit, particular programmes will be put in place to support local authority expenditure on mitigating poverty.

I have just come from a meeting with the leadership of COSLA—it was just before I came down to the Parliament today. We discussed Brexit preparations, and a fair summary is that the local authority leadership expressed its satisfaction with the partnership work that is going on to take forward the work. Of course, we remain in dialogue with local government about funding requirements, and I assure Mr Simpson that such discussions are undertaken regularly, by me, Mr Russell or Aileen Campbell, to take forward the issues.

Annabelle Ewing (Cowdenbeath) (SNP): Will the Deputy First Minister say whether the Scottish Government is having to cover the cost of a no-deal Brexit for Police Scotland? If it is, how much is that? Does he agree that we in Scotland should not have to pick up the tab for the Tories' Brexit mess?

John Swinney: We have allocated £17 million to Police Scotland to cover the additional arrangements to deal with the potential impact on civil contingency matters that I set out in my statement. The chief constable took operational decisions to establish the EU exit capacity in March. That was stood down, but has been stood back up again, and it is obviously part of the planning. The Scottish Government is meeting that cost, and we have to wrestle with that issue within the resources that are available to the Scottish Government as a whole.

Claire Baker (Mid Scotland and Fife) (Lab):

First, we should not be facing a no-deal Brexit and it would be unlawful to leave without a deal on 31 October. Secondly, this week is challenge poverty week and the work that the Scottish Government is doing on no-deal preparedness should not be necessary. The £7 million for a poverty mitigation fund will be spread thin across Scotland. Will the fund be demand led, will it be allocated between local authorities and will it be capped at £7 million?

John Swinney: The first thing that I will say to Claire Baker is that it is nonsensical, when we all know the scale of poverty that exists in our society, to wander into a no-deal Brexit that all the analysis tells us will exacerbate poverty. If there is ever an example of recklessness and the harshness and lack of concern of a Conservative Government, this is it: to pile problems on those who are already facing poverty. I agree with Claire Baker entirely on that point.

On mitigation measures, I have been candid with Parliament today, as have my colleagues over a long time. It would be impossible for us to mitigate all the effects, but we will do all that we can. We have set out the provision of £7 million in the mitigation fund, which will be available should there be a no-deal Brexit. The decision making on the allocation and utilisation of those resources will be informed and driven by the analysis that I cited in my statement, which will identify the areas of the country that are most likely to be severely impacted by a no-deal Brexit.

We will keep under review all the sums of money that are relevant and available. The finance secretary is acutely aware of the issues that Claire Baker has raised and will want to do whatever he can within the resources that are available to him to respond to the scale of the challenge that we might face.

Joan McAlpine (South Scotland) (SNP): As a member who covers a rural region of Scotland, I am interested in how the Government is preparing rural communities—specifically, farmers and crofters—and the rural economy for Brexit, ahead of 31 October.

John Swinney: Some weeks ago, the Government decided that if we were to face the possibility of a no-deal Brexit, we would want to make sure that we equipped the farming and crofting community with as much protection and support as we possibly could in advance of that. Last Friday, we were very pleased that the first payments were made to that community, with more than £327 million arriving in the bank accounts of 13,450 farmers and crofters, and further payments will be made in the coming weeks. Those advance loans are the single biggest mitigation action that the Scottish Government can take to support farmers and

crofters. I am very pleased that the rural economy secretary has been able to accelerate those payments, in dialogue with the finance secretary. They are the first such payments to be made in the United Kingdom and they are in the bank accounts of farmers and crofters to give them the opportunity to plan for what will be a very destabilising situation as a consequence of a no-deal Brexit.

Alexander Stewart (Mid Scotland and Fife) (Con): The statement indicates that COSLA is working with a number of enterprise agencies in conjunction with the Scottish Government to support and prepare businesses. Will the Deputy First Minister clarify the measures that have been put in place?

John Swinney: A combination of measures have been put in place, which include the provision of information to individual businesses to enable them to understand and accommodate the changed environment that they will have to deal with. The document that has been published today by the United Kingdom Government goes into extensive detail on what is an enormous set of burdens to add to the business community. I am horrified by the document's contents and the burdens that are being passed on to businesses, many of which are small and medium-sized enterprises. Much of the advice will have to be enhanced, given the scale of the burdens that are being added to business by the possibility of a no-deal Brexit.

Some of the support relates to direct financial interventions. I know that such interventions do not always sit comfortably with those on the Conservative benches, but this is an interventionist Government and we believe in acting where we can to support sustainable businesses. There will be businesses that, through no fault of their own, will be destabilised by a no-deal Brexit and this Government will want to support them as much as we possibly can. We will be engaged in dialogue with our local authority partners about how best to do that in different localities around the country.

Dr Alasdair Allan (Na h-Eileanan an Iar) (SNP): The shellfish sector accounts for approximately 90 per cent of the total value of landings in the Western Isles. Shellfish exporters face challenging circumstances as it is in delivering via ferry and road to their primary export markets in France and Spain and ensuring that the shellfish stay alive on the way. Does the cabinet secretary have any information regarding contingency plans that might have been put in place by the UK Government for the shellfish sector? What representations has the Scottish Government made to the UK Government on that point?

John Swinney: One of our specific priorities has been to try to secure for the shellfish sector and, indeed, the fisheries sector in general much greater clarity and assurance about the ability to get product to market as timeously as possible. We have been raising that issue with the United Kingdom Government for some time. We have not got to a specific point of agreement, but I am more hopeful that we can get to a position whereby the UK Government understands at last the importance of giving priority to ensuring that shellfish produce can get to market as quickly as possible. We will obviously keep the sector informed of that dialogue as it continues, but I assure Dr Allan that the Scottish Government is, in all its representations to the UK Government, trying to secure that type of access to the market and transportation arrangements that will enable his constituents who do valuable and dangerous work to be able to reap the rewards of the activity in which they are involved.

The Presiding Officer: My apologies to James Kelly and Stewart Stevenson for not calling their questions, but we are a bit pushed for time this afternoon. That concludes the statement and questions on no-deal preparations.

National Islands Plan

The Deputy Presiding Officer (Linda Fabiani): The next item of business is a statement by Paul Wheelhouse, the Minister for Energy, Connectivity and the Islands, on “The Proposed National Islands Plan”. The minister will take questions at the end of his statement and there should be no interventions or interruptions. Members will note that they have headphones on their desks on which to listen to translation from Gaelic to English. However, the member whom I thought would be using Gaelic is now shaking his head.

Dr Alasdair Allan (Na h-Eileanan an Iar) (SNP): I have just been told that the Gaelic translator is stuck in traffic, so I will translate myself.

The Deputy Presiding Officer: Oh. We shall have double the time for Mr Allan’s question. I call Paul Wheelhouse. You have up to 10 minutes, please, minister.

15:14

The Minister for Energy, Connectivity and the Islands (Paul Wheelhouse): Today marks an important step forward in the historic journey for our islands that began with the passing of the Islands (Scotland) Bill on 30 May last year. I am pleased to publish the first-ever draft national plan for Scotland’s islands. Part 2 of the Islands (Scotland) Act 2018 requires the development of such a plan and states that it should

“set out the main objectives and strategy of the Scottish Ministers in relation to improving outcomes for island communities that result from, or are contributed to by, the carrying out of functions of a public nature.”

Section 3 of the act sets out what some of the outcomes are, and section 4 sets out how the plan should be developed. There is provision in section 4(3) for the proposed plan to be laid before Parliament for 40 days and for the final plan to be published within a year of that section of the act coming into force. I confirm that we laid “The Proposed National Islands Plan” before Parliament on Thursday 3 October, and that we are on track to meet those statutory requirements.

Just as important is that we have developed a plan that reflects not only the statutory outcomes but the priorities of islands’ inhabitants and communities. I hope that the proposed plan shows that we have listened to and heard their voices.

The extent of our engagement has been significant. Since spring, we have visited 41 of Scotland’s islands, from Arran to Unst and everywhere in between. We held 61 events and meetings on those islands, which were attended

by almost 1,000 people of all ages and backgrounds. We have engaged online with more than 400 respondents, and we have specifically consulted local authorities and other agencies and stakeholder bodies that have interests in the islands of Scotland.

I thank everyone who attended an event or responded to the online consultation. In particular, I am grateful to the many people who were involved in helping to organise the logistics of the events, including the islands team in the Scottish Government, the Scottish Islands Federation, our partners at the University of Strathclyde and local authority colleagues.

The Islands (Scotland) Act 2018 recognises areas in which action is needed to improve outcomes for island communities, and the proposed plan's strategic objectives reflect that. Members will find in it commitments to address sustainable economic development, community empowerment, how to increase population levels, climate change and many other things. There are 13 strategic objectives, which are important to improving the quality of life for island communities. Each objective is underpinned by a series of actions and commitments, of which there are 104 in total.

The plan was drafted to reflect key themes that emerged throughout the consultation. It focuses on what is fair, integrated, green and inclusive. It is a fair plan that aims to promote, deliver and enhance equality for islanders in every aspect of their lives. Its human rights approach will support greater accountability and help to ensure that rights are respected, protected and fulfilled.

The plan is an integrated one that promotes joined-up services and focuses on the importance of place to island life, and the need to ensure that service delivery is cohesive and that policy making is holistic. Islanders made it clear that issues and challenges overlap and connect, so the plan seeks to build economic, social and environmental considerations into an integrated approach to policy development and service design.

It is a green plan that aims to harness and unleash the potential of having a green and blue economy. Islanders are acutely aware of not only the fragility and vulnerability of their environments and the need to adapt to climate change, but of the possibilities and opportunities for their communities to help Scotland to drive forward its ambitions on decarbonising our energy system and the wider economy, and to continue to lead the world on climate action. It is therefore entirely fitting that I am delivering this statement to members during Scotland's climate week.

It is an inclusive plan that promotes community empowerment at local level. We have tried to

understand better the desire of islanders to have decisions taken as close as possible to where the impact of those decisions will be experienced, and to reflect that throughout the plan's commitments.

I hope that the plan reflects one other key finding from the consultation. There is no doubt that Scotland's islands face, and will continue to face, challenges and issues that are often unique to island life. However, what also came across loud and clear was that although no two islands are the same, Scotland's island communities and people are hugely resilient, with a willingness to adapt and innovate, and have huge core strengths and talents on which to build.

Scotland's islands are not a problem for us to solve: they face a variety of challenges, just as any community does, but they are also a success to be celebrated, nurtured and supported so that they can build on current foundations to ensure secure and sustainable futures. In doing so, they will help to show the way for the rest of Scotland.

Nowhere is that more evident than in the attitudes of young people who live on the islands. During the consultation, we held events specifically for young people and heard their views and experiences, and we heard about their hopes and aspirations for the future. A key theme was their desire to stay, or to leave for a while but then return, in order to realise their dreams in the communities that they grew up in. They have a role to play in implementation of the plan.

That is why we committed in the programme for government to creating a new young islanders network. That network will include children of all ages, and it will help to ensure that the actions that are developed to take forward the plan take full account of the interests and priorities of young people on the islands, and connect with young islanders who live on the mainland. We will seek to develop actions that will help to make a positive impact on depopulation, support growing up on Scotland's islands, and encourage the return of young people and adults to the islands.

I am aware that a plan, and the objectives and commitments within it, are only part of the answer. Island authorities and communities rightly want to be assured that the plan will translate into action. For the national islands plan to be successful, we need national Government, local government and other public agencies to work closely together and to share resources to ensure delivery.

Improving outcomes for our islands' communities is not just my job, nor is it just that of my islands team. If we are to tackle issues such as fuel poverty, improve transport services and housing, and help to sustain economic development, action will be required across Government. I am pleased that work in that regard

is already under way, with island impact assessments being trialled and progress being made on key matters such as ferries, in order to provide increased security of provision for communities.

Work must also be done across all public agencies to harness the widest range of opportunities to improve outcomes in their specific fields, and to help to deliver on the plan's key themes. Work to develop an implementation strategy is already under way. It will set out clear and measurable actions for each of the strategic objectives. Some of the commitments will be achieved in the short-to-medium term, while others will require longer for delivery, and some of those might go beyond the lifespan of this version of the national plan.

We are also developing indicators so that we can carefully measure our progress in achieving the actions, with clear timescales, budgets and partners having been identified. The implementation strategy needs to be pragmatic and ambitious. That is the approach that is taken in the proposed plan. Parliament now has 40 days to consider it: I will be happy to engage with members and committees to hear their views.

During this period, we should also take some time to reflect on what Scotland is achieving through having the national islands plan. We are one of the very few countries in the world to have dedicated place-based legislation on islands. In Europe, our friends in Croatia have similar legislation, albeit that the circumstances are different, but our act and the plan are unique.

Scotland was one of the first countries to embrace the United Nations sustainable development goals; they are woven throughout the plan. To promote fairness and equality on Scotland's islands, the plan embeds a strong human rights dimension. Through the development, launch and future implementation of the national islands plan, Scotland is showing the rest of the world, and our own island communities, that islands are important and that their voice is strong.

We should also not lose sight of our purpose. We want more young people to stay on the islands of their birth, to have fulfilling lives there and to contribute to the success of their communities. I would love to see those who have left and new islanders being provided with opportunities to make our islands their home. We want more businesses to start up and to locate on the islands, to create jobs that pay well and to contribute to Scotland's wider economic ambitions.

We want our islands to build on their cultural and artistic heritage for their own sense of wellbeing, and to attract more people to visit and

share in all that they have to offer. We also want the islands' unique landscapes to be protected and enhanced, so that they can provide a sustainable environment for all animals and humans who live there.

Ultimately, we want our islands to thrive now and in the future, and we want the people who live there to live good lives and to feel valued as an important part of the Scotland of today and tomorrow.

At the risk of murdering it, there is a Gaelic saying, "S e obair latha tòiseachadh." It means "This is just the start". The views, ideas, enthusiasm and experience of islanders have been vital in shaping the work and in bringing "The Proposed National Islands Plan" to life. I am pleased to have laid it before Parliament. I apologise to Dr Allan for my hideous pronunciation, and I hope that he forgives me.

The Deputy Presiding Officer: The minister will take questions on the issues raised in his statement. I will allow around 20 minutes for that. We are pushed for time so I would appreciate brevity; I cannot go over that 20 minutes.

Jamie Greene (West Scotland) (Con): I thank the minister for advance sight of the statement. The islands ministerial role might be a coveted role, given the beauty and variety of Scotland's islands, but equally it is challenging, such is the nature of island life, island economies, connectivity and the other issues that our islands face.

It is fitting that we discuss the islands plan today, on a day when so many of our islanders are cut off from the mainland. The situation in Arran should be unacceptable to us all in the chamber, but it typifies the many challenges that our islands are presented with and how well the Government responds to them.

I have some wider questions on the plan, given that one island council leader has already described it as aspirational but lacking in substance. First, nowhere in the plan, or indeed in today's statement, has mention been made of whether additional financial resources will be allocated to either central Government directorates or local authorities to assist with meeting the 13 strategic objectives.

Secondly, does the plan address the fact—or, indeed, propose a solution to the reality—that we will need at least a dozen new replacement vessels to service our ferry networks in the coming years? Thirdly, and importantly, will the plan propose tangible and realistic solutions to the problem of population decline on our islands, including the creation of jobs that are designed to attract and retain people?

Paul Wheelhouse: I recognise the importance of ferries, which were one of the islanders' top priorities in relation to connectivity and transport. We are not dodging the issue in the slightest. Jamie Greene might be interested in strategic objective 3, which sets out a number of measures to improve transport services. On page 27, the plan mentions the need to invest in ferries, to take forward the vessel replacement deployment plan and to seek the pipeline of new vessels that Jamie Greene mentioned.

On resourcing, we are required to develop the implementation plan. As I said in my statement, that work is under way. We are building the team to respond to that work, and we are identifying the resource that will need to go with the actions. We want to discuss with our island authority partners and other stakeholders the actions that can be taken, the timeframe for them—whether it will be short, medium or long term—who is responsible for the actions, who needs to collaborate to deliver them and what resources will be required to deliver them. I definitely recognise that point.

Jamie Greene said that one island authority leader has described the plan as aspirational but lacking in substance. We have engaged thoroughly with the island authorities and their partners—we had 25 meetings—in preparation for the proposed plan that we published last week. Over the next 40 days, we will engage substantively with local authority partners again to take forward their recommendations for modification of the plan. We recognise that it is a proposed plan, not the final plan, and we want to work with partners on the final plan. I reassure Jamie Greene that there has been considerable engagement. The islands team is making tremendous efforts to engage with local authorities. That process will continue, and we hope to address any concerns that local authorities have.

Colin Smyth (South Scotland) (Lab): I thank the minister for advance sight of the statement. As the translator is not here, I will stick to English with my questions.

In the islanders' response to the consultation on the report, they have set out very clearly that there are genuine fears—they include feeling distant from decision makers in Edinburgh, the impact of depopulation, the costs of transport and the lack of capacity on ferries—about the future of some island communities. Although there is little to disagree with in the strategic objectives in the plan that the Government has published, islanders want to see meaningful action being taken to address the challenges that they face, not promises of more consultations, plans and research.

The minister said several times that an implementation plan is being developed, which will include clear and meaningful actions. Given that it has already been more than a year since the 2018 act was passed, when will we see an implementation plan with detailed actions and clear timescales for implementing them?

Paul Wheelhouse: Colin Smyth makes a very fair point. I have mentioned the implementation plan a number of times. We had started work on it in order to take forward the 104 commitments that are listed in the plan. There is a whole chapter in the proposed plan that sets out our commitments to supporting effective implementation, and I hope that that chapter will help members in the meantime.

We are trying to work out a set of indicators that we will need to monitor success against the outcomes and commitments in the plan. The indicators are being developed for each outcome and objective in collaboration with key delivery partners. Once they have been developed, the indicators will be presented to specific island stakeholders for feedback, after which they will be tailored and finalised, with, I hope, stakeholders' support.

One action from the islands strategic group meeting that I had in August with the island authorities was to take forward work through the Scottish Government's islands team to establish a new partnership group of Scottish Government and local authority officials. That group will be fully involved in the development of the implementation strategy and the associated measurable outcomes.

I hope that my answer gives some reassurance to Colin Smyth. I am very happy to meet him or any other member who wishes to discuss the issue in the 40-day period in order to ensure that members have a chance to influence the work.

Dr Alasdair Allan (Na h-Eileanan an Iar) (SNP): Mar a tha fhios aig a' mhinistear, tha crìonadh na h-àireimh-sluaigh am measg nan dùbhlán as motha a tha ro na h-Eileanan an Iar. Tha "fàs àireamh-sluaigh" air an liosta am measg nan amasan as cudromaiche ann an Achd nan Eilean (Alba) 2018.

Am faod am ministear fiosrachadh a thoirt seachad ciamar a bhios plana nàiseanta nan eilean a' tomhas adhartas air seo. Am bidh e dìreach a' cunntadh nan àireamhan-sluaigh air fad, no a' cleachdadh slatan-tomhais eile—a' cùnntadh clann-sgoile, mar eisimpleir.

Dr Allan continued in English.

As the minister will be aware, tackling depopulation is the major challenge that faces the Western Isles and "increasing population levels" is

listed as one of the key outcomes in the Islands (Scotland) Act 2018.

What measures will the national islands plan use to measure outcomes on tackling depopulation? Will it simply be a measure of total population levels, or will some other metric, such as the number of schoolchildren, be used?

Paul Wheelhouse: That is a very important question, which builds on the point that was made by Colin Smyth. I recognise Dr Allan's concern about depopulation. His view has been endorsed by respondents to the consultation from the Western Isles and other areas. Particularly in some of the archipelagos, such as Orkney and Shetland, outer islands are being depopulated, while the mainland is experiencing population growth. Tackling depopulation is a key priority across the islands, particularly in the Western Isles.

It is likely that we will use a broad range of metrics to measure outcomes relating to depopulation. Indicators and metrics are being developed with key delivery partners for each outcome in that area. As I said to Colin Smyth, once those indicators have been co-developed, they will be presented for comment and feedback to specific island stakeholders.

The programme for government includes a number of commitments that will support the plan's ambition to increase population levels, which include work on talent attraction, labour market policies and housing and planning. We recognise the specific challenges that island communities—and, indeed, some very remote rural communities—face, and there is a specific commitment to develop an action plan to support repopulation of our island communities and to work with partners to test approaches using small-scale pilots. We will also work with the young islanders network to identify actions to encourage young people to stay on or return to the islands. Along with Ivan McKee and other ministerial colleagues, I sit on the ministerial population task force that is led by Fiona Hyslop, and we are considering how we can look at population metrics in the context of the national performance framework.

Jamie Halcro Johnston (Highlands and Islands) (Con): The single issue that was raised most by participants in the consultation's discussion events was transport. The proposed plan recognises the considerable cost of transport within, to and from the islands, the effect on affordability and the wider impact on the islands' economies, but although parts of it relate to ferries, there is no discussion whatsoever of existing or new fixed links between islands. Will the minister, at the very least, make a commitment

that consideration of the future of fixed links will be part of the implementation plan when it arrives?

Paul Wheelhouse: Jamie Halcro Johnston makes a reasonable point about fixed links. We will reflect on that issue if it has been raised by islanders and has not been reflected in the plan. We tried to reflect to as great an extent as we could the issues that were raised.

I reassure Mr Halcro Johnston that such matters are being considered by the Cabinet Secretary for Transport, Infrastructure and Connectivity, Michael Matheson, in the context of the work on the strategic transport projects review and the national transport strategy. We are looking at the issue of fixed links versus ferry links in that context, because particular projects have been suggested by communities across Scotland.

The issue is not being ignored. We will make sure that we reflect on the point that Mr Halcro Johnston has raised, and if islanders have raised consideration of fixed links as a priority for them, we will certainly reflect that in future drafts of the plan.

Kenneth Gibson (Cunninghame North) (SNP): Having a workable islands plan is important, but it is critical that islanders can access the mainland and that visitors can visit our islands. We are currently in an extraordinary situation in which both Ardrossan linkspans and the Gourrock linkspan are out of service and vessels are struggling to tie up at Troon, which is causing havoc with the Arran ferry service. How has that shocking state of affairs arisen and when will it be resolved?

Paul Wheelhouse: I recognise the huge frustration that the situation that has arisen will be causing, not just for Mr Gibson but for his constituents. I note that Peel Ports has apologised to customers for the failure of the linkspan in Ardrossan, and I welcome its engagement in an effort to rectify the situation.

I can reassure Mr Gibson that, following the linkspan failure on Saturday, the replacement motor has arrived in Irvine and is ready to be transported to Ardrossan this afternoon. The timescales for the work include installation and tests, which, if successful, could result in the linkspan being back in service this evening but, obviously, we will have to wait and see how that goes.

Peel Ports is to provide an update on the situation at about half past 3, which might be happening as we speak. Unfortunately, the south-westerly wind direction at Troon, which was deemed to be the alternative harbour for the period of the repairs, and the gusting speeds of in excess of 30 knots are having an impact on the MV Caledonian Isles. It does not have enough

power to safely get off the berth in such conditions. Unfortunately, that has resulted in a passengers-only service between Brodick and Ardrossan. That is the master's decision. I am sure that Mr Gibson is aware of the legal position on that. CalMac Ferries fully supports that decision on the grounds of safety, and so do we.

The recent linkspan issues at Gourrock are being managed effectively by both Caledonian Maritime Assets Ltd and CalMac. Engineers will assess the scale of work tomorrow, and we hope that repairs will start in the week commencing 21 October.

Rhoda Grant (Highlands and Islands) (Lab):

The plan deals with depopulation by promising another plan. We all know what is needed to address depopulation: people need a job, a home and access to transport and services.

Will he prevail on his colleagues to stop the damaging centralisation of air traffic control that will remove high-quality jobs from our islands?

Paul Wheelhouse: Without any disrespect to Rhoda Grant, I point to the fact that the local authorities themselves have been encouraging us to develop an implementation plan. I recognise why she is asking the first part of her question. I know that communities are keen to see action taken quickly, and we will go as fast as we can, but we need to be able to prepare our actions properly and effectively and, as other members have mentioned, ensure that they are resourced. The implementation plan is under way. I hope that it will not take a huge amount of time to prepare, as we work together with local authorities to address that.

Air traffic control is a hugely sensitive issue. I appreciate the impact that the new arrangements will have on particular individuals and families, and we are encouraging Highlands and Islands Airports to work with them to ensure that those arrangements work as effectively as possible for them and that there is as little disruption to their family life as possible.

The cabinet secretary Mr Matheson, or I, will be happy to meet Rhoda Grant to discuss that.

John Finnie (Highlands and Islands) (Green):

The First Minister declared a climate emergency and said that everything would be up for review.

On page 24 of "The Proposed National Islands Plan", the Scottish Government is yet again trumpeting its commitment to dualling the A9, telling us of the benefits to the islands that that will bring. Minister, that is a £3 billion project. It is money that would replace the ferry fleet. The revenue cost of maintaining a dual carriageway could contribute to the running of the internal ferry systems. Replacing the fleet would also provide work for Ferguson's. Investing in the northern isles

ferries would be a very tangible act. Will Mr Wheelhouse undertake to ask the First Minister, as she initially committed, to review this obscene expenditure on the A9 and direct it to something constructive, such as the internal ferries?

Paul Wheelhouse: I recognise John Finnie's and his colleagues long-standing opposition to investment in major roads. We may have to disagree on that. I also point out to Mr Finnie the importance of the A9 to seafood producers and others for getting their goods to market. It is a very important arterial route for getting island products from the mainland to the continent. The steaming time for ferries from the northern isles to Aberdeen is a barrier to certain products reaching the market on time, although for others it is fine. We need to ensure that there is a range of options.

If a producer is sitting in the Orkney islands—as I am sure that Mr Finnie does on a regular basis, for surgeries and so forth—getting goods from there to the mainland across the Scrabster to Stromness route and then down along the A9 is one of the preferred ways of getting goods to market. I ask the member to recognise the importance of trunk roads such as the A9 for that purpose.

We are engaging with both local authorities to identify solutions for the northern isles internal ferry services. We have been in helpful and constructive discussions with them about the costs that they face in maintaining good quality services on the islands, but it is too early to say where that will end.

Beatrice Wishart (Shetland Islands) (LD): I thank the minister for early sight of his statement, and recognise the work that has been done to get to this point. The Government recognises that transport services are a key factor in the ability of islanders to fulfil their basic human rights. Will it commit to full and fair ferry funding in the upcoming budget so that islanders in Shetland finally have their basic needs met?

Paul Wheelhouse: That is the first question that I have responded to from Beatrice Wishart and I welcome her to the chamber.

As I outlined in my response to John Finnie, we will very much engage with both local authorities to see what we can do. The commitment is there to work with both councils but, as the member may know, significant capital costs are required to upgrade ferry services in Shetland and Orkney, and it is too early to say where we will get to. It is not just an issue of recurrent funding; a capital investment is required in both areas. We are sympathetic to both authorities, given the position that they find themselves in with historical pre-devolution arrangements being extended to the current date, and we are trying to work with them

constructively. I hope to keep members informed of progress on that.

Stewart Stevenson (Banffshire and Buchan Coast) (SNP): What progress is being made to introduce other measures that are in the Islands (Scotland) Act 2018?

Paul Wheelhouse: I will flag up two main areas where we are taking forward additional work under the Islands (Scotland) Act 2018. The first relates to island communities impact assessments. Section 8 of the 2018 act, which refers to those impact assessments, has not yet been commenced. Work on the guidance and templates for the provision is being progressed in tandem with work on the national islands plan, with a view to ensuring that the section is commenced as soon as possible. Policy instructions are being drafted and officials are working to finalise an illustrative timetable. Ideally, the regulations will come into force early in 2020.

Secondly, as members may be aware, we are progressing the Additional Powers Request (Scotland) Regulations 2019, which were laid in Parliament on 5 July this year and which are the obvious next step in the implementation of the 2018 act. The regulations will come into force in mid-November at the latest, subject to approval being obtained from Parliament. Non-statutory guidance is being developed collaboratively with the six relevant local authorities and will accompany the regulations when they come into force. We recognise that there is still a lot of work to do, but a lot of progress has been made.

Donald Cameron (Highlands and Islands) (Con): On page 34, the plan refers to the Scottish Government's reaching 100 per cent—R100—target. Given that islands will be some of the last places to be digitally connected, does the minister accept that the Scottish Government's likely failure to meet its 2021 R100 target will disproportionately affect our island communities?

Paul Wheelhouse: Donald Cameron raises an important matter. Digital connectivity came out strongly in the feedback from islanders on the things that they want investment in. I point out—I will do this gently because it that kind of day—that the issue is a legal and regulatory responsibility of the United Kingdom Government and that we are intervening to try to ensure that we address a failure of the UK market to deliver for remote island communities across the whole UK and not just in Scotland. As the member knows, we are in the final stages of procurement for R100. I hope to be able to update Parliament shortly on the outcome for the north lot as well as the central and south lots, but I am optimistic that a good outcome will be achieved. In the R100 bids, we have mandated areas in some of our islands, in

communities such as Yell, to ensure that they are among the main beneficiaries of the programme.

Liam McArthur (Orkney Islands) (LD): I thank those who were involved in facilitating the consultation and the plan, but the leader of Orkney Islands Council has criticised it for having no commitments and being without any real substance. Will the minister reassure my constituents that, in relation to our lifeline transport links, the Government is ready to deliver the new vessels and the sustainable funding that are required for Orkney's internal services as well as the additional freight capacity that is needed on the northern isles routes?

Paul Wheelhouse: I have already given fairly full answers to two members on the point about internal ferry services, so I will use this answer to refer to the freight services. The procurement exercise for the NorthLink services has concluded and we are now working through negotiations with the preferred bidder. As the member knows, there is a standstill period, which we must respect to give CalMac the opportunity to challenge if need be. We are keen to work with the industries in the islands to understand their freight requirements, and we have built flexibility into the contract to allow modification to freight services, should that be needed in due course.

On the comments from the leader of Orkney Islands Council, I stress that we have had positive engagement with Councillor Stockan and his colleagues at the council. Several of the 25 meetings that we have had have been with Orkney Islands Council. At the islands strategic group, Councillor Stockan was made aware of what was in the draft plan and did not object to it at that point. There is an issue about the appeal mechanism in the Additional Powers Request (Scotland) Regulations 2019, which Orkney Islands Council and other councils are concerned about, but we are working with them to try to address that through guidance.

The Deputy Presiding Officer: That concludes questions on the minister's statement. Unfortunately, we did not manage to take questions from Tom Arthur and Angus MacDonald.

Supporting Innovation

The Deputy Presiding Officer (Linda Fabiani): I remind members that there is absolutely no spare time this afternoon, so I will have to be quite strict on timings for the next item of business, which is a debate on motion S5M-19287, in the name of Ivan McKee, on supporting innovation.

I call Ivan McKee to speak to and move the motion. You have up to eight minutes, minister.

15:45

The Minister for Trade, Investment and Innovation (Ivan McKee): Business innovation has never been so important. The ever-increasing pace of technological change, the climate emergency and Brexit all create a highly challenging economic environment. However, where there is challenge there is also opportunity. It is my job to help businesses to weather political and economic turmoil and to support them in taking advantage of the opportunities that times of change bring.

Our First Minister has set an ambition for Scotland to be the designer, developer and manufacturer of the innovations that will shape the future—not just a consumer of them. That ambition sits at the heart of our most recent programme for government, which seeks to

“reinforce Scotland’s place as a dynamic, open, innovative economy.”

The time is right for business to step up to that challenge.

My aspirations are clear. I want to see inclusive economic growth that would benefit everyone in society—growth generated by ambitious, innovative businesses creating high-value jobs that make the best use of Scotland’s well-qualified workforce, and supported by an effective ecosystem that is easy for business to understand and access. I also want to be able to track spend, progress and outcomes to ensure that we are investing in policies that make a clear difference.

In 2017, my predecessor Paul Wheelhouse launched the Scottish Government’s innovation action plan, which clearly articulated our vision for a Scotland in which innovation is an intrinsic part of our culture, our society and our economy. It set out how we would use innovation to drive inclusive economic growth and match the innovation levels of the best-performing Organisation for Economic Co-operation and Development countries.

The plan also set an ambitious target—

Dean Lockhart (Mid Scotland and Fife) (Con): Will the minister give way?

Ivan McKee: Yes.

Dean Lockhart: What progress has there been on the target to be in the first quartile of OECD countries for productivity and innovation?

Ivan McKee: As I was about to say, our innovation action plan set an ambitious target to double our business research and development investment to £1.75 billion over the decade to 2025. To answer Dean Lockhart’s question, we are on track to do so. The latest figures show a 14 per cent annual increase in business R and D in Scotland, which compares with the United Kingdom average of only 3 per cent, with Scottish R and D jobs having doubled to hit an all-time high of more than 13,000.

Daniel Johnson (Edinburgh Southern) (Lab): Will the minister give way on that point?

Ivan McKee: Yes.

Daniel Johnson: I recognise the figures that the minister has mentioned, but does he recognise that the Scottish Government’s R and D spend is 20 per cent lower than that of the UK Government? What is the Scottish Government doing to address that?

Ivan McKee: I am just about to go through a long list of things that we are doing. As I have just said, that gap is closing: we have increased business R and D spend by 14 per cent in the past year, compared with the UK Government’s increase of 3 per cent. If Daniel Johnson cares to get his calculator out, he will realise that that represents a significant closing of the gap within a one-year period. That trend is continuing as we move towards our target of doubling R and D business expenditure.

The innovation action plan identifies four priorities: to encourage more business innovation; to use public sector needs and spend to catalyse innovation; to support innovation across sectors and places; and to make best use of college and university research, knowledge and talent.

In the two years since the plan’s launch, a great deal has been achieved. We have boosted our support for business R and D grants by £45 million, which is equivalent to 70 per cent. We have invested £48 million in the national manufacturing institute Scotland and created the £14 million advanced manufacturing challenge fund. Along with Innovate UK and private sector partners, we have invested £15 million to establish the medicines manufacturing innovation centre. We have launched the can do innovation challenge fund, which leverages private sector innovation to solve public sector challenges. We have increased our support for CivTech, which is the world’s first cross public sector tech accelerator. We have invested £1 million in the

college innovation fund to help businesses to connect better with college facilities and expertise. We have supported the £1 million cancer innovation challenge programme. We have increased our investment in Interface, which has introduced almost 3,000 businesses to academic partners. We have launched an open innovation marketplace in which public and private sector innovation challenges can be posted and solved. We have invested in supporting industry academic links through programmes such as the knowledge transfer partnerships scheme. We have continued to fund our network of innovation centres by up to £60 million over the next five years. We have piloted new models of procurement through the launch of two innovation partnerships.

Further, recognising the need to continually optimise the innovation ecosystem, we have created the Enterprise and Skills Strategic Board to increase collaboration between the enterprise agencies. We have also initiated in-depth reviews of public sector support for innovation; mapped out our innovation system and infrastructure; started work on the creation of a single entry point for business support; and set out plans for streamlining R and D support.

We are also investing in the future. We have committed £2 billion of capital to the Scottish national investment bank to support mission-oriented investments, starting with our transition to net zero emissions. We have launched a new major export drive, backed by £20 million, to internationalise our innovation efforts. We are putting innovation at the heart of our city region deals, with support for projects including the imaging centre of excellence in Glasgow and the Data-Driven Innovation programme in Edinburgh and south-east Scotland. We are also supporting entrepreneurs through the Unlocking Ambition Challenge, the Converge Challenge, Scale Up Scotland and Scottish EDGE.

All of that is having an impact. Members can witness the range of new products and services that our businesses are taking to market, from Clyde Space, which produces and ships from its headquarters in Glasgow more cube satellites than anyone else in the world, to Caithness-based Dunnet Bay Distillers, which can now post its rock rose gin through its customers' letterboxes thanks to its new recyclable gin pouches.

As we all know, the contribution that our universities make to global research and innovation continues to be nothing short of remarkable. We sit near the top of the OECD table for higher education R and D spend. We have four of the world's top 200 universities—

Dean Lockhart: Will the minister take an intervention on that point?

Ivan McKee: I do not have enough time.

Only last week, the University of St Andrews was named by *The Times* as the UK university of the year.

All of that underpins our success in attracting investment from outside Scotland. We benefit enormously from participation in the European Union's horizon 2020 programme, winning almost €650 million for Scottish universities, research institutes and businesses. We are winning more funding from UK Research and Innovation and Innovate UK for major joint projects between academia and industry such as the ORCA Hub at Heriot-Watt University, which is the world's largest centre for research into offshore robotics technology, and the Glasgow-based Industrial Centre for Artificial Intelligence Research in Digital Diagnostics, or iCAIRD.

We have four Scottish bids in the final stage of the strength in places fund in open banking, precision medicine, industrial biotechnology, and photonics and quantum technologies, which are all technologies in which Scotland enjoys genuinely world-class capabilities.

Although it is vital to keep investing in the development of new products and processes, their value can truly be realised only if they are adopted and commercialised to create value for businesses and the wider economy. Only by focusing on the outcomes of our innovation investment will we achieve our goals. Increasingly, that is where our attention must be. My task as Minister for Trade, Investment and Innovation is to ensure that we are investing in the right types of support and in projects that will draw investment into the Scottish economy.

Meanwhile, the endless uncertainty and confusion caused by the UK Government's handling of Brexit is casting a long shadow over Scotland's economy. As I stand here, we are three weeks away from crashing out of the European Union with no clear idea of what might be next, other than possibly the creation of two Irish borders where none existed previously. That uncertainty is clearly bad for business.

The Scottish Government is clear. The message to our European and other international friends is that Scotland will do everything in its power to stay open for business, and that includes pan-European research and innovation collaboration.

Business innovation is of central importance to the Scottish economy. The Scottish Government is determined to further strengthen our innovation ecosystem, to continue to benefit from increasing levels of business R and D investment, to support our thriving and innovative businesses to provide quality jobs and fair work, and to ensure that Scotland enjoys a globally competitive,

entrepreneurial, inclusive and sustainable economy.

I move,

That the Parliament acknowledges that business innovation is of central importance to the Scottish economy; notes the Scottish Government's initiatives to ensure that Scotland is a globally competitive, entrepreneurial, inclusive and sustainable economy with thriving and innovative businesses with quality jobs and fair work for everyone, and recognises the increasing levels of business investment in R&D, the increased number of businesses collaborating within supply chains and an increase in R&D jobs as a percentage of total employment, all of which contribute towards a sustainable, inclusive future for the people of Scotland.

The Deputy Presiding Officer: We are already further over time. I give everyone notice that speeches may have to be dropped or time cut from them.

I call Alexander Burnett to speak to and move amendment S5M-19287.1. You have up to six minutes.

15:53

Alexander Burnett (Aberdeenshire West) (Con): I thank the Scottish Government for bringing the debate to the chamber to celebrate the amazing work of those in the innovation sector and the positive effect that they have on the Scottish and UK economy.

I have been fortunate enough to visit a number of the innovation centres across Scotland and I have seen at first hand the huge value that they add to our industries by drawing on all Scotland's research expertise in their relevant sectors to work on problems and opportunities that are identified by industry.

From aquaculture in Stirling to oil and gas in Aberdeen and construction in Glasgow, those centres are all bringing top-quality research and development expertise to the challenges of their respective industries. Although all are outstanding, the Data Lab in particular has made a great impression. Data science is a unknown field to many people, yet job titles in the field will soon become commonplace.

Data science is expected to contribute more than £20 billion to Scotland's economy by the end of next year and to generate more than £590 million in economic and social impact in Scotland over the next five years. The centres in Edinburgh, Glasgow, Inverness and Aberdeen, which I will visit next month, show how quickly the sector can be rolled out to the benefit of all parts of Scotland. The hard work of Gillian Docherty and Jude McCorry and their team in keeping Scotland at the forefront of such an exciting sector must be commended.

It is important that all sectors receive the backing of both the UK and Scottish Governments in delivering for Scotland by funding projects across the country—building on existing talent and infrastructure to continue to transform Scotland's economy into one that is highly skilled and highly paid.

As members will be aware, the Economy, Energy and Fair Work Committee published a report last year that covered investment in innovation. It noted that, in 2016, total R and D spending as a share of gross domestic product was 1.54 per cent for Scotland, which is lower than for both the UK and the EU. Through the economic strategy, there is an acknowledgement that innovation is influential in relation to economic performance, but investment is lacking. The historical issue of companies being headquartered outside Scotland could also contribute to low R and D investment.

Ivan McKee: Alexander Burnett referred to 1.54 per cent. I want to make him aware that the latest figure is 1.63 per cent, which further significantly closes the gap between Scotland and the rest of the UK.

Alexander Burnett: I thank the minister for that information. We welcome any improvement, but we note that the percentage is still below that in the rest of the UK.

Even the Scottish Government's own report, "Scottish National Investment Bank Implementation Plan", notes that its R and D spending is low by international standards. The report states that Scotland lags behind key competitors in business expenditure on R and D, which remains at less than 1 per cent of GDP in Scotland, and says:

"This makes the relative lack of technology companies based in Scotland starker and points to a missed opportunity to use the intellectual capital that Scotland has in abundance."

The question is whether the Scottish Government recognises that it is missing an opportunity in funding our universities and research teams.

I commend the fact that Scotland increased R and D expenditure in real terms by almost 14 per cent between 2016 and 2017, but, as the Fraser of Allander institute noted earlier this year, Scotland is still falling behind in innovation investment, and we need to do better.

Scotland's R and D expenditure—

Gillian Martin (Aberdeenshire East) (SNP): Will the member take an intervention?

Alexander Burnett: No. I am afraid that I am pressed for time.

Scotland's R and D expenditure is lagging behind at £466 per head, while the UK average is £544 per head. Furthermore, it has been noted that, in comparison with the rest of the UK, R and D activity in Scotland is heavily concentrated, with almost 40 per cent of total expenditure coming from just five companies. As most investment companies will know, it is important to diversify a portfolio. I would like to know what co-ordination takes place with the UK Government—with agricultural engineering precision innovation centres, for instance—and whether calls for farms and facilities in the north-east to be involved will be supported, given that we have seen what the correct investment and geographical spread can do.

Earlier, I referred to the Data Lab, which has outlined that demand for skilled data scientists continues to grow in Scotland, underlining its strength as a global leader in the field. That has been reflected in the biggest ever intake of Data Lab MSc students across Scotland.

We must keep investing if we want to keep up as a global leader, and not just in data science. Innovation is about supporting a cross-sector of industries, and the Scottish National Party Government needs to look to the UK Government to find inspiration in how it can do better in supporting innovation across Scotland.

As part of the UK Government's modern industrial strategy, the chancellor announced £215 million in extra funding for its catapult centres, which focus on digital, medicines discovery, future cities and transport systems. Furthermore, in 2018, a further £780 million was announced, meaning that the UK Government is spending more than a billion pounds on innovation.

Innovation is the building block in ensuring that Scotland's economy can continue to thrive efficiently and keep up with the UK, the EU and the wider global economy.

Scotland used to be a global leader, and we must strive to return to that position. In 1707, Scotland's brilliance was unleashed on to the world through the Act of Union. However, since 2007, we have had an SNP Government that is fixated on breaking up the union and holding back Scotland's brilliance. We can only—

The Deputy Presiding Officer (Christine Grahame): And there you must conclude. I am sorry—there is no extra time. Please move your amendment.

Alexander Burnett: I move amendment S5M-19287.1, to insert at end

“; notes that Scotland's R&D expenditure per head remains well below UK levels, and calls on the Scottish Government to work with the UK Government under the UK

Industrial Strategy to increase levels of innovation in Scotland's economy.”

The Deputy Presiding Officer: I call Rhoda Grant to speak to and move amendment S5M-19287.2. You have an absolutely tight five minutes, Ms Grant.

16:00

Rhoda Grant (Highlands and Islands) (Lab): The Scottish Government motion shows its complacency and its piecemeal approach to the Scottish economy, which does not work. Therefore, we seek to substantially amend the motion in order to join the dots between innovation, economic growth, earnings and productivity. Its motion praises its efforts but does not acknowledge that Scotland's gross expenditure on research and development per head of population is lower than that of the UK, which spends 13 per cent more per head.

Scotland's gross expenditure on research and development as a percentage of GDP was ranked in the third quartile of OECD countries in 2017, as was our business expenditure on research and development. The Scottish Government constantly brings forward debates on various aspects of the economy, but it shows no vision as to how those building blocks come together. We urge the Scottish Government to bring forward an industrial strategy in order to have all those interrelated aspects of the economy working together. Increasing productivity is key to achieving sustainable economic development, raising income levels and creating better quality employment.

Ivan McKee: Will the member give way?

Rhoda Grant: I am sorry, but I do not have time

The Conservative amendment urges the Scottish Government to work with the UK Government's industrial strategy, and, in the absence of a Scottish strategy, we cannot argue with that. However, Scottish Labour would have a Scottish industrial strategy to guide policy making, which would recognise the different socioeconomic challenges and the need for faster sustainable economic growth, because Scotland lags behind the rest of the UK.

Currently, Scotland's productivity is ranked in 16th place in comparison with 37 OECD countries—a place where it has languished since this Government took power in 2007. Catching up with our competitors would, therefore, require a significant and transformational increase in Scotland's rate of productivity. Manufacturing continues to disproportionately drive innovation, investment and international exports. Sadly, research and development is still heavily

concentrated in too few companies, many of which are overseas owned. By some measures, Scotland's innovation performance is improving, which is to be welcomed. However, by many other innovation indicators, our performance is still being outstripped by that of other countries.

In contrast, our universities are at the forefront of innovation. Scotland's higher education expenditure on research and development as a percentage of GDP is the only area in which we rank well. Scotland is seventh among the OECD countries—in the first quartile—and above the UK average. I visited the Roslin institute and was really impressed by its research and support for innovation. However, there is a disconnect between academic innovation and industrial application in Scotland. All too often, those development opportunities go overseas. We need to strengthen links between higher education and the business base. There is obvious potential to improve industrial interaction with higher education. The Roslin institute has an incubator unit for small innovative businesses that are doing their bit to keep those developments in Scotland. The Government needs to support that, and to create the right environment for home-grown business to survive and flourish in Scottish ownership.

Yesterday, the Royal Society of Edinburgh published an independent review of its enterprise fellowship scheme, which made for interesting reading and provided lessons to be learned. However, it stated that the impact of the fellowship is £52.6 million GVA, and that it creates 949 jobs in Scotland each year.

The previous Labour Government set up catapult innovation centres, which have successfully promoted innovation in industry. Those centres aimed to catapult innovation, research and development from higher education into commercial realisation and mass production. That is a proven model to drive greater collaboration between industry and academia.

Burntisland Fabrications is a prime example of where innovative jobs have been lost as a result of the Scottish National Party lacking an industrial strategy. BiFab had the opportunity to secure work that was based in floating offshore wind—a next-generation technology—which would have put Scotland at the forefront of an emerging industry.

Scotland cannot afford to continue to miss out on such lucrative opportunities. Procurement and planning practices require significant improvements if Scotland is ever to act as a catalyst for business innovation.

There must be an industrial strategy at the heart of Government in Scotland that drives innovation and strong economic development, delivers jobs,

secures new technologies and advances our position on the global map.

We believe—

The Deputy Presiding Officer: No, you must move your amendment.

Rhoda Grant: —in an economy for the many and not the few.

I move amendment S5M-19287.2, to leave out from “notes” to end and insert:

“recognises that, without devising and implementing a comprehensive industrial strategy, the Scottish Government cannot truly tackle the country's stagnated economic growth, poor earnings growth and low productivity levels; considers that failure to create a framework for industries has led to Scotland's gross expenditure on R&D as a percentage of GDP being lower than that for the UK, EU and OECD countries, and urges the Scottish Government to implement an industrial strategy that supports expenditure in R&D activity among businesses that helps build an innovative and prosperous economic future for the people of Scotland.”

The Deputy Presiding Officer: I am sorry that I interrupted, but there is not even a squidgen of time left—whatever a squidgen is. I call Alex Cole-Hamilton, who has five minutes.

16:05

Alex Cole-Hamilton (Edinburgh Western) (LD): I welcome the opportunity to participate in this afternoon's debate. The topic cuts through every sector of Scotland's economy, be that in areas such as vertical farming or the development of therapies to modify the immune system.

Scotland has a long tradition of leading innovation and technology. Pioneering and groundbreaking research and development have been cultivated in our world-class universities. Members need look no further than the joint venture between two of Edinburgh's universities—Heriot-Watt University and the University of Edinburgh—to develop the UK's first national robotarium by 2021

The increasing links between Edinburgh's informatics community, the recently opened Bayes centre at the University of Edinburgh and the Alan Turing Institute, alongside the construction of the national robotarium, will create additional entry points for collaborative data-driven research.

However, nowhere is innovation needed more than it is in tackling our climate emergency, which is the single biggest threat of the 21st century—or any century for that matter. With the passing of the Climate Change (Emissions Reduction Targets) (Scotland) Bill, which includes targets to have all emissions offset by 2045 and interim targets of 75 per cent by 2030, we are one step closer to tackling that emergency. Although that will be transformational, we will face many obstacles

along the way. What comes next will require tremendous effort, difficult choices and increased resources.

We require that 35 million people across the UK change their cars to electric vehicles or give up car ownership entirely. We will have to grow the market for electric vehicles from 1 per cent of sales today to 100 per cent of sales in 10 years. Innovation will be needed in order to drive a transition of that magnitude.

Those are the sectors where we know what to do, but removing CO₂ from the atmosphere at an unprecedented rate will necessitate technologies that are not even in the pilot phase. In aviation, where the only serious solution at the moment is to fly less, and in farming, where methods will need to change dramatically, new technologies and innovative solutions will be imperative.

To underpin all that will require our reforming the regulation of finance and investment, skills and innovation and industrial support; it will also require reshaping the institutions of the Scottish and UK Governments centrally and locally.

The Scottish national investment bank can help with our ambitions by creating a sharp focus on new markets. That needs to drive our transition away from carbon-dependent industries. I want there to be a new UK-wide green investment bank, too.

If we are to meet our aim of growing our economy by making Scotland one of the most innovative places in the world, investment in education is vital. A Universities Scotland report has revealed that, over the past three years, there has been a 53 per cent increase in the number of start-up companies created by students and graduates. That underscores why education is key to innovation. The way to establish the high-wage, high-skill economy that we strive towards is to significantly invest in education and in the skills economy. By doing that, we can create a bright and sustainable future for everyone.

It is 10 years since the Scottish Science Advisory Council warned that the

“outputs of Scotland’s universities ... are not being captured by Scottish industry”.

It further warned that that meant that industry exerted

“little influence on the research undertaken in academia.”

I am very interested to hear from the minister when he closes how far the Government thinks that we have moved in the past 10 years and how much we have heeded the council’s message.

As our economy rapidly changes, the need for people to retrain and reskill has never been more imperative. It is no longer the case that the skills

learned at the age of 18 or 21 will last for a lifetime or a career. The ability to learn new skills or change careers is also critical to creating changes for people to succeed in adverse economic circumstances, no matter their stage in life.

College is a vital portal to further learning and work. In that regard, I must remind the chamber that 140,000 college places have been lost on the SNP’s watch, the overwhelming majority of which were part-time places, which are accessed by those for whom studying full time is not an opportunity that they can take. Hundreds of thousands of people have missed out on opportunities to learn, and the hardest hit have been women, those who have to earn at the same time as they learn and those with caring responsibilities.

On innovation, the Government committed to a £500,000 college innovation fund. I do not think that that fully compensates for the losses that I have just mentioned, but I would be interested in hearing from the minister about the impact that it has had.

The cuts prevented people from retraining and equipping themselves for a new career at a time when businesses are reporting in survey after survey that they are struggling to find the skills that they need. We need a massive investment in education, skills and retraining. Then and only then will Scotland be a pioneer in innovation.

16:10

Gillian Martin (Aberdeenshire East) (SNP):

The Scottish Government is committed to making innovation, design and manufacture an intrinsic part of our culture, economy and society. The National Decommissioning Centre is a clear example of that commitment. It was opened in January in Newburgh in my constituency, and it is a centre of excellence in the north-east of Scotland, which will develop new capabilities, skills and jobs to meet the decommissioning challenge now and in the years ahead.

The NDC is a £38 million partnership between the Oil & Gas Technology Centre and the University of Aberdeen, and is funded as part of the Aberdeen city region deal. Over the next decade, 100 offshore platforms and 5,700km of pipeline are forecast to be decommissioned or reused. That will involve safety, efficiency and environmental challenges, which are being actively tackled by the NDC. By combining industry expertise with academic excellence, the NDC is leading the world in research and development in relation to decommissioning challenges in the oil and gas industry and in the wider energy sector, such as offshore renewables. That work will have a legacy beyond our use of

hydrocarbons as we transition to a low-carbon economy. There is a model there for an energy transition innovation centre that would similarly harness our local engineering expertise and couple it with the expertise in our academic institutions—assuming that universities will have a replacement for the funding that they will lose as we exit the EU.

The programme for government rightly sets its innovation ambition in the direction of low-carbon technology, and I was particularly pleased to see the announcement that the Scottish national investment bank will have that ambition as its focus. This week is Scotland's climate week, and the world-leading emissions targets in the Climate Change (Emissions Reduction Targets) (Scotland) Bill, which we passed the other week, present Scotland with an opportunity to be at the forefront of global action, gaining a foothold in the development of low-emissions solutions products and processes that we can export all over the world. I wish that I could say that, to date, enough action has been taken for us to have that foothold, but we have much more to do, and, if we are to harness that opportunity, we need to act much more quickly than we have done so far. My region is still too reliant on oil and gas, and I know that workers in the north-east actively want to be channelling their expertise into future energy, rather than being beholden to the swings and roundabouts of a global oil price and being left behind as other countries steal a march on us as the transition happens. In particular, I know that young people want to work in low-emission energy systems instead of being reliant on hydrocarbon jobs, as their parents are.

The UK Government's pulling of the funding for carbon capture and storage projects has set us back years in that regard. Responsibility for the issue lies not only at the feet of the Scottish Government; the UK Government is involved, too, as it has failed to recognise the challenge that is ahead of us as we decarbonise.

I have made my pitch. The Oil & Gas Technology Centre and the National Decommissioning Centre are excellent and groundbreaking, and we can learn a lot from them, but the low carbon energy transition process needs that model too, and that new focus should have its heart in the energy capital of Scotland—the north-east of Scotland—soon.

16:14

Jamie Halcro Johnston (Highlands and Islands) (Con): Innovation should be a driving force in our economy. It is through renewal, invention and creation that economies thrive, and the pace of that change has increased.

In our lifetimes, the instinct for innovation has only strengthened, and the world moves forward at an ever-faster rate. We should certainly consider the challenges that arise from that; it is also worth considering the enormous, world-changing advantages that we have seen.

Innovation is the main source of sustainable economic growth. We know that, in recent years, Scotland's economic growth has lagged behind that of the rest of the UK.

I draw attention to sustainability, because sometimes it seems that we in Parliament are expected to look on economic growth and productivity as being somehow unsustainable. Although it is right to look beyond the simple gross domestic product of a country, it is wrong to consider growth in itself as a negative thing.

Members might wish to reflect on how innovation has benefited our wider environment. We need look only to the significant decline in the cost of technologies such as offshore wind in recent years to see the environmental benefits.

Much innovation is about how we can manage resources better and be more efficient. Ultimately, the world will go forward; the challenge to individual countries is to seize the opportunities that that presents. The challenge is to be at the forefront of change and to help to shape the future, rather than simply to be shaped by it. If we are to succeed in that, Scotland and the wider UK must create the frameworks for success. Building the conditions for innovation across Scotland will be a key part of that.

We have seen positive work in the city region deals across Scotland. The projects have brought the UK Government, the Scottish Government, local authorities and other partners together in a common aim. They are promising starting points, but they must be regarded as laying the foundations rather than as examples of investment as an end point in itself.

In my region—the Highlands and Islands—opportunities have been seized. The European Marine Energy Centre in Orkney is a case in point. I have been pleased to welcome colleagues including Alexander Burnett to EMEC, to see for themselves the world-leading advances in tidal and wave-energy technology that are happening there.

Our universities must be key drivers of innovation. Some of that work has been taking place in the University of the Highlands and Islands, Heriot-Watt University and many other institutions in Scotland.

Collaboration must extend further—into industries in which productivity growth has not been as significant as we might have hoped it

would be. For too many years, industries such as construction have lagged behind. The Parliament's Economy, Energy and Fair Work Committee explored that issue recently.

In many sectors, a technological revolution is just over the horizon. Change is coming, and the basis for that change is skills—an issue to which I have returned time and again. Learning is central. Our universities can be creative hubs, but the process must begin earlier, because there remains a skills gap in Scotland between what employers need and what is available in our labour market, and the answer to that problem will be found at an earlier stage in education. Innovation and enterprise education and science, technology, engineering and mathematics education must all be improved if we are to build the skills base that we need.

Scottish Conservatives have called for greater links between business and schools—some of our proposals were taken forward by the Scottish Government as part of the developing the young workforce programme. I welcome that. There is still time for recommendations to be delivered. However, that should not happen in a piecemeal fashion; rather, we should be looking for systematic change at national level.

A focus on STEM education is vital, but in recent years the hard work has not been done. We hoped that improvements were coming; instead, the number of employers who report skills shortages in STEM areas is increasing. That is a finding of a report on the Scottish Government's STEM strategy.

We should be forthright about making innovation an important part of what Government encourages and supports. It must be in every ministerial portfolio, from education to health and from transport to business. That approach requires co-operative working at all levels of government. Above all, it requires commitment and a Parliament that respects business and entrepreneurship and their role in our economy.

16:18

Kenneth Gibson (Cunninghame North) (SNP): Innovation is a central feature of a strong economy. The Scottish Government says:

“we define ‘an innovation’ as an idea that creates economic value for individuals and society.”

Innovation can boost productivity, competitiveness and growth. It can lead to improved earnings for the workforce and greater profitability for companies. It can contribute to improving sustainable, inclusive economic growth.

The Scottish Government wants to build on Scotland's rich history of innovation by supporting

the talent and potential of Scotland's entrepreneurs, inventors and businesses. The goal is to ensure that Scotland is recognised as a world-leading entrepreneurial and innovative nation.

To support innovation, in 2017 the Scottish Government published, “Scotland Can Do—Boosting Scotland's Innovation Performance: An Innovation Action Plan For Scotland”. The aim is to see Scotland ranked in the top quartile of Organisation for Economic Co-operation and Development countries for productivity, sustainability, equality and wellbeing. To achieve that ambitious aim, the Scottish Government is working to ensure that Scotland achieves a strong innovation performance rating.

As part of the innovation action plan, the Scottish Government has committed £45 million over two years for additional research and development grants. Last year, 75 R and D grants totalling £123 million were awarded to projects. Between 2016 and 2017, Scotland's gross expenditure on research and development increased by 8.3 per cent in real terms, to £2,529 million, which was a £193 million increase on the previous year.

The Scottish Government has also committed to increasing investment in business enterprise research and development, as part of its goal to double that investment between 2015 and 2025. In line with that, BERD expenditure in Scotland in 2017 was £1,247 billion, which represents a 93.6 per cent increase in real terms between 2007 and 2017. That stands in stark contrast with the UK Government's increase of only 27.2 per cent over the same period.

As part of the Scottish Government's innovation action plan, the can do innovation challenge fund was established to drive a process that is known as open innovation. It supports the public sector as it develops innovative market solutions to operational service and policy delivery challenges. To date, 16 organisations have been funded to run 18 challenges. More than 100 small and medium-sized enterprises have applied to the fund, with £1.36 million having been awarded. The can do innovation forum is designed to formulate and implement proposals to improve Scotland's innovation performance. It brings together key representatives from business, industry and academia, along with the Scottish Government and its enterprise agencies.

I am the representative of an Ayrshire constituency: innovation is nothing new to us. It is an intrinsic feature of our culture, which is why many advances that have shaped the modern world were discovered or invented in Ayrshire, from fingerprinting to pneumatic tyres. The Scottish Government has committed to investing

£103 million to the Ayrshire growth deal, which includes £40 million to develop innovative projects around engineering, digital automation and manufacturing.

In total, the Scottish Government has committed to investing £245.5 million on growth deals for Ayrshire, the borderlands, Moray, and Argyll and Bute, alongside £1.275 billion in city region deals for Glasgow, Aberdeen, Inverness, Stirling and Clackmannanshire, the Tay cities and Edinburgh.

Given that education and innovation are deeply connected, the Scottish Government is working to develop the innovative capacity and performance of business and the economy through training and education. This year, 2019, is the second year of the college innovation fund, which provides £500,000 to produce new course material to support emerging industries. The Government also supports the Scotland can do scale programme, which helps entrepreneurs to scale up their businesses through provision of world-class training.

In addition, a £48 million investment in the national manufacturing institute for Scotland at Inchinnan will make Scotland a global leader in advanced manufacturing. The institute will offer Scottish businesses access to expert services, advanced demonstrator facilities and training programmes that are focused on innovative manufacturing.

I also welcome the development of innovation and investment hubs overseas, which are designed to work across a wider network, including Government, partners and businesses to support Scottish innovation. Each hub works to promote Scotland's research, innovation, industrial, social and cultural strengths.

To show the importance of developing innovation, in June 2018 the First Minister announced a new ministerial post—the Minister for Trade, Investment and Innovation, which is held by Ivan McKee.

Innovation will improve Scotland's long-term productivity, and will enable growth and delivery of higher living standards for the people of Scotland.

16:23

Daniel Johnson (Edinburgh Southern) (Lab): I agree with what Ivan McKee said in his opening statement about the urgent need to look at innovation policy, for exactly the reasons that he set out: technology change—which is going to completely alter the way in which we work and the way in which businesses carry out their business—and climate change. The common thread between them is that both will fundamentally change the way our economy

works. The way to address them is undoubtedly through innovation.

The minister asked me to get my calculator out in response to my question about innovation spend, but I will ask him to make a note. Only three numbers really matter: Scottish spend on R and D is 1.6 per cent of GDP—that is behind the UK spend of 1.7 per cent, and both of those are behind the OECD average of 2.4 per cent. Until the numbers change and we at least meet that OECD average, there will be an awful lot more work to do. There is no room for complacency, either from the Government or from Conservative members.

Ivan McKee: Will the member give way?

Daniel Johnson: I am afraid that I do not have time. I apologise for that.

I will make two or three points about where the Scottish Government needs to improve.

I make a case for the creation of an innovation agency to draw together the multiple strands that lie behind innovation policy. That is not necessarily about doing anything new, but it is certainly about consolidating what currently happens. Anyone who knows anything about this area of policy will know the lessons of the US Defense Advanced Research Projects Agency. It is ironic, given the US's rhetoric about the free market, that the US is perhaps one of the most interventionist states when it comes to innovation policy, with DARPA having created the internet, the global positioning system and the voice recognition behind Siri.

I commend the work of Nesta, which has done excellent work around the role of innovation agencies, and points to what could be done in Scotland. However, it contrasts in some regard with the Scottish Government's record.

I recognise that there are initiatives, but we still have a cluttered institutional landscape with innovation policy falling between Scottish Enterprise, the Scottish Further and Higher Education Funding Council and the Enterprise and Skills Strategic Board. Until we consolidate that policy effort, we will continue to struggle.

The Government needs to think about innovation not only as something that it needs to support but as something that it needs to embrace, much in the way that Estonia has. Innovation cannot be the business of only private enterprise; it must also be seen as the core business of the public sector. In that regard, the Scottish Government must change its relationship with innovation.

I will briefly comment on the universities. Much of the good work on innovation in Scotland is thanks to our outstanding universities. We have twice the rate of spin-out companies from our

universities that the rest of the UK has. However, the reality is—the numbers are clear—that the Scottish Government record is not good in that regard. The recent Audit Scotland report was unequivocal that spend has been cut in real terms by 12 per cent since 2014, and that we are receiving a falling share of UK research grants. That is due in no small part to the fact that the grants that are provided by the Scottish Government for research cover only 80 per cent of universities' costs. That is a clear finding in the Audit Scotland report.

We must do more and at least meet the OECD average of 2.4 per cent. We must join up innovation policy, because there is urgency in respect of meeting the demands of climate change and technology change.

16:27

Emma Harper (South Scotland) (SNP): I welcome the opportunity to speak in the debate. I acknowledge all the people across Scotland who day in and day out come up with innovative and exciting ideas. Scotland has a proud history of innovation, from well-kent inventions such as disposable contact lenses; bank automated teller machines, or ATMs; the magnetic resonance imaging scanner; the human papillomavirus vaccine, which is the world's first vaccine designed to prevent a cancer; and the popular video game "Grand Theft Auto"; to more futuristic Scottish inventions such as the functioning acoustic tractor beam and the fabric Metaflex, which is basically an invisibility cloak—I am intrigued by that one.

Scotland has always led the way in science, technology and medicine. Central to innovation is manufacturing, which accounts for more than 181,000 jobs and 54 per cent of our international exports. In Scotland, 55 per cent of business expenditure is dedicated to research and development, which allows the creation of life-altering products, scientific advances and medical breakthroughs that often become world renowned.

Key to that innovation is ensuring that we equip our population with the skills, technical expertise and ability to thrive and create. I am chuffed that the Scottish Government has introduced a range of measures that give communities, individuals and businesses the skills, support and materials that they need to succeed. One such scheme is the can do innovation challenge fund, which supports many SMEs in Scotland. To date, more than 100 SMEs have applied for that funding and £1.36 million in contracts has been awarded.

A business worth a mention is York Technology, near Gatehouse of Fleet, which the minister visited with me recently. The managing director is Khalid Alvi, who has designed a machine called a

balanced-coil needle detector, which is used in the manufacturing of clothing, including children's clothing, and improves safety by detecting any broken-off needle tips that might be retained in garments after they have been sewn. That is a great piece of innovative technology that supports good quality control checks in the manufacturing of clothing.

Mr Alvi contacted me this morning and noted that the minister had connected York Technology with the managing director of Johnstons of Elgin, which is a cashmere clothes maker. The minister met that managing director at an official function. Both managing directors are now able to meet to discuss York Technology's product and see whether any opportunities exist to help Johnstons of Elgin's product safety regime. If the minister can continue to make such good connections for York Technology with other producers, Mr Alvi will be very pleased.

There are many fantastic schemes that promote Scottish innovation. However, it would be remiss of me not to mention that the uncertainty that exit from the EU is causing is leading people, businesses and investors to fear coming to Scotland. Many parts of rural Scotland rely on EU structural funding, which is often match funded by the Scottish Government. On Friday, I attended the official opening of the newly redeveloped Stranraer millennium centre, which was part funded by EU rural development funding and the Scottish Government as well as by other key, important partners. Money from that fund has allowed for refurbishment and a Changing Places room, which has made the place fully accessible. That modern hub will be at the heart of Stranraer, and it will promote the area and encourage conferences, events and businesses to it. European money is crucial for rural development in my South Scotland region.

If we are forced out of the EU without a deal, the future of those vital structural funds will be in question. I would like the minister to address the impact of that on our communities, especially in rural Scotland.

Despite Brexit, the Scottish Government is committed to ensuring that all of Scotland can benefit from growth deal funding. I am pleased that the UK Government recently made a commitment to match Scotland's ambition for 100 per cent coverage of growth deals in Scotland. That has allowed the Borderlands and Ayrshire growth deals in my South Scotland region to go ahead. Although the UK Government has fallen short by £20 million on Borderlands funding, those deals will allow for investment in innovation and economic growth across the region.

Finally, I want to ask the minister about support for one small business. What current support is

there for LadderLimb, which is an innovative product that is made in my region, to access EU and American markets?

The Deputy Presiding Officer: You just managed to squeeze that in. You should not have kept it so late.

Emma Harper: Thank you, Presiding Officer.

16:32

Brian Whittle (South Scotland) (Con): Presiding Officer,

“Here’s to the crazy ones. The misfits. The rebels. The troublemakers. The round pegs in the square holes. The ones who see things differently. They’re not fond of rules. And they have no respect for the status quo. You can quote them, disagree with them, glorify or vilify them. About the only thing you can’t do is ignore them. Because they change things. They push the human race forward. While some see them as the crazy ones, we see genius. Because the people who are crazy enough to think they can change the world, are the ones who do.”

That is one of Apple’s mottoes.

It is timely to have a debate about innovation just a few days after the anniversary of the death of Steve Jobs, who was one of the great innovators of the computer age. The company that he co-founded and led to global success—Apple—is arguably one of the best examples of the benefits of a culture of innovation. Apple did not invent the computer, the tablet, the smart phone or digital music but, through innovation, it made them more accessible, more useable and commercially successful.

It is important that we do not confuse innovation with invention in this discussion. Both are important to Scotland’s future success and ensuring that we remain a world leader in research and development. Both rely on new ideas, but invention is the creation of something completely original and innovation involves taking an invention and finding a new way of using it that changes how it is used. To use a sporting metaphor, if invention is the giant leap forward, innovation is the run-up; without it, we are less likely to clear the hurdle.

We have an impressive record of invention and discovery in Scotland. We are the home of countless great inventions and discoveries, such as the cell nucleus, cornflour, fountain pens, marmalade, pneumatic tyres, radar, raincoats, tarmac and ultrasound scanners. We have a reasonably good track record of supporting innovators in their early stages of setting up and developing viable products.

Where we fall down is in support for innovators to grow. All too often, businesses grow to a certain size and, instead of being supported to grow further, are swallowed up by one of the big

players. In a globally competitive world, innovation is the difference between success and failure. Without continuous technological and scientific innovation, we risk losing our reputation as a global leader in those fields.

Innovation can mean bringing several different ideas together in a new way, often through seeing connections that others have missed. As Henry Ford is often quoted as saying:

“If I had asked people what they wanted, they would have said faster horses.”

Innovation is not confined to the world of technology and business. It is a mindset that can be applied to almost anything. Many of us will see innovation during our regular visits to our constituencies.

At this point, I highlight how important innovation in healthcare will be as we transform its focus from secondary to primary care. Innovation is useful only if it is adopted and integrated. We have a lot of experience of developing new technologies, but our record on adopting them is much poorer. We need to look at the way that we fund healthcare innovation. There are too many quangos and it is a difficult landscape for business and entrepreneurs to navigate. We need to reduce the complexity of the landscape.

Some of the changes that are needed do not cost money. It is about changing the process and the attitude of people who work in the quangos. We need to nurture an innovative mindset. Albert Einstein said that we cannot solve problems by using the same kind of thinking that we used to create them in the first place.

Like much of the public sector, the NHS is bureaucratic and intensely risk averse—two qualities that are tailor made to stifle innovation and quick reactions to changing circumstances.

Education is the key battleground. We should be creating an educational environment that nurtures and encourages innovation. We should be encouraging exploration, rejecting dogma, questioning ideology, taking the wider view, and seeing the whole board and the benefits of being a generalist with a wide-ranging education, which is why cutting the number of subject choices is so damaging to our children’s education and our ability to innovate. The ability of teachers to innovate has been strangled by that self-same bureaucracy that stifles healthcare innovation.

We all recognise how vital supporting innovation is to our economy, our communities, our society and our health and wellbeing. Much of today’s debate has centred on the financial aspects of supporting innovation, but we should not lose sight of the wider value of encouraging people to have a more innovative mindset and promoting a culture

across Scotland that is more open to trying new and innovative ideas. We must invest in education, because that is the nursery of innovation.

The Deputy Presiding Officer: Stewart Stevenson is the final speaker in the open debate. You have five minutes, Mr Stevenson.

16:37

Stewart Stevenson (Banffshire and Buchan Coast) (SNP): Most generous, Presiding Officer.

In our modern context, innovation plays a critical part in our economic wellbeing. The process is a kind of creative destruction, to echo what Mr Whittle has just said, and it is about replacing the obsolete with the cutting edge and developing the previously unimagined. It is a catalyst to growth, which is why it is critical to every economy on the planet. However, innovation does not happen in isolation. It requires a rich soil for growth and a foundation upon which to build.

The debate has illustrated the danger of focusing on Government and private sector spend on research and development, because it is the outputs from that research and development and from spontaneous thinking that are more important. In other words, how many patents do we produce? How many registered designs and product names do we come up with? How many start-up companies go beyond “me too” enterprise?

It is interesting that Brian Whittle referred to Apple because, of course, the iPod, its first music kit, depended entirely on a chip that came from the Wolfson institute here in Edinburgh. We are still doing innovation—we have been doing it for a long time indeed.

Scotland wants to be a leader in innovation and we put our money where our mouth is. Product and process innovation has a clear link to employment growth but it does not happen in isolation; it generally relies on the quality of the business environment. The weaker the business environment, the less likely innovation will have a positive impact on jobs.

It is worth noting that when full employment is reached, productivity falls, because then the people who are being employed often work part time and do jobs that are not inherently productive. However, even the least productive jobs can respond to innovation.

It is certainly important that we have inclusive growth that matches our innovation ambition. That means investing in public infrastructure. The Forth crossing—now the Queensferry crossing—had an original budget of £3.4 billion, but we built it for less than £1.4 billion. If that ain't innovation in Government and stepping up to ambition, I do not

know what is. We innovate in housing, healthcare, energy, education and digital connectivity.

One thing is clearly missing from the debate—this relates to a feminist issue. The Intellectual Property Office says that only one in eight patents world wide is in a woman's name. Therefore, our Government's focus on STEM for women is vital, because there is a huge untapped source of potential innovation in this country, as there will be in countries across the world. All the women whom I meet say that they are can-do people, and I believe that all the women in my life are can-do people. That is not the only issue; attitudes, culture and self-belief are also important factors.

The Scottish Government is working with partners to support Scotland Can Do, which is good. We must also ensure that people have somewhere where they can innovate. We need people to take risks, and we need to be prepared to see failure.

Historically, Scotland has been an innovating nation. Alexander Burnett seemed to think that innovation started in 1707. Napier's bones and the slide rule were developed in the 100 years before that point, and the decimal point came from John Napier, too. The first coal mining on artificial islands was done in Scotland in 1575. However, there were inventions after 1707. We bequeathed to the world the overdraft, which was invented in 1728 by the Royal Bank of Scotland. Relevant to 1707, Alexander Cumming invented the first flush toilet in 1775. Scotland invents; the world benefits.

The Deputy Presiding Officer: You never disappoint, Mr Stevenson. I learn something every time you speak—whether I want to or not.

16:43

Alex Rowley (Mid Scotland and Fife) (Lab): This has been an interesting debate on a very important subject. I was struck by the fact that a number of members, including Alex Cole-Hamilton and Daniel Johnson, talked about skills, training and development, which are key issues. People used to say that Scotland was a world leader when it came to education, but they certainly do not say that today. There are major difficulties in our education system, not least how curriculum for excellence is panning out, so we need to see the evidence. Whether the different cohorts that come forward are more successful or not, I worry, from hearing reports from teachers, that curriculum for excellence will not deliver the innovators of tomorrow that we so desperately want to see.

There is also a major challenge in relation to school resourcing and massive class sizes, which are unacceptable. The ratio of teachers to pupils in independent schools is something like 1:14—indeed, the adult to pupil ratio in a lot of private

schools is 1:8—whereas classes in schools in the state system have 30-plus children. That shows that we have a difficulty.

If we are serious about this agenda, we need to look at education in its entirety, from the cradle to the grave. Several members have mentioned the need to upskill and reskill, but our colleges have experienced massive cuts over the past number of years. As a result, adult education and the provision of training and skills for adults have suffered the most. If we are serious about this agenda, we need to be serious about education and how that moves forward.

Rhoda Grant mentioned the example of BiFab. Turbine jackets that could be built in Fife are being shipped from halfway round the world to a wind farm that is 10 miles off the Fife coast. We need innovation in renewables and other areas, but we also need to ensure that we can take advantage of that innovation and that the jobs and the skills come to Scotland. That is not happening.

We have a target of no diesel or petrol cars being sold by 2032. We are miles away from achieving that, and I am not sure that we will achieve it. We need to ask where the innovation is that is needed for the future. Does it lie in building the new types of cars or, on the technology side, developing the software for them? In all those areas, we have major challenges.

Ivan McKee: I can tell the member how far away we are from that—we are 11 years away. This morning, I visited CST Global in Hamilton, which is using photonics to build the light detection and ranging devices that will power autonomous vehicles and other vehicles of the future. That stuff is happening. Mr Rowley might not be seeing it—maybe he should get out more—but there is an awful lot of it happening in Scotland at the moment.

Alex Rowley: I accept that a lot of good stuff is happening, but it is not happening quickly enough. My concern is that we will end up buying those cars of the future without having had an input into the manufacture of the vehicles or the software.

Across Scotland, company after company tell me that they are struggling to recruit software and information technology graduates. Where are things going wrong? Where does the investment need to go to ensure that we have more graduates and a more skilled and more able workforce of the future? Too many kids who come out of primary school are not prepared for secondary school, and far too many kids who come out of secondary school are not prepared for a life of work. If we are serious about this agenda, we need to tackle the education issue.

16:48

Dean Lockhart (Mid Scotland and Fife) (Con): Quite rightly, much attention has been paid in recent years to the importance of productivity in the economy. An increase of just 1 per cent in productivity would deliver £2.3 billion extra in GDP and an extra £400 million in tax revenues. Less attention has been paid to the most important driver of productivity, which is innovation. According to the Confederation of British Industry, innovation not only drives productivity but attracts international investment, raises living standards and supports inclusive growth.

However, the reality is that no Government can legislate for innovation. Instead, the role of Government should be to create a coherent and dynamic skills, business and education environment in which innovation can flourish. In his opening speech, the minister set out a list of initiatives that support innovation. Although we welcome those, a patchwork of initiatives is not enough to create an environment in which innovation becomes fully embedded in the economy. That is why, when it comes to innovation, Scotland continues to trail in the third quartile of OECD countries. It is clear that we need to do more to realise Scotland's potential to be a global leader in innovation.

I will address some of the key points that have been raised in the debate. Alexander Burnett and Rhoda Grant highlighted the importance of R and D spending in Scotland. We welcome the recent increase, but the reality is that R and D spend in Scotland remains well below UK levels, so the gap that the minister mentioned is still quite substantial.

The Fraser of Allander institute also highlighted concerns that R and D activity in Scotland is heavily concentrated, with the remarkable figure that half of total R and D expenditure in Scotland comes from just 10 companies.

To encourage further business innovation and R and D, we need to promote an environment that attracts innovators from across the world to come to Scotland. In doing that, we face competition from the rest of the world and the rest of the UK, which is why we will continue to oppose the SNP's decision to make Scotland the highest-taxed part of the UK for innovators. That is an example of creating a business environment that does not encourage innovation.

We also need a business environment that encourages innovators to scale up and expand their business, but, again, the SNP has done the opposite by imposing the large business supplement on successful firms with the ambition to expand.

We should also support universities and colleges in promoting their vital innovation activities—a point that was made by the minister himself, Alex Cole-Hamilton and Daniel Johnson. However, a recent Audit Scotland report highlighted that university funding has been cut by more than 11 per cent over the past five years, and the Economy, Energy and Fair Work Committee heard evidence that the university innovation fund has been cut by 25 per cent in the past five years, in contrast to a 15 per cent increase in the rest of the UK.

Gillian Martin: Will the member take an intervention?

Dean Lockhart: If the member wants to explain why the university innovation fund in Scotland is declining, I am happy to give way.

Gillian Martin: I do not believe that that is how interventions work—they do not work by order.

I want to ask how much universities are losing as a result of horizon 2020 EU funding being taken away from them.

Dean Lockhart: Two weeks ago, the chancellor announced additional spending in the rest of the UK, which will create hundreds of millions of Barnett consequentials for education in Scotland, which dwarfs the spending from horizon.

In hearing evidence that the university innovation fund has been cut, the committee recommended that the Scottish Government increase it, and I look forward to the minister's response to that in his closing remarks.

The negative impact of the increasing skills gap was raised by Jamie Halcro Johnston and Alex Rowley. That is a particular problem in the innovative digital sector, because only 9 per cent of businesses in Scotland use digital, compared to 43 per cent in other countries. That lack of digital penetration in the economy will act as a major drag on innovation activity going forward. That is why we have been calling for the establishment of a dedicated institute of e-commerce—a specialised agency that will help firms capitalise on developments in technology and e-commerce.

The final issue that I want to raise is the need for a coherent policy framework to promote innovation, a point that Brian Whittle highlighted, and something that the Scottish Council for Development and Industry called for in relation to the Scottish Government actively participating in the UK industrial strategy.

Innovate UK has invested £2.5 billion across the UK in the past five years, and the British Business Bank has helped to unlock £10 billion of finance for innovation.

For Scotland to deliver real potential as a global leader in innovation, this Government needs to change direction on economic policy to create an economic environment in which innovation and business can truly flourish.

The Deputy Presiding Officer: I call Ivan McKee to close for the Government. Minister, you have until 5 o'clock.

16:53

Ivan McKee: It has been an interesting debate, and a lot of very valuable points have been raised. I will run through some of the contributions.

I thank Alexander Burnett for his recognition of the value of the Scottish Government's innovation centres. I, too, have visited all of them, and have seen their great work.

Alex Cole-Hamilton gave a name check to the robotarium, a fabulous innovation that is happening between Edinburgh and Heriot-Watt universities. He also talked about climate change, which is an issue that came up in a number of contributions. It is important to recognise the leading position that Scotland holds globally in off-shore wind development and hydrogen, in tidal and wave, as mentioned by Jamie Halcro Johnston, and in decommissioning, as referred to by Gillian Martin. There is a lot going on in renewable energy, in which, I know from international trips that I have made, that Scotland is recognised globally as being at the leading edge of innovation.

Gillian Martin also mentioned the Oil & Gas Technology Centre, and it is worth pointing out that an increasing amount of the activity there is focused on renewables.

In the context of skills, it is also worth mentioning that the just transition commission and the national youth training partnership, which were raised by Alex Cole-Hamilton and Gillian Martin, are working on the transition of the workforce to the technologies of the future.

I am grateful to Kenny Gibson for reminding us of Ayrshire's central role in global innovation, because it is always good to remember that. I thank Emma Harper for namechecking York Technology. I was delighted to help in that case and, if Ms Harper wants to introduce me to any other SMEs, I shall do my best to put them in touch with potential outlets for their products.

There was a lot of value in some of the things that Daniel Johnson said, and certainly food for thought. It is worth pointing out that Nesta now has a base in Scotland and that we work closely with it through the innovation forum, which I chair. Nesta makes a valuable input to the ecosystem in Scotland.

The Enterprise and Skills Strategic Board, rather than being another player in that space, has the role of co-ordinating work between Scottish Enterprise, the Scottish Further and Higher Education Funding Council and other agencies to ensure that there is co-ordination across the work on innovation and other aspects of the enterprise and skills area. The board is undertaking a significant piece of work in collaboration with the innovation forum to identify opportunities to streamline and make more effective the innovation landscape in Scotland. Daniel Johnson can rest assured that there is absolutely no complacency. We clearly identify the challenges that are in front of us and work to address them.

Mr Johnson also raised a valuable point about public sector innovation. I am keen on pushing that and I am working hard to get it further up the agenda. Mr Johnson is absolutely right that the public sector can set an example through innovating in order to streamline and make its processes more effective, which makes it much easier to sell innovation across the rest of the economy.

Brian Whittle talked about innovation versus invention. We recognise innovation as being broad and including not just product innovation but innovation in services and processes, and we continually strive for that.

On Mr Whittle's point about investment, what we might call the valley of death between start-up investment and large-scale investment later down the track affects economies and businesses globally. We recognise the issue, and the Scottish national investment bank will have a focus on leveraging additional private sector funding to support SMEs as they transition through that challenging time in their growth. We are focused on understanding how we can best support that through the SNIB and other activities.

On Mr Whittle's point about healthcare innovation, as a co-chair of the Life Sciences Scotland industry leadership group, I continually see the issue, and I am keen to simplify the process so that life sciences businesses have routes into the health sector in Scotland to allow them to use that as a platform to develop and globalise their innovations. I am working closely with health ministers to streamline that process.

At the moment, we are going through a process of mapping everything in the whole ecosystem. It is important to recognise that there is clutter. Some things are done with good intentions, but there is a requirement to understand how we can simplify and to evaluate the impact of current measures and ensure that they are focused on delivering for businesses.

I thank Stewart Stevenson for his brief tour of the 16th and 17th centuries and his point about the importance of differentiating between outputs and inputs.

I will comment quickly on the issues that were raised by the Labour front-bench members, who, in contrast to Daniel Johnson, did not seem to appreciate the breadth of the innovation process and the activities that are going on. I hear Labour members speaking all the time about Labour's industrial strategy—frankly, that sounds a lot like Labour hiding behind a soundbite, because I think that not even they know what they mean by an industrial strategy. Labour's Scottish industrial strategy in 2017 proposed making the Scottish Investment Bank the industrial investment bank for Scotland, which we have done through the SNIB. The strategy also proposed devolving powers to communities, which we have done through the city deals, and evaluating the innovation centres, which we have done—we are ramping up phase 2 funding for those. There was also a proposal to integrate the catapults into the manufacturing sector, which we have done through the national manufacturing institute Scotland. Those are just a few examples of the disconnect between Labour's rhetoric and the reality—frankly, Labour has a lack of understanding of that.

Rhoda Grant talked up the Roslin incubator. The Scottish Government put £10 million into that to get it going. That is the value of the Scottish Government's investment in supporting the innovation ecosystem in Scotland.

I will touch briefly on the Conservatives' amendment to the Scottish Government's motion. We are keen to work with the UK Government to understand how we might co-operate. Only last week, representatives from the Department for Business, Energy and Industrial Strategy were here to talk through its 2.4 per cent road map. Scottish Government officials engaged with them on that and one of the shared learning points that BEIS took away was the value of the interface programme in Scotland, which it is looking to roll out across the rest of the UK.

As I have done in the past, I urge Conservative members to recognise that co-operation is a two-way street. I have asked them to support the Scottish Government in achieving Scottish representation on the UK Life Sciences Council and the life sciences industrial strategy implementation board, but nothing has happened and we are still being refused access to those bodies. We have also asked for information on what is happening on the UK Government's shared prosperity fund, but very little has emerged either on that or on the trade agenda. We are keen to co-operate, but the UK Government is dragging its heels. Therefore I ask Conservative members

who are present in the chamber to use whatever influence they might have at UK Government level to help us to make progress.

I will conclude by reflecting that the debate has been interesting and has contained lots of food for thought. The Scottish Government remains hugely focused on what we need to do to evaluate the innovation ecosystem, make it more effective, continually improve it, understand its impact and move towards having a Scotland in which we are not just the consumer of innovations but their inventor and manufacturer.

Decision Time

17:01

The Presiding Officer (Ken Macintosh): The first question is, that amendment S5M-19287.1, in the name of Alexander Burnett, which seeks to amend motion S5M-19287, in the name of Ivan McKee, on supporting innovation, be agreed to. Are we agreed?

Members: No.

The Presiding Officer: There will be a division.

For

Baillie, Jackie (Dumbarton) (Lab)
 Baker, Claire (Mid Scotland and Fife) (Lab)
 Balfour, Jeremy (Lothian) (Con)
 Ballantyne, Michelle (South Scotland) (Con)
 Beamish, Claudia (South Scotland) (Lab)
 Bibby, Neil (West Scotland) (Lab)
 Bowman, Bill (North East Scotland) (Con)
 Boyack, Sarah (Lothian) (Lab)
 Burnett, Alexander (Aberdeenshire West) (Con)
 Cameron, Donald (Highlands and Islands) (Con)
 Carlaw, Jackson (Eastwood) (Con)
 Carson, Finlay (Galloway and West Dumfries) (Con)
 Chapman, Peter (North East Scotland) (Con)
 Cole-Hamilton, Alex (Edinburgh Western) (LD)
 Corry, Maurice (West Scotland) (Con)
 Findlay, Neil (Lothian) (Lab)
 Fraser, Murdo (Mid Scotland and Fife) (Con)
 Golden, Maurice (West Scotland) (Con)
 Grant, Rhoda (Highlands and Islands) (Lab)
 Gray, Iain (East Lothian) (Lab)
 Greene, Jamie (West Scotland) (Con)
 Griffin, Mark (Central Scotland) (Lab)
 Halcro Johnston, Jamie (Highlands and Islands) (Con)
 Harris, Alison (Central Scotland) (Con)
 Johnson, Daniel (Edinburgh Southern) (Lab)
 Kelly, James (Glasgow) (Lab)
 Kerr, Liam (North East Scotland) (Con)
 Lamont, Johann (Glasgow) (Lab)
 Lennon, Monica (Central Scotland) (Lab)
 Leonard, Richard (Central Scotland) (Lab)
 Lindhurst, Gordon (Lothian) (Con)
 Lockhart, Dean (Mid Scotland and Fife) (Con)
 Macdonald, Lewis (North East Scotland) (Lab)
 Mason, Tom (North East Scotland) (Con)
 McArthur, Liam (Orkney Islands) (LD)
 McNeill, Pauline (Glasgow) (Lab)
 Mountain, Edward (Highlands and Islands) (Con)
 Mundell, Oliver (Dumfriesshire) (Con)
 Rowley, Alex (Mid Scotland and Fife) (Lab)
 Rumbles, Mike (North East Scotland) (LD)
 Sarwar, Anas (Glasgow) (Lab)
 Simpson, Graham (Central Scotland) (Con)
 Smith, Liz (Mid Scotland and Fife) (Con)
 Smyth, Colin (South Scotland) (Lab)
 Stewart, Alexander (Mid Scotland and Fife) (Con)
 Tomkins, Adam (Glasgow) (Con)
 Wells, Annie (Glasgow) (Con)
 Whittle, Brian (South Scotland) (Con)
 Wishart, Beatrice (Shetland Islands) (LD)

Against

Adam, George (Paisley) (SNP)
 Adamson, Clare (Motherwell and Wishaw) (SNP)
 Allan, Alasdair (Na h-Eileanan an Iar) (SNP)

Arthur, Tom (Renfrewshire South) (SNP)
 Beattie, Colin (Midlothian North and Musselburgh) (SNP)
 Campbell, Aileen (Clydesdale) (SNP)
 Coffey, Willie (Kilmarnock and Irvine Valley) (SNP)
 Crawford, Bruce (Stirling) (SNP)
 Denham, Ash (Edinburgh Eastern) (SNP)
 Dey, Graeme (Angus South) (SNP)
 Doris, Bob (Glasgow Maryhill and Springburn) (SNP)
 Dornan, James (Glasgow Cathcart) (SNP)
 Ewing, Annabelle (Cowdenbeath) (SNP)
 Fabiani, Linda (East Kilbride) (SNP)
 Finnie, John (Highlands and Islands) (Green)
 FitzPatrick, Joe (Dundee City West) (SNP)
 Forbes, Kate (Skye, Lochaber and Badenoch) (SNP)
 Freeman, Jeane (Carrick, Cumnock and Doon Valley) (SNP)
 Gibson, Kenneth (Cunninghame North) (SNP)
 Gilruth, Jenny (Mid Fife and Glenrothes) (SNP)
 Gougeon, Mairi (Angus North and Mearns) (SNP)
 Grahame, Christine (Midlothian South, Tweeddale and Lauderdale) (SNP)
 Greer, Ross (West Scotland) (Green)
 Harper, Emma (South Scotland) (SNP)
 Harvie, Patrick (Glasgow) (Green)
 Hepburn, Jamie (Cumbernauld and Kilsyth) (SNP)
 Johnstone, Alison (Lothian) (Green)
 Kidd, Bill (Glasgow Anniesland) (SNP)
 Lochhead, Richard (Moray) (SNP)
 MacDonald, Angus (Falkirk East) (SNP)
 MacDonald, Gordon (Edinburgh Pentlands) (SNP)
 MacGregor, Fulton (Coatbridge and Chryston) (SNP)
 Mackay, Rona (Strathkelvin and Bearsden) (SNP)
 Macpherson, Ben (Edinburgh Northern and Leith) (SNP)
 Maguire, Ruth (Cunninghame South) (SNP)
 Martin, Gillian (Aberdeenshire East) (SNP)
 Mason, John (Glasgow Shettleston) (SNP)
 Matheson, Michael (Falkirk West) (SNP)
 McAlpine, Joan (South Scotland) (SNP)
 McKee, Ivan (Glasgow Provan) (SNP)
 McKelvie, Christina (Hamilton, Larkhall and Stonehouse) (SNP)
 McMillan, Stuart (Greenock and Inverclyde) (SNP)
 Neil, Alex (Airdrie and Shotts) (SNP)
 Robison, Shona (Dundee City East) (SNP)
 Ross, Gail (Caithness, Sutherland and Ross) (SNP)
 Ruskell, Mark (Mid Scotland and Fife) (Green)
 Russell, Michael (Argyll and Bute) (SNP)
 Somerville, Shirley-Anne (Dunfermline) (SNP)
 Stevenson, Stewart (Banffshire and Buchan Coast) (SNP)
 Stewart, Kevin (Aberdeen Central) (SNP)
 Sturgeon, Nicola (Glasgow Southside) (SNP)
 Swinney, John (Perthshire North) (SNP)
 Todd, Maree (Highlands and Islands) (SNP)
 Torrance, David (Kirkcaldy) (SNP)
 Watt, Maureen (Aberdeen South and North Kincardine) (SNP)
 Wheelhouse, Paul (South Scotland) (SNP)
 Wightman, Andy (Lothian) (Green)
 Yousaf, Humza (Glasgow Pollok) (SNP)

The Presiding Officer: The result of the division is: For 49, Against 58, Abstentions 0.

Amendment disagreed to.

The Presiding Officer: The next question is, that amendment S5M-19287.2, in the name of Rhoda Grant, which seeks to amend motion S5M-19287, in the name of Ivan McKee, on supporting innovation, be agreed to. Are we agreed?

Members: No.

The Presiding Officer: There will be a division.

For

Baillie, Jackie (Dumbarton) (Lab)
 Baker, Claire (Mid Scotland and Fife) (Lab)
 Balfour, Jeremy (Lothian) (Con)
 Ballantyne, Michelle (South Scotland) (Con)
 Beamish, Claudia (South Scotland) (Lab)
 Bibby, Neil (West Scotland) (Lab)
 Bowman, Bill (North East Scotland) (Con)
 Boyack, Sarah (Lothian) (Lab)
 Burnett, Alexander (Aberdeenshire West) (Con)
 Cameron, Donald (Highlands and Islands) (Con)
 Carlaw, Jackson (Eastwood) (Con)
 Carson, Finlay (Galloway and West Dumfries) (Con)
 Chapman, Peter (North East Scotland) (Con)
 Cole-Hamilton, Alex (Edinburgh Western) (LD)
 Corry, Maurice (West Scotland) (Con)
 Findlay, Neil (Lothian) (Lab)
 Fraser, Murdo (Mid Scotland and Fife) (Con)
 Golden, Maurice (West Scotland) (Con)
 Grant, Rhoda (Highlands and Islands) (Lab)
 Gray, Iain (East Lothian) (Lab)
 Greene, Jamie (West Scotland) (Con)
 Griffin, Mark (Central Scotland) (Lab)
 Halcro Johnston, Jamie (Highlands and Islands) (Con)
 Harris, Alison (Central Scotland) (Con)
 Johnson, Daniel (Edinburgh Southern) (Lab)
 Kelly, James (Glasgow) (Lab)
 Kerr, Liam (North East Scotland) (Con)
 Lamont, Johann (Glasgow) (Lab)
 Lennon, Monica (Central Scotland) (Lab)
 Leonard, Richard (Central Scotland) (Lab)
 Lindhurst, Gordon (Lothian) (Con)
 Lockhart, Dean (Mid Scotland and Fife) (Con)
 Macdonald, Lewis (North East Scotland) (Lab)
 Mason, Tom (North East Scotland) (Con)
 McArthur, Liam (Orkney Islands) (LD)
 McNeill, Pauline (Glasgow) (Lab)
 Mountain, Edward (Highlands and Islands) (Con)
 Mundell, Oliver (Dumfriesshire) (Con)
 Rowley, Alex (Mid Scotland and Fife) (Lab)
 Rumbles, Mike (North East Scotland) (LD)
 Sarwar, Anas (Glasgow) (Lab)
 Simpson, Graham (Central Scotland) (Con)
 Smith, Liz (Mid Scotland and Fife) (Con)
 Smyth, Colin (South Scotland) (Lab)
 Stewart, Alexander (Mid Scotland and Fife) (Con)
 Tomkins, Adam (Glasgow) (Con)
 Wells, Annie (Glasgow) (Con)
 Whittle, Brian (South Scotland) (Con)
 Wishart, Beatrice (Shetland Islands) (LD)

Against

Adam, George (Paisley) (SNP)
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 Allan, Alasdair (Na h-Eileanan an Iar) (SNP)
 Arthur, Tom (Renfrewshire South) (SNP)
 Beattie, Colin (Midlothian North and Musselburgh) (SNP)
 Campbell, Aileen (Clydesdale) (SNP)
 Coffey, Willie (Kilmarnock and Irvine Valley) (SNP)
 Crawford, Bruce (Stirling) (SNP)
 Denham, Ash (Edinburgh Eastern) (SNP)
 Dey, Graeme (Angus South) (SNP)
 Doris, Bob (Glasgow Maryhill and Springburn) (SNP)
 Dornan, James (Glasgow Cathcart) (SNP)
 Ewing, Annabelle (Cowdenbeath) (SNP)
 Fabiani, Linda (East Kilbride) (SNP)
 FitzPatrick, Joe (Dundee City West) (SNP)
 Forbes, Kate (Skye, Lochaber and Badenoch) (SNP)
 Freeman, Jeane (Carrick, Cumnock and Doon Valley) (SNP)

Gibson, Kenneth (Cunninghame North) (SNP)
 Gilruth, Jenny (Mid Fife and Glenrothes) (SNP)
 Gougeon, Mairi (Angus North and Mearns) (SNP)
 Grahame, Christine (Midlothian South, Tweeddale and
 Lauderdale) (SNP)
 Harper, Emma (South Scotland) (SNP)
 Hepburn, Jamie (Cumbernauld and Kilsyth) (SNP)
 Kidd, Bill (Glasgow Anniesland) (SNP)
 Lochhead, Richard (Moray) (SNP)
 MacDonald, Angus (Falkirk East) (SNP)
 MacDonald, Gordon (Edinburgh Pentlands) (SNP)
 MacGregor, Fulton (Coatbridge and Chryston) (SNP)
 Mackay, Rona (Strathkelvin and Bearsden) (SNP)
 Macpherson, Ben (Edinburgh Northern and Leith) (SNP)
 Maguire, Ruth (Cunninghame South) (SNP)
 Martin, Gillian (Aberdeenshire East) (SNP)
 Mason, John (Glasgow Shettleston) (SNP)
 Matheson, Michael (Falkirk West) (SNP)
 McAlpine, Joan (South Scotland) (SNP)
 McKee, Ivan (Glasgow Provan) (SNP)
 McKelvie, Christina (Hamilton, Larkhall and Stonehouse)
 (SNP)
 McMillan, Stuart (Greenock and Inverclyde) (SNP)
 Neil, Alex (Airdrie and Shotts) (SNP)
 Robison, Shona (Dundee City East) (SNP)
 Ross, Gail (Caithness, Sutherland and Ross) (SNP)
 Russell, Michael (Argyll and Bute) (SNP)
 Somerville, Shirley-Anne (Dunfermline) (SNP)
 Stevenson, Stewart (Banffshire and Buchan Coast) (SNP)
 Stewart, Kevin (Aberdeen Central) (SNP)
 Sturgeon, Nicola (Glasgow Southside) (SNP)
 Swinney, John (Perthshire North) (SNP)
 Todd, Maree (Highlands and Islands) (SNP)
 Torrance, David (Kirkcaldy) (SNP)
 Watt, Maureen (Aberdeen South and North Kincardine)
 (SNP)
 Wheelhouse, Paul (South Scotland) (SNP)
 Yousaf, Humza (Glasgow Pollok) (SNP)

Abstentions

Finnie, John (Highlands and Islands) (Green)
 Greer, Ross (West Scotland) (Green)
 Harvie, Patrick (Glasgow) (Green)
 Johnstone, Alison (Lothian) (Green)
 Ruskell, Mark (Mid Scotland and Fife) (Green)
 Wightman, Andy (Lothian) (Green)

The Presiding Officer: The result of the division is: For 49, Against 52, Abstentions 6.

Amendment disagreed to.

The Presiding Officer: The final question is, that motion S5M-19287, in the name of Ivan McKee, on supporting innovation, be agreed to.

Motion agreed to,

That the Parliament acknowledges that business innovation is of central importance to the Scottish economy; notes the Scottish Government's initiatives to ensure that Scotland is a globally competitive, entrepreneurial, inclusive and sustainable economy with thriving and innovative businesses with quality jobs and fair work for everyone, and recognises the increasing levels of business investment in R&D, the increased number of businesses collaborating within supply chains and an increase in R&D jobs as a percentage of total employment, all of which contribute towards a sustainable, inclusive future for the people of Scotland.

Institute of Occupational Medicine 50th Anniversary

The Deputy Presiding Officer (Linda Fabiani): The final item of business today is a members' business debate on motion S5M-18154, in the name of Gordon MacDonald, on 50 years of the Institute of Occupational Medicine. The debate will be concluded without any question being put.

Motion debated,

That the Parliament congratulates the Institute of Occupational Medicine (IOM), a charity based in Edinburgh, on its 50th anniversary; notes that IOM was founded in Edinburgh as an independent research organisation in 1969 by the National Coal Board, primarily to complete groundbreaking research on lung disease in coal mine workers; further notes that IOM's work has now progressed and broadened to understand and mitigate a range of occupational and environmental health risks, including from exposure to quartz and other dusts, asbestos, other fibrous materials, carbon nanotubes, ultraviolet radiation, air pollution and physical and psychological stress; believes that IOM's research has been critical in leading to the understanding that coal mining not only caused the specific disease known as coal workers' pneumoconiosis but also an increased risk of chronic obstructive lung disease (COPD); understands that IOM has been a leading player in Europe in collaborative research related to the safety of nanomaterials and that SAFENANO, IOM's Centre of Excellence, was one of the first recognised organisations developing the safe use of nanotechnology; considers that IOM has made an important contribution to policy nationally and internationally through developing, interpreting and assessing the scientific evidence on the health risks of these issues; believes that IOM's research and other scientific work over the last 50 years has improved people's health and safety at work, at home and in the environment, and thanks everyone who has been a part IOM over the last 50 years for their work to create a healthy and sustainable world through outstanding independent science.

17:06

Gordon MacDonald (Edinburgh Pentlands) (SNP): I thank all the members from across Parliament who have supported the motion and allowed the debate to take place. I welcome to the gallery several members of the Institute of Occupational Medicine, including its chief executive officer, Rob Aitken.

It is a pleasure to be leading this members' business debate to celebrate 50 years of the Institute of Occupational Medicine and its achievements over that time. The IOM was founded in Edinburgh in 1969 by the National Coal Board, and was founded as an independent research organisation. It is based in the Heriot-Watt University research park in Riccarton my constituency. It was established to complete groundbreaking research into lung disease in coal miners, and its research has been critical in leading to the common understanding that coal

mining not only specifically caused the disease coal workers' pneumoconiosis, but created increased risk of chronic obstructive lung disease among miners.

Since then, the IOM's work has progressed and expanded and has enabled us to understand and mitigate a range of occupational and environmental health risks, including exposure to quartz and other dusts, asbestos and other fibrous materials, carbon nanotubes, ultraviolet radiation, air pollution and physical and psychological stress.

The IOM has made many achievements over the past 50 years, but I do not have time to mention them all. Nevertheless, I will touch on a few accomplishments that stand out to me. The IOM has been a leading player in Europe through collaboration on research on the safety of nanomaterials including emissions from welding and diesel engines. Its centre of excellence was one of the first recognised organisations to develop safe use of nanotechnology.

The IOM has also played an incredibly significant role in eradicating asbestos exposure across Europe. In 2006, having teamed up with the European Commission's Senior Labour Inspectors Committee, it created a European guide on asbestos for employers, employees and labour inspectors. The guide defined a set of practices to eradicate exposure in the workplace by focusing on identifying asbestos-contaminated materials and engaging specialists to remove them.

Unfortunately, that guide came too late for my late father, who died of lung cancer in 1990 at the age of 56. As a young man, he was a merchant seaman who worked in the engine rooms of cargo ships. He maintained that it was not smoking that was killing him, but his exposure to the asbestos that was used for lagging pipes—a danger that was not known about in the 1950s or 1960s.

The IOM has also played an important role in improving global understanding of environmental pollution. It has contributed to the clean air for Europe programme and a European Union-funded review of air quality standards. Alongside AEA Technology, the IOM assessed the literature and offered its views on how many deaths and diseases in Europe might be caused by air pollution. Overall, the results from the clean air for Europe programme showed that the health and environmental benefits of interventions to reduce pollution far outweigh the implementation costs. That evidence-based assessment strengthened the negotiating position of those in the European Commission, the European Parliament and the member states who wanted better air quality and, subsequently, better health throughout Europe.

I will bring us up to date. As a result of IOM investigations earlier this year, problems were identified with the ventilation system in the new Royal Hospital for Sick Children here in Edinburgh. IOM is continuing to provide assistance to the commissioning team to facilitate improvements that will enable the hospital to open with a fully validated, safe and effective ventilation system.

IOM is now one of the most successful organisations in the EU's flagship research programme, horizon 2020. IOM's role in horizon 2020 has seen it leading or participating in 13 projects across topics including nanotechnology and chemical and environmental risks to health and their management. With regard to participation in horizon 2020 projects, IOM is the 12th most successful organisation in Scotland—if we exclude universities, it is the fourth most successful.

To mark its 50th anniversary, IOM has worked with Innovation Digital to create 50 pieces of unique digital artwork that will be on display at the event in the garden lobby tonight. Each one of the large posters will illustrate one of the 50 most significant scientific impacts that IOM has made during the past half century. The poster campaign is aligned with IOM's charitable aims, one of which is

"to lead the advancement of education in these fields."

It is with education in mind that one of the hopes for the campaign is that it will inspire the next generation of scientists.

I know that the Scottish Government and everyone across the chamber fully recognises our need to develop and grow Scotland's expertise in the interrelated fields of science, technology, engineering and mathematics. It is hoped that IOM's campaign can play a crucial role in promoting to today's young people not just science, but science as a discipline in Scotland. I very much welcome the focus from IOM on helping to drive forward improvements in STEM education and training in Scotland.

I have briefly outlined how a Scottish organisation that is based in Edinburgh has made such a difference to health outcomes across Europe and beyond. I thank everyone who has been a part of IOM over the past 50 years for their hard work to create a healthy and sustainable world through outstanding independent science. Their research and other scientific work over the past 50 years has improved the health and safety of people at work, at home and in the environment.

I urge everyone who takes part in the debate to join the Cabinet Secretary for Education and

Skills, John Swinney, and me at the event tonight in the garden lobby. [*Applause.*]

The Deputy Presiding Officer: I ask Mr MacDonald's fan club in the gallery to please refrain from clapping, booing or doing otherwise during the debate. Thank you.

17:13

Alexander Stewart (Mid Scotland and Fife) (Con): I am very pleased to take part in this members' business debate and I congratulate Gordon MacDonald on securing it.

The Institute of Occupational Medicine, or IOM, is celebrating its 50th anniversary. It is one of our leading providers of workplace health research and consultancy services and it is vital that it has the opportunity to extend its scientific and medical disciplines.

Based here in Edinburgh, at Heriot-Watt University research park, the IOM employs more than 100 staff, who help to deliver safer working environments and healthier working lives for thousands of organisations and individuals across the world.

As we have already heard, the National Coal Board founded the IOM in Edinburgh as an independent research organisation back in 1969, primarily to enable the research of lung disease in coal miners. Nowadays, the IOM advises on, regulates, inspects and controls many kinds of hazard in the workplace, including legionella risk assessment, asbestos and other fibres, workplace exposure limits, hand-arm vibration, dust and noise monitoring and many others. It also provides an invaluable expert witness service.

As we know, the IOM's excellent work has been to understand and mitigate a myriad range of occupational and environmental health risks. Those include physical risks to health in addition to those of a psychological nature, which the IOM also participates in mitigating.

The IOM has also been a leading light across Europe in collaborative research related to the use and safety of nanotechnology, which has helped to shape many of the latest advances in medicines, healthcare, personal cosmetics, paints, packaging and 3D printing. For the past 13 years, the IOM's SafeNano centre of excellence has de-risked nanotechnology using its unique combination of laboratories, state-of-the-art equipment and expertise in collaboration with enterprises from small start-ups to national companies. SafeNano's work has also ensured that the UK Government—in association with many of its agencies, such as the Health and Safety Executive, the Department for Environment, Food and Rural Affairs, the

Environment Agency and the Food Standards Agency—has participated.

Much progress has been made on the impact of nanotechnology topics, and there are many examples of individuals and organisations who are addressing the risks that are there, and which have impacted on the workplace. However, there are many examples of Governments and industries that have still to fully recognise the extent of the risk and the issues that are emerging from the technologies that we have at present.

To that end, I commend and congratulate the Institute of Occupational Medicine on its pioneering and innovative approaches in its research and its effective governance across the technologies with which it has been involved, including current and emerging technologies, where there is as much uncertainty today as there was regarding past technologies. The Institute of Occupational Medicine—and organisations like it—has ensured that the issue is pushed up the agenda and that it is being tackled.

The institute has hit a major milestone in celebrating 50 years of service. The organisation has achieved a considerable amount of wellbeing for individuals and organisations across the years, and it is right that we recognise its achievements in the chamber. Its pioneering work has ensured that the organisation has gone from strength to strength. I congratulate all those who have contributed to it during the past 50 years and I wish it well for the next 50 years.

17:17

Rona Mackay (Strathkelvin and Bearsden) (SNP): I am pleased to speak in the debate and thank my colleague, Gordon MacDonald, for bringing it to the chamber.

At a time when our rights have never been more uncertain—employment rights, human rights and rights around health and safety at work—there could not be more need for a body such as the Institute of Occupational Medicine. Its 50th anniversary is an important milestone in the institute's history. Over the past half century, much scientific research has been undertaken in order to understand a whole range of occupational and environmental health risks.

So much has changed in the past 50 years. Thanks to amazing medical advances, we are living longer; however, on the downside, we are witnessing the devastating effects of global warming and climate change. The work that has been done and that is being done by the IOM is truly science at work; it is tangible proof that science has made the world a safer place for us all to live and work.

As we have heard, throughout the year, the organisation is celebrating our scientific achievements and the impacts that they have had in a series of events, exhibitions and artwork throughout the United Kingdom and beyond. And there is much to celebrate, such as groundbreaking work on asbestos, lung disorders from mining work, legionella disease, hand-arm vibration, chemical risk, noise monitoring and much more, much of which we heard about from previous speakers.

I confess that I knew little of the amazing achievements for which the institute is responsible until I was researching for the debate. Is it not always the way that the most important work—work that protects every one of us in some form or another—is done quietly in the background, and represents safeguards that, to some extent, we all take for granted? And the work and the research never stop. As technology moves on at an eye-watering pace, the IOM will go on protecting our children and grandchildren for generations to come.

I am proud that the institute's headquarters is located in Edinburgh, in my colleague Gordon MacDonald's constituency. Scotland's capital city is a fitting place for that world-leading organisation to call home and I know that its global reputation enhances our country more than we will ever know.

Sometimes, it is good to stop and think about what is going on behind the scenes that protects us and enhances our environment, whether that be at work or in our day-to-day life. I thank the Institute of Occupational Medicine for all its skilled research and innovative, amazing work. I wish everyone involved a very happy 50th anniversary.

17:20

Monica Lennon (Central Scotland) (Lab): I thank Gordon MacDonald for lodging the motion for debate and for an excellent speech. He is clearly proud to have the Institute of Occupational Medicine based in his constituency. Although there are many achievements to cover, he did justice to the institute.

Unfortunately, I am unable to stay for the full debate—or for the reception, which I am sorry to miss out on. I pass on the best wishes of David Stewart MSP, who had hoped to speak tonight, but is unwell. However, my colleague Lewis Macdonald, the convener of the Health and Sport Committee, is here and will be at the reception to join the celebrations.

As we have heard, from its origins in the late 1960s as an organisation that was designed primarily to research lung disease in mine workers, the institute continues to do crucial work

on informing us of the risks that are faced by workers and increasing the rights of people at work.

As Scottish Labour's health spokesperson and an MSP for the Central Scotland region who represents many former mining communities, I know well the legacy of industrial respiratory illness. I thank Gordon MacDonald for speaking about his father's experience.

I was appointed recently as the parliamentary pulmonary rehab champion by the British Lung Foundation, so I am all too aware of the work that needs to be done to improve treatment for lung health and the availability of pulmonary rehab and other treatments for those with lung disease, so that that is equally accessible across the country. Although it is right to focus on access to treatment, much more focus must be given to the prevention of illnesses in the first place; that is where the institute's research comes in and is so vital in increasing our understanding of occupational and environmental health risks for workers, such as asbestos and other hazards.

As Gordon MacDonald and Rona Mackay set out, there is a global context. Although we in the Parliament are alive to that, we must wake up to the fact that those challenges do not have borders. The motion touches on the need to create a healthy and sustainable world, and we will have to play our part in achieving that alongside the institute.

I am the daughter of a health and safety officer, so I am well acquainted with some of the themes that we have touched on tonight and the importance of health and safety in the workplace. Like Rona Mackay, I did not know a great deal about the institute. That is the great thing about members' business debates—the chamber becomes like a classroom and we can all learn from one another's passions.

Lung disease has affected our family, too. My gran, who was a barmaid for most of her working life, died because of lung cancer. She was a smoker herself, but I think that smoking in the workplace certainly had a big part to play. Thankfully, the Parliament has passed legislation that has addressed that issue.

We need to understand and scientifically research potential hazards. We also need the presence of strong trade unions in the workplace that can advocate for workers and ensure that they are being fairly treated. Rona Mackay began her speech by talking about rights. People need to know what their rights are and when they are being breached.

We may no longer have coal miners working in Scotland, but the work of the IOM remains just as relevant today as it was 50 years ago. Everyone

has the right to be safe while they are doing their job. I reiterate my thanks and congratulations to the Institute of Occupational Medicine for the work that it does and that it has done over the past 50 years. I wish everyone at the IOM well for the future.

17:24

Clare Adamson (Motherwell and Wishaw) (SNP): I thank my colleague Gordon MacDonald for bringing the motion to Parliament for debate this evening. Like others who have spoken, I had not understood the extent of the work of the Institute of Occupational Medicine until I did my research for tonight's debate. As the member for Motherwell and Wishaw, and as someone who grew up in that area, members can understand that the issue is personal to me, as I know many people who were involved in mining and the steelworks and who suffered occupational ill health as a result. Indeed, vibration white finger is common among members of a certain generation in my area, and it was interesting to hear about the work that the IOM has done on the recognition of the effect of that condition in terms of ill health.

It is important that, through the work of organisations such as the IOM, the effect on women and children in the workers' families has been recognised. Asbestos and silica dust and so on were taken home to families at one time, and that caused ill health in the wider community, too.

I am delighted to speak tonight as I am the convener of the cross-party group on accident prevention and safety awareness, which has held a number of meetings specifically on occupational health. In 2015, we had a fascinating presentation from Professor Andrew Watterson, from the University of Stirling's centre for public health and population health research. What he told us takes us back to the reason why the IOM was important at the time of its inception. He said that, in 1875, paraffin cancer was first described by a Professor Bell, who had noticed it in workers in the Scottish shale plants. The incredible thing is that the article in which the first case was described said that the occurrence of the cancer was

"a well known fact among the local physicians".

That is something that we forget: culturally, miners, steelworkers and others who are affected by occupational health issues will have known dozens of people who have been affected over the years, yet it took a long time for action to be taken. Indeed, in 1922, 19 cases of paraffin cancer were detected in the Scottish industry, and no effective action had been taken between 1875 and 1922. That is why what we are doing today, in highlighting the issue, is important.

In his presentation, Professor Watterson said that 15,764 people had died of cancer that year in Scotland, and that 10 per cent of the cancer deaths were work related. That means that 1,576 people died that year because of their work environment. That is why, as Monica Lennon said, it is important that we recognise the work that is done across the world of trade unions and others who campaign for safer workplaces and aim to ensure that every worker has information about occupational hygiene, so that they can look after their health. I am proud that we are highlighting that this evening.

At that meeting of the cross-party group, we also discussed the issue of welding, and heard how that is coming to the fore as a potential area of occupational ill health.

Each year on 28 April, we mark workers memorial day, on which we remember people who have not made it home from their workplace. I want to highlight the work of the Scottish hazards group, which campaigns not only in Scotland and the UK but across the world for work that does not cause physical or mental injury or illness; for meaningful work that enables the development of skill and competence; for work that differentiates but does not discriminate, and is based on respect and fairness; and for access to occupational health and safety information and support. That is vital, going forward.

17:29

Annie Wells (Glasgow) (Con): I thank Gordon MacDonald for bringing the motion to Parliament. I enjoy the opportunity that members' business debates offer me to learn about charities and organisations at an in-depth level. That has been the case with the Institute of Occupational Medicine, because, prior to the debate, I had not fully comprehended the extent of its work.

As we know, the Institute of Occupational Medicine was founded in Edinburgh in 1969 and is now celebrating its 50th anniversary. It has an interesting history. With the aim of improving the lives of people all round the world by improving health and safety at work and at home, the National Coal Board founded the IOM as an independent research organisation, with the primary purpose of carrying out groundbreaking research on lung disease in coal miners.

As the scope of its work developed, the IOM's research unearthed that coal mining not only caused pneumoconiosis but increased the risk of chronic obstructive lung disease, a condition that is commonly caused by tobacco smoking. The IOM also made important advances in the understanding of how asbestos causes disease,

which led to the establishment of methods for assessing possible hazards.

Years later, the IOM's remit has broadened to cover a range of occupational health and safety risks. The IOM relaunched as a fully independent, self-funded charity in 1990. Its services and areas of expertise include legionnaires disease risk assessment, helping businesses to comply with chemical risk regulation, dust exposure monitoring and noise monitoring. The IOM carries out research into areas such as UV exposure in outdoor workers, and it produces reviews of air quality. Its work informs Government policy.

As well as doing that vital work, the IOM understands that the world has changed a lot in the past 50 years—positively and negatively—and that that brings new challenges. Since 2005, it has become a leading player in Europe in collaborative research into the safety of nano-sized materials. As members heard, that has led to the establishment of SafeNano, the IOM's centre of excellence.

As the IOM has taken on a broader portfolio of work, its influence across the world has grown. As well as covering the UK and Ireland, it oversees a number of international projects that are aimed at improving the environment of thousands of workers. In a significant development, in 2012, foreseeing the need for expertise to improve working conditions in Asia, it set up its first overseas office, in Singapore.

I again thank Gordon MacDonald for bringing the topic to the Parliament, and I thank the Institute of Occupational Medicine and all its staff for all the work that they do to improve people's health and safety at work, at home and in the environment. I wish the IOM a happy 50th anniversary.

17:32

The Minister for Public Health, Sport and Wellbeing (Joe FitzPatrick): I congratulate Gordon MacDonald on securing this debate, and I join Monica Lennon in thanking him for talking about his father's experience. As Annie Wells said, the debate has given us an excellent opportunity to raise awareness of the Institute of Occupational Medicine among members and, I hope, in wider society.

The IOM has a proud, 50-year record of improving the lives and the health and wellbeing of a great many people. I put on record my congratulations to the IOM on reaching this milestone. I hope that the next 50 years are equally successful.

The IOM's journey over the past 50 years reflects the seismic changes that we have seen in

our industrial landscape, which Gordon MacDonald set out. In 1969, the world was coal powered. Many thousands of miners worked in dangerous conditions and ran the poorly understood risk of exposure to harmful substances such as coal dust. As Clare Adamson reminded us, sometimes the hazards extended into the wider environment and even the home—that is an important point.

The IOM's work gave people a better understanding of the dangers to which miners were exposed, allowing the health of miners to be better supported and enabling mines to mitigate the risks of exposure and become safer places in which to work.

Since then, our industrial landscape has been transformed. The pits have closed. Much of our heavy industry has been swept away, and new types of work and workplace have emerged.

The IOM's recent work reflects that change. The move to a largely office-based, information-led economy means that our workers face new and different challenges to their health, safety and wellbeing. Nonetheless, it remains the case that employers have a duty of care to understand risks to their workers' health and safety and to take appropriate steps to mitigate those risks.

We are facing an ageing workforce, with people having to work later in life before they can get their pensions, so we need to improve our understanding of the risks of an older workforce and what steps can be taken to keep our workers safe.

We are also seeing increases in mental health issues in the workplace. It is important for individuals, organisations and the wider economy that we recognise and understand the challenges that that presents and develop approaches to address them. The IOM has developed expertise in a wide range of areas where work can present hazards to workers and it has helped many organisations to take the steps that are necessary to protect their workers.

Scotland is leading the way in pioneering new technologies in industrial biotechnology, life sciences, digital technology and artificial intelligence, science and engineering and space technology. We aim to make Scotland world renowned for inventing, designing, developing and manufacturing key products and technology.

As Rona Mackay outlined, the IOM is an example of Scotland's world-leading innovation and an important contributor to our understanding of the impact that new technologies, new materials and new ways of working have on the workforce in Scotland and worldwide. Every worker is entitled to go to work and return home safe and unharmed by their work or their workplace. Here in Scotland,

we take worker protection very seriously, collaborating across public, private and trade union bodies—Alexander Stewart spoke about some of those collaborations. The partnership on health and safety in Scotland is a collaboration between the many players in the Scottish occupational health and safety sector. It is the envy of other parts of the UK and provides a forum for addressing existing and emerging safety challenges in the modern workplace.

Scotland punches above its weight in science and research and enjoys a global reputation for research and innovation. To maintain that lead, we need to encourage new scientists, engineers and technologists. Organisations such as the IOM need to be able to recruit skilled and qualified scientists and researchers.

As well as creating an environment that can attract the best minds from around the world, we need to encourage our young people to take up the study of STEM subjects, which Gordon MacDonald mentioned. Our STEM education and training strategy is focused on encouraging and supporting everyone to develop their STEM capability and skills, through concerted action in early years and school education, community learning, colleges, universities, apprenticeships, science centres and festivals. Our STEM strategy, which we launched in 2017, aims to build Scotland's capacity to deliver excellent STEM learning and to close equity gaps in participation and attainment in STEM. It also aims to inspire young people and adults to study STEM subjects and to provide a better connection between STEM education and training and the needs of the labour market in Scotland.

In particular, we are working with partners to address the underrepresentation of women in STEM courses and careers and ensure that Scotland's STEM sectors are diverse, equal and prosperous. It is only by attracting the brightest and best into STEM subjects and careers that Scotland will continue to be at the cutting edge of science, engineering and technology.

As Gordon MacDonald mentioned, the IOM commissioned 50 posters that combine art and science to commemorate its 50 years of history. The splendid visualisation of the IOM's contribution to scientific research and tackling the real and present hazards in the workplace demonstrate the breadth and depth of the value of the institute. I encourage everyone to take a look at them in the Parliament's garden lobby tonight. If members cannot make that, they are available on the IOM website—so log in and have a look.

This year marks the 50th anniversary of the first human being to land on the moon—a remarkable technological achievement—but it is also important to mark the 50th anniversary of

achievements closer to home. I acknowledge what the IOM has given us over the past 50 years and offer the institute my very best wishes for the next 50.

Meeting closed at 17:39.

Correction

John Swinney has identified an error in his contribution and provided the following correction.

The Deputy First Minister and Cabinet Secretary for Education and Skills (John Swinney):

At col 24, paragraph 6—

Original text—

Medicines of the type that Emma Harper refers to are defined as category 1 goods, which will have priority in transportation across the short straits at Dover.

Corrected text—

Medicines of the type that Emma Harper refers to are defined as category 1 goods, which the United Kingdom Government plans to prioritise on freight capacity it is procuring on routes which avoid the short strait crossings.

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The deadline for corrections to this edition is:

Tuesday 5 November 2019

Published in Edinburgh by the Scottish Parliamentary Corporate Body, the Scottish Parliament, Edinburgh, EH99 1SP

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