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PARLIAMENTARY DEBATES
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HOUSE OF LORDS
OFFICIAL REPORT

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Abbreviation	Party/Group
CB	Cross Bench
Con	Conservative
DUP	Democratic Unionist Party
GP	Green Party
Ind Lab	Independent Labour
Ind LD	Independent Liberal Democrat
Ind SD	Independent Social Democrat
Ind UU	Independent Ulster Unionist
Lab	Labour
LD	Liberal Democrat
LD Ind	Liberal Democrat Independent
Non-afl	Non-affiliated
PC	Plaid Cymru
UKIP	UK Independence Party
UUP	Ulster Unionist Party

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House of Lords

Wednesday 12 July 2017

3 pm

Prayers—read by the Lord Bishop of Chelmsford.

Brexit: United Kingdom-European Union Parliamentary Assembly *Question*

3.06 pm

Asked by Lord Soley

To ask Her Majesty's Government whether, as part of their Brexit negotiations, they intend to propose the formation of a United Kingdom–European Union joint parliamentary assembly.

The Minister of State, Department for Exiting the European Union (Baroness Anelay of St Johns) (Con): My Lords, European parliamentary rules of procedure state that joint parliamentary committees can be created only with countries that have an association agreement with the EU or pre-accession member states. While the United Kingdom is a member of the European Union, the Government therefore have no plans to create an assembly. Parliament should continue to engage through existing channels. Once we have left the EU, it will be for Parliament to consider how it wishes to engage.

Lord Soley (Lab): I am grateful for that Answer, and I am aware of the problem at the European Parliament end. I think that everyone agrees that, following Brexit, the EU and the UK will need a very close and strong relationship both politically and economically. In that respect, it would be very useful for everyone for the EU and UK Parliaments to have a close relationship—not dissimilar to the British-Irish Parliamentary Assembly, which was set up with a grant of £1.5 million from the Treasury. That is a useful model. Do the Government support such an approach?

Baroness Anelay of St Johns: My Lords, the noble Lord makes a very important point. Who could but wish that after we leave the European Union, we are able to continue the strength of our relationship with our colleagues across Europe at not only governmental but parliamentary level? The noble Lord referred to the British-Irish assembly. The House may wish to know that that assembly and three other parliamentary groups—the CPA UK, the British Group of the Inter-Parliamentary Union and the British-American Parliamentary Group—are funded by a grant from the two Houses. The funding which had been provided by Her Majesty's Government was transferred to Parliament some years ago, so it is clearly a matter for Parliament, and I think that a lot of voices here might beat a path to the door of the relevant authorities.

Lord Garel-Jones (Con): My Lords, does the Minister agree that although the Question of the noble Lord, Lord Soley, is quite legitimate, in a complex negotiation such as Brexit, involving 27 nation states and where all kinds of difficult compromises will have to be made, the less that the Government have to reveal in advance about their negotiating position, the better?

Baroness Anelay of St Johns: Absolutely right, my Lords, but in defence of the noble Lord, Lord Soley—although my goodness, he does not need me to defend him—it is a fact that the Government simply cannot under the rules of the European Parliament take any action on this specific matter. As for the generality of my noble friend's comments: absolutely right.

Baroness Ludford (LD): My Lords, thoroughly disagreeing with the previous question, is not the European Parliament, however much mocked in this country, showing the mother of Parliaments just what parliamentary control looks like in the modern era? Its ability to veto the Brexit deal means that the other institutions have to front-load information to the Parliament, so there have been seven position papers, as against one from our Government. Unfortunately, parliamentary scrutiny in the Westminster Parliament is still rather unstructured, despite many promises. We have things to learn from the European Parliament.

Baroness Anelay of St Johns: My Lords, it is recognised by countries around the world where I have visited as a Minister in the Foreign Office that other Parliaments have much to learn from the strength of scrutiny in this House and another place, and indeed, through our Select Committees, as well as the way in which the Chambers work. With regard to scrutiny of papers, I believe that my right honourable friend the Secretary of State made it clear to the European Union Select Committee yesterday that further position papers are expected shortly.

Lord Hylton (CB): My Lords, I am going to speak from a non-party point of view. Will the Government consider bringing together the existing assemblies of the Council of Europe and the OSCE with the kind of assembly that the noble Lord, Lord Soley, proposes? Would this not enable much better consideration of issues affecting the whole of Europe?

Baroness Anelay of St Johns: My Lords, the latter point about matters affecting the wider geographical range of Europe is an interesting one. It is not for the Government to intervene with regard to rolling up existing parliamentary bodies. We have colleagues across the House who have made a great impact in the parliamentary assemblies of both the Council of Europe and the OSCE, particularly recently. I commend those who attended because they stuck the course, whereas some representatives from other countries left a wee bit early.

Baroness Hayter of Kentish Town (Lab): My Lords, I was in Rome, as it happened—where I was introduced to tiramisu—when there was a “parliament of

[BARONESS HAYTER OF KENTISH TOWN]

parliaments”: a gathering of the European Parliament with representatives of the then 15 member states during the process of the intergovernmental conferences. Parliamentarians at that stage were about to vote on what was emerging from those conferences. We now face similar complicated intergovernmental negotiations in which, in due course, as the noble Baroness says, both we and the European Parliament will vote on ratification. Although I appreciate that it is not a governmental issue, could the Minister use her best efforts with some of her friends to see whether there is a way of facilitating early discussions which would be helpful later in the process when both they and we come to vote?

Baroness Anelay of St Johns: My Lords, the noble Baroness makes an extremely valid point: that better exchange of information leads to better understanding in negotiations. That is why, as Ministers, we have not only engaged thoroughly with our counterparts around the European Union but encouraged Select Committee visits. I know that those visits have been thorough, and if they have been to the European Parliament, they have been supported by the secretariat and the European Parliament. The worst thing is for newspaper articles to appear giving misleading information, not necessarily intentionally but just because we have not had the opportunity to discuss with colleagues the real issues.

Lord Tebbit (Con): My Lords, does my noble friend agree, on the proposal of the noble Lord, Lord Soley, that most of us can recognise what the Americans call a boondoggle when we see one? Secondly, would she be so kind as to instruct the Liberal Benches that this Parliament in this country can dismiss the Executive? Can the European Parliament dismiss the Executive?

Noble Lords: Yes!

Lord Tebbit: I do not think there is any record of it yet. It can sack the Commission? Oh, no.

Baroness Anelay of St Johns: My Lords, I find it very interesting that when I have travelled around the world as a Minister I have met Ministers who have never appeared in Parliament and never had to answer questions in Parliament. For me, it is a vital part of parliamentary accountability. But there are also occasions, I know as a Member of Parliament, when as a Minister you could get your finger caught in the nut and the screw.

Istanbul Convention *Question*

3.15 pm

Asked by Baroness Gale

To ask Her Majesty's Government what is their timetable for the ratification of the Istanbul Convention, following the passing of the Preventing and Combating Violence Against Women and Domestic Violence (Ratification of Convention) Act 2017.

The Minister of State, Home Office (Baroness Williams of Trafford) (Con): My Lords, we signed the convention in 2012, demonstrating our commitment to tackling violence against women and girls. We are committed to ratifying the convention; measures in the new domestic violence and abuse Bill will extend extraterritorial jurisdiction over certain offences, ensuring that we fully comply with it and can deliver on that. We will set out a timetable in due course.

Baroness Gale (Lab): My Lords, I thank the Minister for her reply, but does she agree with me that the importance of ratification will be that women and girls in the UK would be guaranteed the right to live their lives free from violence and the fear of violence, as the convention sets out standards for the prevention, protection, prosecution and monitoring of issues related to violence against women? Will the 2017 Act marry up with the draft domestic violence and abuse Bill, as it covers only England and Wales? What steps will she take to ensure that Scotland and Northern Ireland comply with extraterritorial jurisdiction? Can she give some idea of the timetable of the draft Bill, as it may help to let us know when the Istanbul convention will be ratified?

Baroness Williams of Trafford: My Lords, there are quite a few questions in there—but on the devolved Administrations, the noble Baroness is right to ask, and she will know that we liaise regularly with them on issues such as violence against women and girls. The Minister for Vulnerability and Safeguarding has been in touch with her counterparts in Scotland, Northern Ireland and Wales on the issue, and Ministry of Justice officials have had contact with the devolved Administration on this issue.

The noble Baroness touched also on the 2017 Act from Dr Eilidh Whiteford, which attracted a significant amount of media interest, and was sponsored in your Lordships' House by the noble Baroness. I look forward to debating the issues through the domestic violence and abuse Bill.

Baroness Pidding (Con): My Lords, the Istanbul convention sets out clear obligations to support victims of violence against women and girls. Can my noble friend the Minister assure us what the Government will do to comply with those obligations?

Baroness Williams of Trafford: I am certainly happy to answer my noble friend's question. To support the Government's commitment to tackling violence against women and girls—or VAWG, as it is also known—we have pledged £100 million in funding. This will help to deliver our goal to work with local commissioners to deliver a secure future for rape support centres, refuges and FGM and forced marriage units. She will know that last week the Home Secretary announced 41 areas across England and Wales that will share around £17 million from the VAWG service transformation fund. Those projects will include work with victims and survivors, targeted support to victims with complex needs, early intervention with young people and work with perpetrators to change their behaviour.

Baroness Corston (Lab): I note that the Minister refers to legislation in 2012. How many women's refuges have closed since then? Many of us would feel a lot more optimistic about the Minister's Answer to the Question if under the coalition and this Government so many women's refuges had not had to close through lack of funding. How many new refuges will there be?

Baroness Williams of Trafford: I am very happy to tell the noble Baroness that, in 2015, the number of bed spaces in refuges raised from 3,563 to 3,686.

Baroness Burt of Solihull (LD): In February, our Prime Minister announced a major consultation across government, which would result in a domestic abuse and violence Act, consolidating other relevant legislation and introducing new measures to help victims. Has that consultation started or has it been put on the back burner because of Brexit?

Baroness Williams of Trafford: It certainly has not been put on the back burner because of Brexit. Why would it be? This Government are very committed—as we have been since the days of the coalition Government—to tackling domestic violence and abuse. That consultation is ongoing. It was very good to hear the other day from noble Lords across the Chamber what we could do to improve some of the measures through the Bill.

Lord Wigley (PC): My Lords, has the Minister read last week's report by the joint inspectorate of the police and the prosecution service on stalking, which stated that victims' complaints were routinely not investigated or dismissed through the device of issuing a police information notice? If the Istanbul convention was ratified, surely these deplorable practices would be overcome and victims would be better safeguarded.

Baroness Williams of Trafford: The Police and Crime Act increases the sentences for stalking thanks to the noble Baroness, Lady Royall, who is not in the Chamber and who brought that matter to the attention of the House. I agree with what the noble Lord said about the report. It was certainly brought to my attention the other day in terms of training the police. We are looking into that.

Baroness Nicholson of Winterbourne (Con): Given the enormity of the wave of sexual violence against girls and women as well as men worldwide, will Her Majesty's Government, given their track record of domestic violence legislation coming forward, ensure that countries which have signed and ratified the Istanbul convention make an effort to implement it?

Baroness Williams of Trafford: My Lords, it is not for this country to dictate to other countries what they do and do not do. However, I would have thought that in ratifying the convention, those countries had shown good commitment in this area.

Turkey: Death Penalty Question

3.22 pm

Asked by Lord Balfe

To ask Her Majesty's Government what discussions they have had with (1) the government of Turkey, and (2) other members of the Council of Europe, regarding the proposed reintroduction of the death penalty in Turkey.

Baroness Goldie (Con): My Lords, we have made it plain to the Government of Turkey that we oppose the death penalty under all circumstances. We have also held regular discussions with other Council of Europe partners on the human rights situation in Turkey, including the possible reintroduction of the death penalty. We all unequivocally oppose it.

Lord Balfe (Con): I thank the Minister for her Answer. Many of us have reacted with dismay to the increasing authoritarianism displayed by the Turkish Government. We have to draw a red line at some point. Could I ask that the Government, through their like-minded colleagues in the Council of Europe, make clear to the Government of Turkey that the reintroduction of the death penalty would be that red line and would lead to suspension from the Council of Europe? There could be other consequences, but that is one where we can lead the way.

Baroness Goldie: I thank my noble friend for a pertinent question. He will be aware that it is a long-standing policy of the UK Government to oppose the death penalty in all circumstances as a matter of general principle. We believe that its use undermines human dignity, that there is no conclusive evidence of its deterrent value, and that any miscarriage of justice leading to its imposition is, of course, irreversible and irreparable. I think Turkey understands that it would jeopardise both its Council of Europe membership and, for that matter, possibly its EU accession aspirations if it went down the reintroduction path.

Lord Alton of Liverpool (CB): My Lords, was it not another indication of the creeping authoritarianism referred to by the noble Lord, Lord Balfe, a moment ago that just last week the Government of Turkey sequestered more than 50 monasteries, churches and cemeteries, seizing buildings, including the Mor Gabriel monastery on the Tur Abdin plateau, which is 1,400 years old? What does this do to create a more plural and tolerant society? When did we last remind the Turkish Government of their obligations under the Universal Declaration of Human Rights to a right to life, yes, but also a right to believe, not to believe or to change belief?

Baroness Goldie: I think that the noble Lord is referring to a background of transfer of Christian churches, starting in 2012. The British embassy in Ankara regularly raises human rights issues with the Turkish authorities and we will closely follow the legal

[BARONESS GOLDIE]

process implicit in this activity. We strongly support religious freedom in Turkey and have supported civil society organisations working in this area.

Lord Anderson of Swansea (Lab): My Lords, the Foreign Minister of Turkey is a former president of the Assembly of the Council of Europe; therefore the Turkish Government must be well aware of the consequences of the reintroduction of the death penalty, possibly after a referendum. Is it the Government's view that Turkey will inevitably have to be suspended from the Council of Europe if capital punishment is reintroduced?

Baroness Goldie: As I indicated to my noble friend Lord Balfe, the United Kingdom Government's position on the death penalty is crystal clear and widely known and understood. I have also indicated that Council of Europe members seem to be unanimous in their opposition to the death penalty. It would be for the Council of Europe membership to determine how to respond if—it is an “if”—Turkey went down the undesirable road of reintroducing the death penalty. However, I think that Turkey understands that that would jeopardise its position within the Council of Europe.

Baroness Hussein-Ece (LD): My Lords, what discussions or representations have been made about the detention of Amnesty International's Turkish director and the sheer number of journalists—quite an unprecedented number—being detained in Turkey? Is the Minister aware that the mass demonstration last Sunday of hundreds of thousands of Turks of all colours, and all political backgrounds and none, shows that there is a strong movement in Turkey to bring the country back to a more plural and democratic state than we see it in?

Baroness Goldie: I thank the noble Baroness, who raises three important issues. We share concerns about the detention of the chair of Amnesty International, Taner Kiliç, and that of other lawyers. I am pleased that staff in the embassy in Ankara and the consulate in Istanbul met Amnesty International staff in June to express their support. The Foreign Secretary raised Mr Kiliç's detention directly with the Turkish Foreign Minister recently, and our embassy in Ankara, including our ambassador, has also raised that matter at a senior level with the Turkish authorities. We also share the noble Baroness's concerns about the detention of Idil Eser, the director of Amnesty International Turkey. The Prime Minister raised with President Erdogan at the G20 summit the issue of Idil Eser, also emphasising the importance of fundamental rights and the rule of law. This final point of the noble Baroness's question referred to freedom of expression. Yes, of course we support that; we are concerned about the actions against Turkey's oldest independent newspaper and against two journalists working for it, and we strongly encourage Turkey to protect freedom of expression. We feel that respect for the freedom of the media is essential for the long-term health of Turkish democracy.

Lord Collins of Highbury (Lab): My Lords, the noble Baroness, Lady Anelay, said that our influence in Turkey,

“is directly related to our ability to gain access to the highest levels”.—[*Official Report*, 2/3/17; col. 949.]

She was of course referring to the Prime Minister's visit in January. Does the noble Baroness agree that we need to gain access to the highest levels, and will she reflect on her comment, in that perhaps dashing Turkey's hopes and aspirations of EU membership is causing a lot of these problems we now face?

Baroness Goldie: I am not sure that I totally understand the latter part of the noble Lord's question. In principle, the United Kingdom Government have been supportive of Turkey's accession to the EU. My earlier comments were in specific—

Lord Collins of Highbury: By leaving the EU—

Baroness Goldie: By leaving the EU we enter a new world with new opportunities. However, as I indicated to the noble Baroness on the Liberal Democrat Benches, if our Prime Minister, as Prime Minister of the United Kingdom—whether we are in or out of the EU—can raise with the President of Turkey a fundamental issue of vital importance like the detention of Idil Eser, that is exercising clout and influence where it matters.

Electric Car Ownership *Question*

3.29 pm

Asked by Baroness Deech

To ask Her Majesty's Government what steps they are taking to promote electric car ownership.

The Parliamentary Under-Secretary of State, Department for Transport (Lord Callanan) (Con): My Lords, we have a number of initiatives in place to encourage ownership, and are investing more than £600 million up to 2020 to make the UK a leader in the development, manufacture and use of electric vehicles. We are cutting the up-front costs of purchase with our plug-in car, van and motorcycle grants, and helping meet the costs of installation of charge points in homes, on residential streets and in workplaces right across the UK.

Baroness Deech (CB): I declare my interest as the proud owner of a new all-electric car. May we seek guidance from the Government on this question? Is the future to be all-electric in order to reduce pollution and a reliance on Middle Eastern oil, in which case we need more infrastructure and more points, including right here in the House of Lords car park: or is the future not so good because there are downsides to driving all-electric vehicles—for example, the cost of extra electricity? We need an answer because we do not want to find ourselves with another diesel débâcle—good yesterday but not so good tomorrow.

Lord Callanan: The noble Baroness makes some important points. Of course, a shiny new electric car is useless if there is nowhere to charge it up. However, I am pleased to tell her that we already have over 11,000 public charge points in the UK. We have Europe's largest network of rapid chargers. In the Autumn Statement last year, the Chancellor announced additional funding of £80 million for charging infrastructure for the period to 2020. Alongside this, Highways England has £15 million to expand the existing rapid charge point network.

Lord Lea of Crondall (Lab): My Lords, is it not a fallacy to say that we are using less oil? Electricity does not come from nowhere. Is it not a fact that until recently in this country electricity was produced roughly 20% from nuclear, 20% from coal, 40% from gas and oil, and 10% and rising from renewables? That is where electricity comes from. The effect that electric cars have on the streets of London is very interesting, but it has nothing to do with the generation of electricity.

Lord Callanan: Of course, the noble Lord is correct. The lifecycle CO₂ value of an electric car depends on where the electricity is generated. That is a statement of fact.

Lord Deben (Con): Is my noble friend aware that the report of the Committee on Climate Change makes the point that many more vans are used today because of e-commerce and that many of those vans are very damaging in terms of pollution? Do the Government have a special way of ensuring that emission levels from vans are reduced by making them turn increasingly to electricity, which of course is very sensible for short runs?

Lord Callanan: Given his role on the Committee on Climate Change, my noble friend is probably well aware that we have an investment programme to encourage the take-up of electric vans, cars and motorcycles. You can receive a grant to purchase one.

Baroness Walmsley (LD): My Lords, is the Minister aware that in England and Wales there are over 1,000 nursery schools looking after 47,000 young children that are very near main roads with illegal levels of nitrogen dioxide and the small particulates that come from diesel cars? These can not only cause lung disease but have an effect on children's brain development. So when will the Government start regarding the rollout of electric vehicles as a serious public health matter, not just for now but for the future?

Lord Callanan: We have the largest investment programme for electric vehicles in Europe and we are the largest market for electric vehicles in Europe. One in five electric vehicles sold in Europe is manufactured in the UK. We have an extremely ambitious programme. Indeed, it was started under the coalition Government, and I would have thought that the Liberal Democrats would be quite proud of that.

Lord Rosser (Lab): My Lords, I presume that encouraging electric car ownership is a cross-departmental government policy, and the noble Lord is of course answering on

behalf of the Government as a whole. What is the Government's estimate of the impact of the increase in electric car ownership over the next five years and the next 10 years on the tax take from the sale of petrol and diesel fuel, and how will the Government compensate for or make up any reduction in such tax revenues resulting from increasing electric car ownership?

Lord Callanan: Noble Lords will probably realise that it is very dangerous for me to speculate on what the Chancellor might do in future Budgets with regard to tax levels.

Lord Craig of Radley (CB): My Lords, is the Minister aware that insuring electric cars appears to be extremely expensive? Certainly my attempts were declined: I could not get insurance, even though I have a complete no-claims bonus—the full length. When I did eventually find an insurer, it was going to cost me £1,500—so I have not got an electric car.

Lord Callanan: I think the noble and gallant Lord might find that that was less to do with the car and more to do with his personal circumstances.

Noble Lords: Oh!

Lord Callanan: I am sure that were he a female driver, it would be much cheaper.

Lord Campbell-Savours (Lab): My Lords, would the Minister confirm that you do not need an expensive, fast-charging point for an electric car? You can charge an electric car with a 13 amp domestic plug and a 3 kilowatt feed.

Lord Callanan: That is of course true—it just takes longer.

Lord Dobbs (Con): My Lords, I am truly enthused by my noble friend's enthusiasm for electric cars. Being an old romantic, when I look 10 or 15 years ahead, I see electric and autonomous vehicles changing the way that we live, transporting people safely and cheaply, taking them from the point they start to where they want to go. Where does HS2 fit in with this?

Lord Callanan: In my brief period answering Questions in this House, I have come to marvel at the ability of noble Lords to get off one subject and on to another. HS2 is also an environmentally friendly mode of transport, similar to electric cars.

Unaccompanied Asylum Seeking Children (Legal Advice and Appeals) Bill [HL] *First Reading*

3.37 pm

A Bill to make provision for unaccompanied asylum seeking children to receive legal advice and for extending the deadline for an unaccompanied asylum seeking child to appeal an asylum decision.

The Bill was introduced by Lord Roberts of Llandudno, read a first time and ordered to be printed.

BBC Licence Fee Bill [HL]*First Reading*

3.37 pm

A Bill to establish the BBC Licence Fee Commission to make recommendations to the Secretary of State on a settlement for BBC funding from 1 April 2022, after conducting public and parliamentary consultation.

The Bill was introduced by Lord Best, read a first time and ordered to be printed.

Cosmetic Surgery (Standards) Bill [HL]*First Reading*

3.38 pm

A Bill to make provision to include medical practitioners specialising in cosmetic surgery in the Specialist Register for medical practitioners.

The Bill was introduced by Lord Colwyn (on behalf of Lord Lansley), read a first time and ordered to be printed.

Awards for Valour (Protection) Bill [HL]*First Reading*

3.38 pm

A Bill to prohibit the wearing of medals or insignia awarded for valour, with the intent to deceive.

The Bill was introduced by Lord Brooke of Alverthorpe, read a first time and ordered to be printed.

Modern Slavery (Transparency in Supply Chains) Bill [HL]*First Reading*

3.38 pm

A Bill to make further provision for transparency in supply chains in respect of slavery and human trafficking.

The Bill was introduced by Baroness Young of Hornsey, read a first time and ordered to be printed.

Air Travel Organisers' Licensing Bill*First Reading*

3.39 pm

The Bill was brought from the Commons, read a first time and ordered to be printed.

Space Industry Bill [HL]*Second Reading*

3.40 pm

Moved by Lord Callanan

That the Bill be now read a second time.

The Parliamentary Under-Secretary of State, Department for Transport (Lord Callanan) (Con): My Lords, the UK space industry is a British success story—a story of invention and innovation, of enterprising spirit and global ambition: from our close collaboration with the European Space Agency, which continues to yield ground-breaking science and discovery, to our globally respected satellite companies leading the small satellite revolution. I know that many noble Lords share my admiration for the UK's achievements in space and will be keen to contribute to its continued success, which is why I welcome their input into and scrutiny of the Space Industry Bill, a Bill that will boldly go where no Bill has gone before.

Very few people realise how important space is to our everyday lives. Satellites in particular provide many critical services that we all take for granted. Navigation satellites, for example, provide the precision timing needed to enable global financial transactions. They support the safe and efficient use of our seas and skies, and help us all to find our way in unfamiliar surroundings. Weather satellites equip farmers, health workers and the emergency services with the foresight to protect people, property and produce from extreme weather, and provide unique insights into our changing climate. Communication and imaging satellites let us monitor disasters and threats to our national interests, and allow us to watch live news events unfolding anywhere on earth. Indeed, satellites, a specialty of the British space industry, play a crucial role in our economy, supporting more than £250 billion of our GDP, and provide the data to power the future of our digital economy. Noble Lords can see why space has been made part of our critical national infrastructure.

This is how we use space today. Looking to the future, ambitious new plans could require tens of thousands of new small satellites to be launched and serviced. This surge in demand is the result of the declining costs of satellite manufacturing and launch services. What was once possible only at huge public expense is now being pursued commercially by companies such as SpaceX and Rocket Lab, spurred on by the global market for small satellite launch that could be worth £25 billion over the next 20 years. This is not the only opportunity. Sub-orbital flights to the edge of space offer another emerging commercial prospect. Such flights would not only be thrilling for paying customers but could expand the boundaries of human knowledge by giving our world-leading science sector access to the unique environment of microgravity, enabling exciting opportunities for discovery in many branches of science. Empowering our aerospace sector to pursue this opportunity will ensure that future aircraft technology comes by way of British innovation,

keeping us at the forefront of aviation as we move into an exciting future of long-distance, high-speed air travel.

We have in front of us opportunities of significant strategic and economic consequence. The UK is well equipped to pursue commercial markets in both small satellite launch and sub-orbital flight. Our northern latitude, abundant coastline, aviation heritage, great engineering capability, thriving space sector and business-friendly environment are all factors which make the UK an attractive destination for these services. In line with our modern industrial strategy, we will strengthen our economy by allowing UK companies to benefit from access to new opportunities and supply chains. The sky will no longer be the limit for our talented scientists, engineers and entrepreneurs, and we will attract the capability, infrastructure and investment needed to prepare for the next 50 years of spaceflight.

For example, British companies like Reaction Engines are developing engine technology which could revolutionise the way we get to and from space, making it easier and cheaper to escape the earth's atmosphere. If we fail to prepare for these opportunities, the UK risks losing out to early adopters overseas and would not receive the benefits of this British innovation. However, we must move quickly. Experts are forecasting a sharp rise in demand for launch services from 2020 and we are not alone in pursuing this market. The first movers in Europe are likely to gain a significant commercial advantage over those who arrive later.

A number of operators from the UK and further afield have expressed an interest in launching from UK spaceports. They recognise the benefits of setting up shop here, but until now have not had a sufficient legal framework to enable safe and secure operations. This is why we are here today. For several years we have been laying the groundwork for commercial small satellite launches and sub-orbital flight in the UK by understanding what regulation needs to be put in place to enable safe commercial spaceflight in this country; identifying the key characteristics of any potential locations from which commercial spaceflight operations could be safely launched, and the infrastructure and facilities that would be required; and developing an understanding of the complex array of technologies in this emerging market and exploring options and approaches to attract commercial spaceflight operators and investment to deliver Launch UK.

Our thanks must go to all those who have helped to inform, challenge and shape this policy, which has resulted in the Bill before us, which aims to boost the economy, British business, engineering and science by making the UK the most attractive place in Europe for commercial spaceflight. It provides for the creation of a regulatory framework to enable commercial spaceflight activities—both launch to orbit and sub-orbital spaceflight—to be carried out from spaceports in the United Kingdom. It will work alongside the existing Outer Space Act, which was enacted primarily to implement UK obligations under UN space treaties. To date, this has involved licensing of satellites launched from overseas.

The Bill has to be sensitive to the context of the emerging market, which is full of innovation, disruptive technology and rapidly evolving business models. In this

context it would be inappropriate and self-defeating to set down in the Bill language that would inflexibly bind the UK's ability to respond to this market as it emerges. Instead, we seek to be a global exemplar of good regulation by balancing flexibility and foresight with an absolute commitment to safety and best practice. As such, the Bill provides a framework for the development of more detailed rules in secondary legislation, supplemented by guidance and supported by a licensing regime.

I place on record my express and immense appreciation for the pre-legislative scrutiny already carried out on the draft Bill by the Delegated Powers and Regulatory Reform Committee and by the Science and Technology Committee in the other place to strengthen this framework. I know noble Lords will further build on this process with the benefit of their work, for which I am also grateful. Our collegiate approach will continue as we develop secondary legislation, consulting on key issues and providing confidence to investors and insurers that the UK will develop safe, business-friendly regulation in the public interest.

Our space industry extends to and benefits all territories in the United Kingdom, and potential spaceport sites have come forward from all across our union. The Bill extends to all those territories, except for certain provisions not extending to Northern Ireland and Scotland as described in individual clauses.

As I am sure noble Lords will see, the Bill is comprehensive in the measures it puts forward. These include the duties of the regulator, the intention being that space activities will be regulated by the Secretary of State acting through the UK Space Agency, and sub-orbital activities by the Civil Aviation Authority. It also provides for range and range control and the licensing of the range control service provider, operator and spaceport operator, setting out the circumstances in which regulators may grant such licences and where such licences are needed. It refers to informed consent, training, qualifications and medical fitness to ensure safe and effective regulation of persons taking part in spaceflight and associated activities.

The Bill also provides for safety regulations, investigation of accidents and security. In addition, we have offences against the safety of spacecraft, which draw on offences against aircraft and aerodromes in the Aviation Security Act 1982 and the Aviation and Maritime Security Act 1990 respectively. The Bill covers monitoring and enforcement, allowing the regulator to investigate and prosecute offences contained in or made under the Bill.

The Bill regulates liabilities, indemnities and insurance. We have chosen not to bind any operational policy decisions by specifying any cap on liability. The existing Outer Space Act permits only the capping of the operator's indemnity to the Government and contains no provision concerning the operator's liability to third parties. We consider that the liability provisions in the Bill are therefore more comprehensive. However, liability capping will be subject to further consultation to ensure that our policy and regulation on capping, and many more measures besides, are in the public interest.

The Space Industry Bill is necessarily broad in scope, but it benefits from the experience and best practice of international launch and our own world-class

[LORD CALLANAN]

aviation regulators, resulting in a safe, proportionate and comprehensive enabling framework in one piece of legislation.

In turn, the activities defined in the Bill and its subsequent regulatory framework will benefit many in the UK. Entrepreneurs will benefit from new opportunities to build innovative commercial enterprises off the back of launch services and small satellite data. Local economies will benefit from the creation of spaceport sites, with related jobs and opportunities in construction and hospitality. Our small satellite industry will have direct access to domestic launch capacity, reducing dependence on foreign launch services and enabling growth across the industry. British-based scientists will benefit from increased access to microgravity and investment in institutional capability in launch, spaceflight and related sciences, attracting world-class scientists to the UK. Young people seeking careers in science, technology, engineering and maths will gain new opportunities and greater inspiration from an expanding UK spaceflight industry. The UK as a whole will benefit from access to a strategic small satellite launch capability, contributing to our understanding of the world, the provision of public and commercial services, the delivery of national security and new opportunities for investment and export.

Half a century ago, the British rocket programme was considered unviable, but as the last rocket had already been built it was given permission to launch. Prospero, the small satellite that it successfully transported into space, was the first and, currently, only satellite to reach orbit on a British launch. Today, we stand at the dawn of a new commercial space age—an age in which we can once more reach for the stars, not at vast public expense or with our being dependent on the hospitality of others, but in the best spirit of British innovation by enabling, attracting and empowering commercial markets for small satellite launch and sub-orbital flight from UK spaceports.

So let us end Prospero's lonely record. Let us empower our best and brightest to reach higher than they ever have before, inspire the next generation to reach higher still and, in so doing, deliver the benefits that low-cost access to space will bring us all. In this spirit, I welcome scrutiny of and debate on the Bill. I beg to move.

3.53 pm

Baroness Bloomfield of Hinton Waldrist (Con): My Lords, the UK's space industry is important not only nationally but internationally. It already contributes substantially—approximately £13.7 billion to the UK economy and some 38,000 jobs. Workers in the sector are nearly three times more productive than the UK average. The UK's space sector is at the forefront of developments and therefore poised to make an even greater contribution in the form of space transportation, generating thousands more jobs throughout the sector and inspiring many young people to pursue studies and careers in the sciences. The aim of the UK Space Agency is to ensure that the UK develops into a major global player in this fledgling sector. It is important that the Government, through the passing of legislation as well as the publication of policy, give strong support to this aim.

However, it is also important to emphasise that a Bill that introduces regulation can, unless carefully administered, also bring with it the undesirable potential for overregulation, wiping out the benefits that regulation can provide. It is vital that the space industry regulator, whether the Civil Aviation Authority or another body, should act in a positive and not a negative way when exercising its discretionary powers. As Sir Stephen Dalton, former Chief of the Air Staff and president of the Royal Aeronautical Society, writes in its magazine:

“The use of and access to space is growing exponentially and the increasing international commercial sources of such access are only likely to become more varied over the coming decade. Our community needs to encourage all the relevant agencies and organisations to move as speedily as possible to ensure that the facilities, spaceports, launch co-ordination and recovery options, as well as the regulatory structures, are framed and agreed in line with the greater access and use of space. International and inter-governmental agreements will be needed and new ways of working together on the continuum which is space, need to be brokered and agreed as soon as practicable”.

It is to be noted that much of the contents and format of the Bill mirror many of the provisions of the current civil aviation Acts, with the advantage that the interpretation of comparable provisions has been tried and tested previously over a number of years. This provides legislative confidence. It is unarguable that ensuring public safety must be the regulator's overriding consideration when exercising its statutory duties. Regulation is required and will provide public and investor confidence in space transportation as well as in the other areas the Bill covers. All these factors are welcome.

What is missing from the Bill, however, is any balancing provision comparable to that found in Section 1 of the Civil Aviation Act 1982 placing the Secretary of State under a general duty of encouraging measures for the development of space transportation within the UK. This is a highly valuable and effective provision and can no doubt be the subject of further consideration during scrutiny of the Bill in Committee. It is to be noted that the US Government expressly recognise the need to facilitate a pro-growth environment for the developing commercial space industry by encouraging private sector investment and creating more stable and predictable regulatory conditions. It is now for the UK Government to do so too.

It is not as if the UK is a follower and not a leader in the aviation and aerospace sector. The UK has been at the forefront of the development of aviation since the first powered flights by Cody at Farnborough in 1908 and arguably half a century before that, when, in 1849, Sir George Cayley strapped a hapless young local boy into his prototype glider for its first test flight: there was no such thing as the CAA or any regulatory control in those days. Since the 1950s, space flight has been developed with the UK occupying a leading role and today the UK is a major user of space and a provider of space technology to the world. Space is strategically important to the UK. The Government's goal of making this a £40 billion sector by 2030 is ambitious but attainable, with the right economic and legislative climate in place. In the absence of overregulation, especially when compared with other nations, including many in Europe, we have the drive, the knowledge, the universities and a world-class aerospace

industry to ensure that the UK becomes a world leader in the promotion and provision of space transportation and space technology. It could be said that we are at the second dawn of UK aerospace, following which space travel becomes commonplace. Let the UK Parliament, Government and the devolved Administrations play their respective parts in its achievement.

3.58 pm

Lord Hunt of Chesterton (Lab): My Lords, I welcome the Bill. There is no doubt that the UK's growing involvement in space science and technology over the past 30 years, from a rather low point, has now definitely encouraged greater general interest in science and technology in schools and universities. The Russians and then the United States knew that animal and human participation was a great stimulus to popular interest—it was a dog first, as noble Lords will remember, and then some humans.

The UK has seen the same stimulus, with Helen Sharman becoming the first woman from the UK in space and then Tim Peake's space voyage last year. At the Royal Institution Christmas lectures two years ago, full of young, enthusiastic scientists, and at a Science Museum event recently, Tim Peake communicated with thousands of schoolchildren as he demonstrated his scientific experiments in the space environment. The excitement and risk of the voyages were definitely part of the attraction.

Along with fundamental scientific experiments, satellites have provided many practical and commercial benefits in navigation, communication and monitoring the environment near and above the earth's surface, such as for weather and climate, ocean waves, volcanoes and the huge and dangerous effect of solar storms. As director of the Met Office, I represented the United Kingdom at the European meteorological satellite organisation, which worked closely with the UK space industry.

The UK has developed its space involvement through its membership of the European Space Agency and through UK and European-wide companies such as Airbus. Some of the UK's satellite business was developed with Russian launchers; particularly, for example, the Surrey satellites. This continued involvement with European space research and commerce has competed and collaborated with the activities of the major space nations. An important aspect of the ESA business has been launching satellites from its base in French Guiana through the company Arianespace. The Bill proposes that satellites will be launched from one or more bases or spaceports in the UK. These will have to be carefully regulated, as set out in the Bill.

The Bill has to be broadly framed so that, first, spaceflight provides new business: for example, tourism and testing new systems and materials. The UK's small satellite companies, such as Surrey, have been very successful—but they are now part of an international company. This approach should enable small countries to have their own satellites; for example, that company has worked closely with developing countries around the world. I believe that the use of space for development in these countries is a very important part of our space programme, and with the UK making a substantial financial contribution to developing countries, I trust

that that will be part of the expenditure on space. Secondly, there will be connections between the international space station and low-orbit satellites. Through Tim Peake and others, the UK has been involved in the international space station.

Another interesting aspect to the science and technology is associated with microgravity, as the Minister described, with many applications of the extraordinary physical and biological experiments; for example, relating to drugs, aerosols and odours. There is a nice example on Google of what happens to a candle lit at ground level: when it goes up into space and gravity drops, the flame turns blue. I thought your Lordships would like a little bit of science.

The ranges for civilian operations extend over land and sea. Presumably these will be privately owned. Will foreign ownership be permitted? Surely security is important. What is not clear is how the Bill relates to the current regulations of United Nations agencies, which do not get a very full audience in this House, I am afraid. For example, the International Civil Aviation Organization—ICAO—will play a significant role in the growing business of space. ICAO will also have an important role with regard to UK satellites being launched from airspace or from foreign aircraft. Another aspect is the International Atomic Energy Agency, which regulates radioactivity and nuclear materials. Will any nuclear materials be involved in these near-orbit launches? I believe they should be.

There is also the question of whether there will be launches from shipping or oil platforms. I was at the annual meeting of the International Maritime Organization last week. The UK plays a prominent role in that UN agency. For example, one might have the situation that we have at the moment with ships with flags of convenience; some small countries have a large number of ships with their flag. One wonders whether the same thing may happen here. That needs to be considered very carefully.

I support the enthusiastic approach of the Minister to the Bill, which has my support.

4.05 pm

Lord Moynihan (Con): My Lords, I declare two interests. First, I am a member of the Delegated Powers and Regulatory Reform Committee. As the Minister said, its involvement with this legislation began early. It was invited to comment on the draft spaceflight Bill at the request of the House of Commons Science and Technology Committee towards the end of the previous Parliament, a contribution which was welcome as a precedent and which, in turn, led to substantial changes from what was, in effect, a skeletal Bill to one where the number of regulations subject to the affirmative procedure has increased from four to 13.

My second declaration is that I live in Prestwick, having moved to Scotland in December last year. I take an active interest in the area, not least because the office I occupy overlooks Prestwick Airport. I am a strong believer that Scotland and south Ayrshire, in particular, can significantly benefit from being designated and licensed as one of the first airports to enable commercial spaceflight activities—not vertical-launch rockets, but the horizontal launch of modified 747s to

[LORD MOYNIHAN]

include satellites, scientific experimentation and suborbital spaceplanes. This part of Scotland is already a hub for high-tech engineering and experts in the aviation industry. It is also home to a wide range of entrepreneurially minded individuals from Buzzworks, with its nationally achieved award-winning restaurants across Ayrshire, to the remarkable business acumen and philanthropism of Tom and Marion Hunter. This is an area ready to take on the challenge as a home for high-tech companies as well as being one of the most beautiful areas of the United Kingdom. However, despite that paean of praise, I have no commercial interest in the subject of the Bill. My views are personal and underline my belief that south Ayrshire can become a thriving business centre for the supply and service sector to support spaceport activities.

In his excellent speech, the Minister referred to the way in which links with schools can provide the vital local benefit of preparing young people for careers in aviation technology and the spaceflight industry. The area can become a thriving economic zone lifting it to the forefront of technical expertise with training programmes, a visitor centre and some 880 acres of land for aerospace-related development adjoining Prestwick Airport. Prestwick Aerospace already employs more than 3,000 highly skilled employees. It is the largest aerospace cluster in Scotland. If other sites are licensed in Scotland, the aerospace cluster at Prestwick will be able to service their development and act as the hub for technical and supply activities, bringing significant jobs to the local communities.

The educational links are perhaps the most exciting for the area. Ayr College, Strathclyde University, Glasgow University, UWS and the Astronomy Technology Centre at Edinburgh University can all be significant beneficiaries. Prestwick Airport is well located and has the best surface links of any Scottish airport. Its local weather microclimate is recognised as the best in the UK. It is not looking to become a Cape Canaveral with vertical launches—more remote locations would fit that bill—but it would focus on horizontal flights.

Of course, this Bill is not just about Prestwick. As the Minister stated, there are many opportunities throughout the United Kingdom, and it is my firm opinion that it will be necessary to license at least two spaceports in the UK to develop and deliver a sustainable and effective solution for launch operations, including, most importantly, diversionary runway capabilities.

Addressing the whole of the UK, the regulatory environment has the potential to support companies in their bid to help government,

“capture 10% of the global space market”,

by 2030. The most immediate beneficiary of this Bill will be the opportunity to deliver a significant proportion of the estimated 3,500 to 10,000 satellites that are due to be launched by 2025. It will also facilitate the building of bigger and more technologically advanced satellites and remove the need for UK companies to use test facilities located abroad.

Today is the first step in the parliamentary process to create the legal framework to enable exciting new technologies to operate safely from the UK. It is a welcome clear signal of the UK's commitment to

enable commercial spaceflight to be carried out from UK spaceports, including the launching of small satellites into orbit, and permitting manned suborbital operations for scientific experiments and space tourism. It is essential that through the legislation before us we create a regulatory process which is internationally competitive for the billions of dollars of investment income which can boost the economy, British business, engineering and science by making the UK the most attractive place in Europe for commercial spaceflight and competitive with any regulatory system in the world. That is a significant challenge, but the most important objective is to provide a comprehensive and proportionate regulatory framework to manage risk, ensuring that commercial spaceflight and everyone working in the sector remain safe. The measures in the Bill to promote public safety by providing a regulatory framework to cover operational insurance, indemnity and liability are important in this respect.

Committee stage will provide us with the opportunity to scrutinise the Bill in detail. When we do, there are a number of key issues which we need to consider, some requiring an important balance between regulation and the vital importance the private sector attributes to the Bill providing a competitive framework, with enthusiasm and backing from the Government and a level of funding support commensurate with commercial success. As my noble friend the Minister said, we are talking about intense international competition to attract inward investment. The Government will need to step up to the plate as much as the private sector and will need to do so quickly if we are to gain competitive advantage.

I urge my noble friend the Minister to ensure that we do not stifle this opportunity by overregulating, as other nations such as Spain, Portugal and Norway are preparing competing legislation and launch sites. I ask my noble friend to give the House his commitment that the final legislative framework will ensure that the Government recognise the reduced risks posed by small-scale microlaunchers and nanosat payloads, each exceptionally valuable new areas where Britain could lead the world with “soft touch” regulatory oversight, while always recognising that there is no room for manoeuvre when it comes to the paramount question of safety. To allow this industry to succeed in the long term, it is essential that licensing, insurance and range-tracking costs are appropriate to the level of risk, so that the UK can build a globally competitive national space launch capability for the UK. A burdensome regulatory requirement would negatively impact this opportunity, which will see a massive growth in satellites and an ultimate colonisation of space.

From the perspective of my work on the Delegated Powers and Regulatory Reform Committee, I believe the Government have already moved significantly to improve the Bill, which is very welcome. I was concerned that in the original draft Bill, the Government appeared to dispense spaceport operators from any statutory requirement in any Act of Parliament, without any parliamentary procedure whatever. Now, the Government have acknowledged, perhaps implicitly, the committee's argument that a regulator's job is to regulate compliance with the law not to dispense people from complying with the law.

It is also welcome to see that the Government have taken on board many of the committee's recommendations. The number of regulations subject to the affirmative procedure has increased from four to 13, and two objectionable Henry VIII powers have been removed altogether. However, my one remaining concern in this area is the question of safety in a new, fast-moving and changing technology-driven sector. In the case of safety regulations under Clause 18, my noble friend justified making the first set of regulations affirmative, and subsequent regulations only negative, on the ground that the continuous updating of safety regulations should occur in a "nimble and proportionate" way—an unfortunate turn of phrase. No one would want safety regulations not to be updated because of the alleged difficulty of scheduling affirmative debates. I had ministerial responsibility for responding to both the Hillsborough tragedy and the Piper Alpha disaster, and the safety of the public must always be paramount. It sits as a priority alongside the safety of the nation. I very much hope that the Government will further reflect on the compromise solution on offer in Clause 18. I believe the issue of safety is sufficiently important to require the affirmative procedure whenever and wherever safety regulations are revised and updated, particularly in this new industry. It should be for the House to be proportionate and not the Government.

I also hope the Minister can respond to the excellent comments made by the noble Lord, Lord Hunt, about the international relationships we have in this sector. I hope he will give a commitment today that we should be working very closely with the FAA in the United States, looking to learn from its regulatory framework and seeking to agree a bilateral arrangement to submit export licences for approval. I hope urgent progress is being made on this front and that the question of what is US technology and how it will be controlled if not on US soil is resolved before we leave Committee. The FAA in the States had never seen spaceflight before. It had to work through the role with all interested parties, as we should. There was a need to determine the right balance between the roles and the responsibilities of each and every party. We need similar progress in the UK, and I hope that my noble friend can set out a timeline for the measures set out in the Bill until the first licences and approvals are granted.

My second request to the Government is that, notwithstanding which operator is appointed, the sector needs to be joined up. There is talk of the Space Agency investing a sum of £10 million. We need to recognise that this will not go far in a multibillion pound industry if we are to meet the Government's objectives. The cost of a suborbital flight system is of the order of £120 million, and modifying a 747 as a carrier aircraft stationed in a UK airport—the type envisaged for airports such as Prestwick—is unlikely to cost much less than £700 million. Yet we have no real idea how the Space Agency is approaching the grant process and how it will reach decisions about which sites it backs and which operators at those sites. It has talked of £10 million being available, but it is not clear whether that will be per site or per operator. Not to put too fine a point on it, as I mentioned, £10 million is de minimis funding in the context of the

space industry, especially if the UK wants to get behind it and establish a new, exciting growth industry as we approach Brexit.

My third and final observation is that we want to avoid regulatory mission creep. We must at all times maximise the participation of the private sector while providing a safe, secure, transparent and accountable regulatory framework, and there is no time to lose.

The Bill is a welcome and important step in the right direction, and I very much hope that when the House moves into Committee, we will have the momentum towards further and accelerated progress and clarity for the future of an important sector in a safe working environment.

4.16 pm

Lord McNally (LD): My Lords, it is a great pleasure to follow the noble Lord, Lord Moynihan, in what I thought was a thoughtful and constructive speech. There are a number of reasons why I wanted to speak in this debate. I am a member of the All-Party Space Group. I am the treasurer of the Parliamentary Internet, Communications and Technology Forum—Pictfor. I have a son who works as a space engineer in Germany, and I was inspired by the adventures of Dan Dare in the *Eagle* in the 1950s. It is interesting to remember that Dan Dare was set in the 1980s, and the assumption was that Britain would be leading an international space effort to Venus by then. Of course, Dan Dare also inspired a generation of children with the idea of space travel and condemned schoolmasters across the land to the nickname "the Mekon" after Dan Dare's small, green nemesis.

The moon landing in 1969 sustained the idea that space travel was just around the corner. The reality has been much slower and more circumspect, which prompted Sir Richard Branson to invest in space travel via Virgin Galactic, explaining as he did so that,

"government is not in the business of taking you and me to space; they have other priorities. It is up to private enterprise to learn from what government had started and pave a way for other applications for their technology".

It is that thinking which is at the heart of the Bill. This is not the start of a mega state-funded journey into space. As the Explanatory Notes make clear:

"The Bill provides for the regulation and licensing of space activities".

It is an enabling Bill which is in some ways very modest in its ambitions. It employs what I would describe as the "Field of Dreams" approach. Noble Lords will remember that in that film, Kevin Costner was encouraged to build a baseball stadium in the middle of nowhere with the heavenly advice, "Build it and they will come". That is very much the advice that the Minister is giving us today.

The task of Parliament is to stress-test the idea in terms of whether there is a market and if there are any legal, safety or environmental issues which have to be taken into account. In terms of public support for the space industry, my noble friend Lady Randerson, who unfortunately cannot be with us today, has warned against pouring resources into projects of unproven merit while areas of transport are crying out for investment funds. That is a wise warning. On the other

[LORD McNALLY]

hand, we do not want to be like stagecoach manufacturers at the end of the 19th century: leaders in our field but oblivious to the fact that Henry Ford was about to roll out his Model T.

I mentioned that I was treasurer of Pictfor, one of the largest of the all-party groups looking at the implications for our economy and society of the new data technologies. From our agenda I see that we are on the brink of an explosion of demand for launch facilities to meet the rapid expansion of telecommunications and related technologies which already depend on satellites—from car navigation systems to mobile phones, from television services to cash transfer and withdrawals. In terms of demand for satellite launch capacity, we already have a chronic shortage.

I recently went to a presentation demonstrating the wide range of new technologies and services now being developed which will rely on satellite communications for their efficiency and success. The idea of driverless cars has already caught the public imagination. They will need a satellite-based support system far stronger and more accurate than the GPS systems with which we are all familiar. In addition to driverless cars, there is artificial intelligence, the internet of things and the development of 5G. This technological tsunami is already under way and almost all of it will involve satellite and space technologies in one way or another.

The US inventor/engineer/entrepreneur Elon Musk is talking of constellations of thousands of satellites, and it is clear that the next stage in the development of the space industry will involve building the capacity for thousands of launches for many years to come. So, in terms of spaceports, if we build them the customers are likely to come. It is also true that space travel, as mentioned by the noble Lord, Lord Hunt of Chesterton, retains the capacity to excite and inspire, particularly among the young. One only has to witness how the exploits of Helen Sharman and Major Tim Peake inspired great national pride and interest. I understand that Tim Peake is already scheduled to return to the International Space Station, so we will soon have a Brit in orbit once again, with the accompanying rise in public interest in space travel, and we wish him well.

I appreciate that this Bill is about not the International Space Station but what I might call the bread-and-butter side of the space industry, for which this Bill offers the framework legislation. Here we have to ask ourselves if this is a sector where we have the know-how and the capacity to succeed. It seems that here again the auguries are good. The UK is well placed to capitalise on the expansion of the space industry, with UK companies, such as Clyde Space and Surrey Satellite Technology, which has been referred to, already at the forefront of small-scale satellite manufacturing.

In preparation for this debate I received a briefing from another British company, Orbex, which is hoping to develop full orbital launch capabilities in Scotland with backing from the UK Space Agency and the European Commission's H2020 programme, as well as private venture funds. Some of our leading universities are also pathfinders in the field. Surrey Satellite Technology is a spin-off from the University of Surrey. The University of Leicester is working on plans to introduce an

automated approach to satellite building that is similar to that used in the car and aircraft industry. This will be collocated with the National Space Centre.

Last month it was announced that the first commercial astronaut training centre will be built in the UK. The £120 million Blue Abyss facility will be constructed at RAF Henlow in Bedfordshire. In addition to these purely British ventures, a number of international companies, such as Airbus and Thales, are working here on space ventures. Private firms, such as Sir Richard Branson's Virgin Galactic and Elon Musk's SpaceX, are also in the field.

At the moment we are also well represented in European Space Agency projects and the number one investor in the main commercial programmes: telecommunications, earth observation and navigation. Can the Minister give an assurance that our involvement in the European Space Agency and its projects will be fully protected and sustained post Brexit? The space industry is a highly collaborative industry. For it to succeed, it must have access to public, private and international funding, co-operate extensively with other states, have access to the free flow of people and ideas and be governed by a robust regulatory structure.

Are the Government undertaking any risk assessment as to impact of Brexit on our space industry? There are already worries in the sector, which thrives on the freedom to recruit the best and brightest. A hard Brexit that included the UK's exit from the Galileo satellite navigation programme and brought in cumbersome border checks would completely undermine the UK's desire to be the European hub for satellite launches. The truth is that Brexit is bound to cast a long shadow over our future prospects in the space industry. Since the Black Arrow and Blue Streak projects ended our ambitions as an independent player 50 years ago, as the Minister said, the emphasis of the past 30 years has been on the collaborative European efforts. Compared with other European space nations, the UK still has a very small national programme. Although the Government are putting great emphasis on encouraging the private sector, there is a case for a national programme to complement our ESA investment.

There are a range of other issues relating to insurance, liability and licensing, which will probably be best dealt with in Committee. In advance of that, have the Government considered plans for establishing a regulatory advisory group that would allow would-be participants to feed in ideas and concerns as the projects develop? It may be that lessons can be learned from other industries about safety and security concerns and engagement with the communities where they are located. The nuclear industry has a lot to teach us in that respect. Has any study been made of the likely environmental impact of spaceports and rocket launching? Has a full impact assessment been made of the cost of protecting spaceports from terrorists or other possible attacks?

The noble Lord, Lord Hunt, raised a number of other issues, which will need clarifying, on safety and international laws. We have an important job to do in getting the balance right between entrepreneurial freedom and public safety. I received two briefings which illustrate the dilemma that we face. From Orbex, the British company that I mentioned earlier, I received the plea:

“It must be paramount that the UK does not stifle this opportunity by over-regulating, as other nations such as Spain, Portugal and Norway are readying legislation and preparing launch sites. The UK should ensure that the framework legislation recognises the reduced risks posed by small-scale micro-launchers and nano-sat payloads, such exceptionally valuable new areas where Britain—and Scotland in particular—could lead the world with a soft-touch regulatory oversight. It is essential that licencing, insurance and range-tracking costs are appropriate to the level of risk”.

I think that the noble Lord, Lord Moynihan, got the same briefing, but it is worth repeating.

On the other hand, both the Science and Technology Select Committee in its report on the Bill and a detailed brief that I received yesterday from the Royal Aeronautical Society raised a range of issues about safety, liability, legal scope, planning, environmental impact and so on. Those are matters that we will be able to raise more effectively in Committee. Briefs arguing for a light touch and for specific regulation are helpful and will be used at the appropriate time. I welcome the offer that I received today from the Minister's office to engage with all sides of the House as this goes forward. As the noble Baroness, Lady Bloomfield, and others have said, we need to get the balance right with regulation that gives assurances about safety and freedom for entrepreneurs to take this forward.

As I said at the beginning, I am unashamedly of the Dan Dare generation. I have an *Eagle* annual that is 60 years old, which has a fully diagrammed article on how to build a spaceport, which I am very happy to provide to the Minister as part of the new spirit of collaboration. He has already laid claim to being part of the “Star Trek” generation by his opening quote—I had thought of him as more of a Buzz Lightyear than a Spock. I think that we will have an interesting time with this Bill and I am sure that, in the same spirit as that in which he introduced it, we can make it a good Bill for a very exciting industry.

4.30 pm

Lord Dunlop (Con): My Lords, one hazard of speaking later in the debate is that many of the good points have already been made, so I apologise in advance if I indulge in a bit of reiteration. I warmly welcome this Bill; I do not approach it as a space expert but as an amateur enthused by what a recent Goldman Sachs report called “the second space age”, with the space economy forecast to become a multibillion-dollar market within the next two decades. It is a market in which the UK and UK businesses can play a leading role, if we are able to establish early-mover advantage. As has already been mentioned, countries such as Spain, Portugal and Norway are all preparing to bring forward competing legislation and launch sites.

It seems to me that that is what the Bill is all about. A globally competitive and successful space industry cannot be built if we do not first put in place a regulatory framework to make it possible—one which recognises the space industry as it is today, not as it was 20 years ago. Traditionally, space has been dominated by Governments and government agencies with significant reliance on public funding, which is not surprising given the hitherto high costs of space entry. The UK space industry has therefore had to argue its corner for

funds in the face of competing demands, and it has not always had a sympathetic hearing. Many felt that it was a “nice-to-have”, associated with exotic inter-planetary exploration, compared with the immediate and pressing needs of funding our schools and hospitals.

A few years ago I worked with the UK's leading space company—then called Astrium, but now Airbus Defence and Space—on how best to argue for continuing investment in space. Our case had the not very original working title of “Bringing space down to earth”. Our argument was that the space industry is not some esoteric luxury; it is highly relevant, and increasingly essential, to improving everyday lives here on earth. GPS, memory foam, LEDs and artificial limbs all owe something to space innovations. If we are going to feed the world's population—forecast to be 9 billion in 30 years' time—food production needs to increase by 70%. More precise weather forecasting can help to improve crop yields and better tracking of food shipments can reduce the number of perishable cargos delayed or damaged in transit. More-effective earth observation, brought about by advances in satellite technology, makes all this possible. As we wrestle here in the UK with how to deliver at an acceptable cost superfast broadband to the final 5% of the hardest-to-reach properties, or effectively to track and enforce fishing rights in our territorial waters post Brexit, better answers are likely to be found in developments in space.

The Government are to be commended for having the foresight to recognise the strategic importance of the UK's space industry. I pay tribute to my noble friend Lord Willetts, who is not in his place today but who, as Science Minister, was such a great champion of the space industry, overseeing the establishment of the UK Space Agency and an increase in our budgetary contribution to the European Space Agency.

As we look ahead, and as we have already heard today, the space industry is changing fast, driven by falling costs and lower barriers to entry. Satellites are becoming smaller and lighter, and reusable technology and other developments are cutting the cost of launches. A sector hitherto dominated by the public sector is now increasingly seeing an influx of private and commercial players. Private investment in space has been growing rapidly in recent years.

Three-quarters of private investment activity in the space sector since 2000 has taken place in the last five years, with eight space start-ups on average per year, and more than 50 venture capital firms had invested in space enterprises by 2015. As we have heard, private entrepreneurs such as Elon Musk, Jeff Bezos and Richard Branson are pioneering new space launch solutions.

While much attention is rightly paid to satellites and the value-adding applications derived from them, looking to the future, space tourism, mining asteroids for precious minerals and on-orbit manufacturing will no longer be in the realms of science fiction; they will become science fact.

The Bill is, of course, designed to facilitate the development of UK spaceports. As such, it begs one pretty big question: is the demand there to support one or possibly more spaceports in the UK? Structural changes in the industry suggest that demand is there,

[LORD DUNLOP]

as we have already heard. Traditionally, large and heavy satellites have been launched into geostationary earth orbit from, for example, the Guiana Space Centre on the equator. A new disruptive technology—the so-called CubeSat—opens up new possibilities. It measures just 10 centimetres squared, weighs less than three pounds and typically is used in low-earth orbit, which does not require equatorial launches to be cost-competitive. Therefore, more miniature satellites will be needed to provide sufficient coverage of the earth, and they have a lifespan of just one to three years rather than the 15 for larger, more conventional satellites. All this means that between 2018 and 2020 alone there is a forecast requirement to launch 1,500 small satellites.

Ground infrastructure is therefore going to become a major constraint for CubeSat operators if they are not to rely on piggybacking on the less-suitable missions to launch larger satellites. Therefore, there can be no question but that the Bill before the House is very timely. The Government abandoned the original competition to select the UK spaceport location in favour of the licensing approach set out in the Bill. I think the Government are right not to restrict the possibility of multiple approaches that may allow different launch solutions to be tried in different places, and to bring fresh economic activity to local communities in need of it. As a former Scotland Office Minister, I am delighted to hear the support of the noble Lord, Lord McNally, and my noble friend Lord Moynihan for Scotland. If the House will indulge me, I would like to bang the drum for Scotland again. Three of the original five shortlisted spaceport sites are in Scotland at Prestwick, Stornoway in the Outer Hebrides and Campbeltown in the Mull of Kintyre, and only yesterday I learned of a fourth proposed site in Sutherland.

If the UK is fully to realise the economic potential of spaceports, linking them to a broader space industry ecosystem will be a real competitive advantage. In this regard Scotland is very well placed. It has a pre-existing and impressive space cluster of 100 private and public organisations and 18% of the jobs in the UK space industry are in Scotland. Scotland is home to the only UK-owned independent satellite manufacturer, Clyde Space. In the last two years, Glasgow has built more satellites than any other city in Europe. Scottish universities have built a strong reputation in space-related disciplines, including Strathclyde University's Space Institute and Edinburgh University, which, in collaboration with NASA, is developing Valkyrie, a human-sized robot booked on the next unmanned mission to Mars. One of the perks of being Minister is that you not only get to meet Tim Peake, you also get to meet Valkyrie, which I have to say was like something out of a "Star Wars" movie.

I recognise, of course, that Scotland is not the only place with a strong claim as the location for a spaceport. Some involved in the industry believe that the market could sustain more than one spaceport in the UK. Perhaps the Minister could comment on that when he winds up. I also wonder whether he could address two further points in his wind-up which have been touched on. The first is about the availability of insurance and the capping of liabilities, to which he himself referred. The new market potential comes in large part because

costs and barriers to entry are falling. What further reassurance can my noble friend give that uncapped liabilities will not hinder commercial developments, particularly from smaller players and new entrants? The second concerns technology transfer. If spaceports are to succeed, the UK will need to attract those developing new launch technologies to come and operate from here. Many are currently based in the US, although, like the noble Lord, Lord McNally, I was pleased to hear about a British company, Orbex, which is developing an indigenous, full-orbital launch capability. Nevertheless, does my noble friend foresee any US regulatory hurdles to be overcome—for example, US ITAR restrictions—before these US launch companies are able to operate from here?

In conclusion, I warmly welcome the Bill. It is clear that we need to make quick progress if we are to secure early-mover advantage, and we need to put in place a regulatory regime that is sufficiently flexible to accommodate innovations in a very fast-moving industry.

4.40 pm

Lord Suri (Con): My Lords, it is a pleasure to speak on this subject. I have always favoured bold steps to unlock the potential that new markets hold and sensible frameworks set up by the Government to get the development of such markets right.

Spaceflight is a topic that has long interested me. The moon landing, which many of us in this place will remember, was the first time I turned my eyes heavenwards and considered what lay out there in the inky blackness, studded with lights. The pioneers of the space race are a fine example of how inventions spring forth from good regulation and government attention. Velcro, freeze-dried food and memory foam are a few of the more useful daily tools made available by the scientists at NASA.

It is my firm belief that creating a sensible and flexible regulatory regime will help scientific advance in this country, too. I should say, too, that I am delighted that the British Government were in a position recently to send an official British astronaut into space, in no small part due to the work of my noble friend the former Minister of State for Universities and Science. For us to be outstripped in the ease and regulation of spaceflight by a number of other European countries is certainly an anomaly that needs to be addressed.

I think that, in this Bill, the Government have struck the correct balance. In general, I am wary of excessive secondary legislation supported by guidance. It can give too much power to Ministers to escape the scrutiny and oversight provided here and in the other place. However, since this industry is moving at such a rapid pace, it is entirely reasonable to give more power to Ministers to tweak the rules so as to provide the best business environment. I will still be reading the *Policy Scoping Notes*, of course. I will be glad if the Minister can confirm that he will further engage with stakeholder industries over the summer to make sure that the Bill is in correct shape ahead of Committee.

Quite often, fledgling industries like this need some help to get off the ground, as it were. In the related industry of aerospace, there is the iconic example of

wings. The UK is a world leader in wings due to a substantial investment made in that field by the British European Airways Corporation in the 1960s. Now, Airbus and Boeing still have most of their wing supply chain in this country. It is a great success story, hiring thousands of people across the Midlands, and is a plank of our industrial strategy. In that light, I would like to know whether there has been any consideration of what support could be provided to those who wish to set up spaceports and engage in sub-orbital activity. This need not necessarily take any form of grants, as tax incentives would have a similar stimulating effect.

Furthermore, I am glad that criminal law will be applied to spacecraft pursuant to the provisions of the Bill. I have no doubt that this will be a contentious industry with regular disputes. By applying criminal law to spacecraft, we establish in spaceflight one of the UK's great advantages—our widely trusted and internationally respected rule of law. This will, in my view, be a tempting prospect for future entrepreneurs and inventors looking for places to set up. Supporting new industry is precisely what the Government should be doing post Brexit, and I am glad that they are. I will be supporting the Bill.

4.45 pm

Lord Balfé (Con): My Lords, I begin by drawing attention to my entries in the register of interests—in particular, my honorary position with the British Airline Pilots Association.

What I have to say may be seen as being tangential, but not irrelevant, to the Bill, but I pray in aid the fact that I have notified the Minister and he did not hit the ceiling when I told him what I would be dealing with—that is, safety, in particular. I commend the remarks of my noble friend Lord Moynihan and the noble Lord, Lord McNally. At the moment, we debate all Bills in the shadow of the Grenfell Tower tragedy and the fact that we know that, had steps been taken, we might well not be facing that problem today.

Safety issues are a major feature of the Bill. Clauses 9, 20, 40 and 18 all deal with various aspects of safety, and rightly so. Perhaps I may quote from the briefing notes a couple of points about Clause 18, which is the more general clause. They say:

“The regulations made under clause 18 will provide for overarching safety regulations and those not captured elsewhere”.

It also says that the Clause 18 powers,

“will supplement the matters prescribed under clause 9”,

and that,

“the broader powers in clause 18 will ensure continuing oversight”.

One of the difficulties that arose out of the last election—there were of course many—was that a number of issues that were near the top of the legislative agenda have slipped right down to the bottom. One of those issues, as the Minister will know because I have discussed it with him, is the safety aspect of drones at airports, and that could well apply at spaceports too. As the Minister will know, there has recently been a study of this matter. It has not been published yet, but I am sure that it will be. The point that comes through that study is that, unless some safety legislation is introduced at a fairly early stage, we could have another committee of inquiry looking at what I would regard as an avoidable accident.

I am informed by the parliamentary draftsmen that, as this is a DfT Bill, it would be perfectly possible to strengthen the safety provisions in it and to extend them into areas not presently covered, including drones at airports. In particular, I refer to the hazard they pose to helicopters. Scotland has been mentioned many times in this House and in this debate, and noble Lords will be well aware of the importance of helicopters, particularly in the Scottish North Sea. I realise that the Minister cannot agree anything this afternoon, because this matter is not within his brief today, but I ask him to take back to the department the problem posed by drones and the need, acknowledged by the Government before the election, for legislation to clarify the safety regulations around them. Perhaps he would look at whether it would be possible to add a suitable clause to this Bill or to strengthen one of its existing clauses.

It is a small area, but if it went wrong it would be another tragedy. I believe it to be an avoidable tragedy, and it has been accepted as such. It is sad that time was not found for specific legislation but I believe—and the parliamentary draftsmen seem to agree—that it would be possible to extend this Bill into that area. I invite the Minister to give no more than an undertaking that he will look at this matter when it goes back to the department and, if possible, come back to the House with a helpful amendment to the Bill.

4.50 pm

Lord Fox (LD): My Lords, we have heard of “Star Trek”, Dan Dare, Buzz Lightyear and “Star Wars”. I am rather disappointed that no one managed to work HS2 into the narrative—but there may yet be an opportunity. I declare my interests in aerospace as listed in the Members’ register.

We have heard overwhelming support for the spirit of the Bill, with some serious reservations, particularly around safety. In the knowledge-based economy of the future, scientific research, innovation and skills will be important to the prosperity of this country. Any Bill that is aimed at strengthening that has the support of the Liberal Democrats. We have to be in a position to attract investment in the future, supporting the innovative technologies that have been outlined today.

As we have heard from the Minister, the noble Baroness, Lady Bloomfield, and others, we already have a very valuable space industry in this country. The UK Space Agency estimates that it is worth about £13.7 billion—or a 6.5% share of the global space economy. The UK space sector, Space Agency and Innovate UK have the ambitious target of growing that share to 10% of the global market by 2030.

If you look at market trends in the space economy, you will see that there are two major developments. One is large satellites in geostationary orbit delivering massive broadband capability, and the other is the very large constellations of smaller and micro satellites in orbit, also delivering new services such as broadband, connectivity for driverless cars, 5G and other “internet of things” services. As we have heard from many speakers, already in this country we have companies that contribute well to the global economy in both those areas.

[LORD FOX]

It is clear that one of the major bottlenecks in the growth of the small satellite sector will be launch capacity, and we heard from the noble Lord, Lord Dunlop, about the market need. Waiting lists could become prohibitive. If the noble Lord, Lord Moynihan, is correct and there are 10,000 satellites lined up to be launched over the next decades, there will need to be capacity, otherwise the bottleneck will become even more apparent. A lot of the satellite applications which will drive future growth of the UK space industry require those satellites to be launched. In other words, the growth plans for the UK industry cannot be realised unless the satellites are there to create the data opportunities for the industries of the future.

So there is a gap in the market, and the UK could be a competitive alternative to some of the existing facilities and the potential facilities that are being considered. If a low-cost launcher programme could be put together, it could become a workhorse for European satellite programmes—as well as, as we have heard, a jumping-off point for what I call space tourism or lower-level flight.

As the Minister has already said, we are not the only country having these thoughts and considering such legislation. Other European countries have the same idea and are moving forward in this area. It is therefore right that we are trying to move swiftly and it is also right that we should move to the point where we have a flexible legislative environment in place.

The Government's ambition is not to have a sovereign launch capability; rather, it is, as we have heard, to rely on the private sector to come up with the capital to build several UK spaceports. As my noble friend Lord McNally suggested, the UK Government should not get sucked into draining more from the money tree that we hear about to support this process; there are many other pressing terrestrial travel needs that require investment. We have heard of one example from industry of putting together consortiums. Does the Minister have examples of other groupings coming forward? What kind of support is envisaged along the lines of the £10 million that has been referred to, which seems a large number but also a small one when compared with other transport needs.

The noble Lord, Lord Moynihan, talked about the need for a timetable for approval, which is very important. What kind of time are we looking at? When we consider the example of Russia and building spaceports, we can see that it is a six to 10-year project. We need to know the lead time between when we cut the first grass and actually launch the first satellite or spaceplane. To meet the growth that we need will be the equivalent of creating by 2030 two new Inmarsats—the biggest company we have. Growing this industry to the size that people want will be a big ask and it is important that we get moving on it quickly. As the Minister, my noble friend Lord McNally and others have said, we want to get into a position of being able to drive those technologies with the data that we can produce from satellites. I understand that there is a proposal to use part of Innovate UK's industrial strategy challenge fund to stimulate the adoption of services, which again would help to develop more space companies. Can the Minister confirm this and explain how it might operate in the future?

There are one or two concerns. Heeding the advice of my noble friend Lord McNally about not going into too much detail on some of the regulatory and insurance issues, I would like to pick up on a couple of points around licensing and insurance for the mega-constellation style of launch. We heard from one noble Lord about the potential for 1,000 micro satellites to be released in a single launch. This creates certain issues. British law currently treats nano satellite constellations no differently from a \$200 million satellite in geostationary orbit: in other words, each satellite in a constellation would be subject to a licensing fee of around £6,500 and would have to be covered by its own third party insurance. All of that adds up to a huge sum of money which starts to become a big barrier, particularly when we consider how the US Government deal with similar issues. So I will ask in Committee whether we will have an opportunity to rethink the process. As the noble Lord, Lord Suri, said, we need flexible and appropriate legislation, and this is an area that requires some thought.

The noble Lord, Lord Hunt, raised some thoughtful issues which I am sure that the Minister has taken on board. I would highlight the question of foreign ownership that he mentioned—because, of course, defining the ownership of a company can be extraordinarily difficult. It would be interesting to hear the Minister's thoughts on that, as well as on the issue of offshore launches.

No Liberal Democrat spokesperson can ever stand up at the moment without mentioning Brexit, so I am afraid that I am going to mention it briefly. First, will we retain full access to the vital EU space programmes? Where are we on that? Secondly, can the Minister confirm that the UK will continue to participate in Galileo and where will we be in Horizon 2020 on this issue? Thirdly, the chairman of UKspace has called for the UK to “enhance” its investment in the European Space Agency following Brexit—a point that was echoed by my noble friend Lord McNally. Our relationship with the ESA, which is not part of the EU, will be an important symbol of our continuing commitment to European co-operation. The Minister's thoughts on the future of that and how we will take it forward will be helpful.

Finally, other noble Lords mentioned the free flow of talent. The Minister quite rightly talked about wanting to attract world-class scientists to this programme and it being part of a magnet. We need some assurance, not just in this industry but in practically every other technology-based industry and all the university sectors, around free movement of talent and people. To make the UK the most attractive place to work, it has to be a place where people feel welcome, needed and valued.

Another issue that again was touched on by the noble Lord, Lord Moynihan, in his comprehensive speech, was the format of the Bill. He is right that it is substantially less skeletal than it was. My Benches have some concerns about skeletal Bills, not least because we feel that this may be the shape of things to come in other legislation. We recognise that this has been improved but it is not perfect. We would like to put that on record.

My noble friend Lord McNally and the noble Lords, Lord Moynihan and Lord Balfe, raised safety. They are correct. I am sure that we will have an opportunity,

given that concern and the importance of the issue, to come back to it in discussions with the Minister and in Committee.

In summary, the space industry is highly collaborative. For us to succeed in it, it has to have access to private and international funding; it has to be able to co-operate extensively with other states and allow the free flow of people and ideas around the world; and it has to be governed by a flexible and facilitating regulatory structure. This Bill provides for only the last of those three conditions. I hope that the industrial strategy will fill in some of those details. Notwithstanding that, it is a welcome Bill.

5.02 pm

Lord Rosser (Lab): My Lords, this Bill is clearly regarded, I hope correctly, as not potentially controversial; hence it is starting its passage through Parliament in your Lordships' House. The Bill appears to have had a somewhat truncated period for consideration and scrutiny prior to its Second Reading. The *Draft Spaceflight Bill*, as it was then called, was published on 21 February, with an invitation sent to some three or four Select Committees to consider the measures proposed in the draft Bill. No deadline for reporting was apparently given. Nevertheless, the House of Commons Science and Technology Committee began its consideration of the draft Bill on 2 March, with the aim of reporting before the end of the Session. The advent of the general election rather curtailed its proceedings, including an evidence session with the Minister, but it published its report on 29 April. The committee received just 12 written submissions and took evidence from 12 witnesses.

As has been said, the Commons committee also wrote to the Delegated Powers and Regulatory Reform Committee of this House, inviting it to consider whether the delegated powers in the draft Bill offered sufficient opportunity for parliamentary scrutiny—an invitation to which the DPRRC responded. However, the House of Commons Science and Technology Committee commented in its report:

"Cabinet Office guidance recommends giving committees 'at least three to four months (excluding parliamentary recess)' to scrutinise draft Bills. We have had just over five sitting weeks"—

hardly a satisfactory state of affairs.

On behalf of the Government, the noble Lord the Minister wrote, presumably to a number of us on, I think, 28 June—the letter was headed "Dear Colleagues"—setting out the measures contained in the Bill and the Government's reasons for bringing it forward. I thank him for that letter. The penultimate paragraph stated:

"Given the number of delegated powers contained within the Bill, the Government has committed to publishing policy scoping notes covering all regulation-making powers prior to Second Reading".

Along with, I presume, other noble Lords, I received an email late yesterday afternoon with what I assume are the scoping notes—it looked like 94 pages. If that is the Government's version of honouring the spirit, as opposed to the letter, of a commitment given two weeks previously, it is not mine.

So we have a Select Committee not given anywhere near the Cabinet Office guideline on the amount of time to consider draft Bills and we have a Government

who think that producing a lengthy document in the late afternoon of the day before a Second Reading constitutes honouring a commitment to publish such a document "prior to Second Reading". Bearing in mind that the Bill contains some 100 individual provisions containing delegated powers, one of which is a Henry VIII power, I am sure that many wonder whether this is but a dry run for the Government's approach to both the legislation and to Parliament in seeking to implement the decision to withdraw from the European Union.

The letter from the noble Lord the Minister of 28 June also stated that,

"further engagement with industry and others will take place over the summer and I intend to make more information available regarding the Government's approach to secondary legislation in advance of Committee Stage of the Bill".

In the light of what has happened with the previous commitment to which I have referred, can the Minister now give a firm and specific commitment on how far in advance of Committee that further information will definitely be made available, bearing in mind the Government could seek to start the Committee stage immediately after we return from the recess or shortly afterwards? Indeed, it might be helpful if the noble Lord the Minister could point out to his relevant government colleagues the extent to which the Bill provides for delegated powers and the commitments that have been given on providing further information on the Government's approach to secondary legislation, and suggest that it would be better if there was a breathing space between the return from recess and the start of the Committee stage.

The Outer Space Act 1986 provides the current legal framework for the UK to fulfil its obligations under the United Nations space treaties, which require any UK organisation or individual launching, procuring a launch or operating space objects to be licensed. These licensing powers rest with the Secretary of State and are administered by the UK Space Agency. To date, as has already been said, launches licensed by the UK Space Agency have taken place overseas. The Civil Aviation Authority recommended that the regulatory regime for spaceflight activities be updated, following its review of UK commercial space plane operations in 2014. At the end of 2015, the Government published a national space strategy. Following that, we now have this Bill, whose purpose is to make provision to enable commercial spaceflight activities to be carried out from the United Kingdom for the first time in the light of the expectation that the global market for small satellites will grow rapidly.

The space sector has already delivered important benefits to the UK economy, generating a turnover of just under £12 billion in 2012-13 and employing at that time some 35,000 people. A 2016 assessment reported that the space industry was worth £13.7 billion in 2014-15, equivalent to 6.5% of the global space economy, and contributed £5.1 billion gross value added to the UK's economic output. The UK Space Agency has said that a majority of income generated by the space industry, nearly 75%, comes from space applications such as the services which use satellite data directly. Space operations, such as operating satellites and ground stations, constitute 15% of the income generated.

[LORD ROSSER]

As the noble Lord the Minister has said, the Bill seeks to create a regulatory framework to enable commercial spaceflight activities, launch to orbit and sub-orbit spaceflight to be carried out from spaceports in the United Kingdom, and for the licensing of spaceflight activities. Clauses within the Bill make provision for the grant of licences, the establishment of ranges, safety and security as well as liabilities, indemnities and insurance. The Bill will apply only to activities conducted in the United Kingdom and will restrict the application of the current legislation in force, namely the Outer Space Act 1986, to activities conducted outside the UK. While the Government have said that the UK's obligations under international and EU space law, as it is currently practised, would continue to be enforced under this Bill in respect of the UK, where is that spelled out, for example, in relation to contamination of outer space in compliance with the 1967 UN Outer Space Treaty and covered in the Outer Space Act 1986, which would no longer apply to activities conducted in the United Kingdom?

The 1968 Act refers to a set of comprehensive standards applicable to the design and functioning of space vehicles, but these do not appear to be carried over into this Bill, which will, in future, regulate activities conducted in the UK. What are the Government's intentions in this regard? On licensing, why does the Bill not clarify the differing nature and duration of licences for the different parties involved, and the need for certification? Is it really the Government's intention that all this should be left to secondary legislation? Nor does the Bill appear to include provisions related to health and safety, environmental protection, local planning and other issues associated with on-site activities. Why does the Bill not do this?

We support the thrust of the Bill, which, as has already been said, has the support of the space industry, not least because of its focus on enabling commercial spaceflight from the United Kingdom. The major downside of the Bill, to which I have already referred, is the lack of detail, which makes detailed scrutiny somewhat difficult. It is in effect still a skeletal Bill which places a lot of powers in the hands of the regulators and the Secretary of State. Consequently, the Bill contains a very considerable number of delegated powers—as I have said, around 100 provisions—to bring forward secondary legislation in the future. While there is clearly an argument for having a flexible regulatory structure in a field of activity where there are many unknowns, there is also a need to provide for meaningful parliamentary debate and scrutiny, which cannot be achieved through secondary legislation in the way that it can through primary legislation.

The Government have, as has been said, made some changes from what was in the draft Bill in the light of the reports and consideration by the House of Commons Science and Technology Committee and the Delegated Powers and Regulatory Reform Committee of this House, and that is to be welcomed, but the issue of whether the changes go far enough in meeting the concerns raised by those committees, and by others, is one that will have to be considered in more detail at further stages of the Bill, and in the light of further documents received from the Government only late

yesterday afternoon by email, and further information that is to be provided by the Government prior to Committee. However, in its delegated powers memorandum dated 28 June the Department for Transport, in noting the concern of the DPRR Committee that some powers dealing with matters of significant public interest, such as safety and security, were subject to the negative resolution procedure, went on to say:

“However, switching these to affirmative procedure in all cases could take up a disproportionate amount of parliamentary time and might discourage timely updating because of difficulties in securing parliamentary debates”.

So much for the importance of parliamentary scrutiny and accountability. The Government appear, at heart, to regard it all as a bit of an inconvenience.

I would add, of course, that the Government have proposed a compromise in respect of some delegated powers with a “first-use” affirmative procedure, with the negative procedure thereafter. The Government's response as a whole will need to be considered carefully, but as the DPRR Committee said in its response, while flexibility and adaptability are key to the underlying technology,

“it does not follow that legal matters affecting the rights of the general public should be governed by considerations of ‘flexibility’; quite the contrary”.

My noble friend Lord Haskel is not able to be here today to take part in this debate, but I know he has issues in relation to the regulations for operations and safety and standards, and other matters, in what is a highly competitive market, with thousands of new satellites required over the next five to 10 years and companies planning commercial spaceflights. Without international collaboration on standards, there is likely to be little collaboration in business. Is it the Government's objective that the standards of safety and security outlined in the Bill should satisfy all potential customers? What protections are envisaged against cyberattacks seeking to cause disruption and damage? Presumably, launches and landings become more vulnerable to attack, with potentially tragic consequences, with the move to digital systems. If the navigation system is open to attack, the results could be even more tragic. This does not appear to have been addressed in the relevant clauses in the Bill, so what reassurances or commitments can the Government provide?

The Bill refers to horizontal launches and vertical launches and establishing a new centre for these. Are the Government looking at adapting existing aerodromes, which would presumably already have some infrastructure for access, service and accommodation? What intentions or restrictions do the Government have in mind in respect of the location, ownership and operation of a spaceport or space station? In respect of horizontal launches, sub-orbital space tourism is presumably the major market and there are spaceport promoters interested in bringing this to the UK. Once members of the public are flying in a spacecraft, other concerns emerge, with the spacecraft becoming more like a commercial aircraft. Presumably, the CAA will be largely responsible for the regulatory environment in this situation. Issues have already been raised in this House, including by the noble Lord, Lord Balfe, about the potential dangers posed to aircraft by drones—and, indeed, by the use

of lasers—and they could equally apply with the public flying in spacecraft. Do the Government intend to address this in the Bill?

With a major increase in the number of satellites, how do the Bill's provisions relate to international efforts to reduce the amount of junk? In some instances, there will no doubt be reusable spacecraft. How does the Bill regulate returning craft? Will this be controlled by the UK Space Agency and the CAA, and will they have to co-operate in this with other agencies? If that is the case, how does the Bill envisage this being done?

Finally, is it the Government's intention to retain our membership of the European Space Agency, which is independent of the European Commission? If so, is that space agency satisfied with the Bill's provisions?

I conclude by reiterating our support for the general thrust and intent of the Bill, but not for some of the lack of detail in it. No doubt there can be further discussions about the Bill prior to Committee, which looks as though it may not be until October. I hope that those discussions, as well as our discussions in further stages of the Bill, will resolve some of the questions about the lack of detail in the Bill.

5.17 pm

Lord Callanan: My Lords, I thank all noble Lords who have taken part in today's Second Reading for their, as ever, very informed questions, which they were quite right to ask. The challenge and the debate are welcomed by the Government and will help us strengthen the Bill. I appreciate the broad support that has been shown for the Bill's ambition. I reiterate the point that I have made to a number of noble Lords, both publicly and privately, that we are looking to co-operate on all sides of the House on this matter with Members from all parties and none. I am always available to discuss aspects of it and I have written to a number of Members to make that point. I thank my right honourable friend the Minister of State at the Department for Transport, who was sitting on the steps of the Throne earlier. I was delighted to see him paying such close attention to our proceedings.

I will try to address many of the points that have been made. I thank the noble Baroness, Lady Bloomfield, for her astute analysis of the UK space industry and her support for the Bill. On the issue that she raised concerning the comparable provisions to those in Section 1 of the Civil Aviation Act 1982 to promote the development of the space industry in the UK, I agree that the Government should recognise the need to promote growth in this sector. The Deregulation Act 2015 provides for a growth study to apply to functions specified by order. Statutory Instrument 2017/267 already lists functions under the Outer Space Act 1986, and we propose to amend this SI to also list functions under the Bill. My noble friend also shares the concerns of a number of other noble Lords—my noble friend Lord Moynihan also mentioned this—about over-regulation of this emerging market. This is a concern we are very alive to, and the Bill establishes a proportionate framework to support growth in this emerging sector while adequately balancing government and operator rights, the safety provisions and other factors dedicated to it. In exercising the powers in the Bill, the Government

will ensure proportionality, and we intend to consult fully on all the secondary legislation required to implement these measures.

Engaging with agencies such as ICAO was raised by the noble Lord, Lord Hunt. Through the DfT and the Civil Aviation Authority, the UK has been working as part of a joint ICAO/UNOOSA space learning group better to understand how commercial spaceflight fits in with the global air navigation structure and how regulation will need to adapt to the new industry. ICAO has not yet developed detailed rules on spaceflight.

The noble Lord, Lord Hunt, also raised the issue of the carriage of nuclear materials. We do not intend to permit the carriage of any nuclear materials. Paragraph 3 of Schedule 3 allows for prohibitions and restrictions on this. There may be exceptions regarding everyday appliances such as smoke detectors, which routinely use small quantities of technically radioactive material.

We do not believe that the Bill engages obligations to produce an environmental impact assessment. Environmental impacts are heavily correlated with the type, frequency and location of spaceflight activities. At this stage, it is very difficult to ascertain specific environmental issues. For example, the sensitivities of a site cannot be known until we know the location of the spacecraft.

My noble friend Lord Moynihan and the noble Lord, Lord Hunt, raised international agreements, and they were right to do so. We have put in place a number of agreements to enable commercial spaceflight in the UK. The type and nature of these agreements depends largely on the technology used, how and where it is operated and what it is used for. The UK complies with all existing space treaty obligations, and we are working to secure the agreements necessary to enable commercial spaceflight to take place from the UK.

On a point made by the noble Lord, Lord Hunt, I should say that the UK Space Agency's international partnership programme uses UK R&D to support international development. This supports developing countries to use satellite solutions for problems such as deforestation and disaster relief. My noble friend Lord Moynihan asked about the Government's support for the development of this emerging market in the UK, and a number of other Members raised a similar point. The UK Space Agency published details of the grant process in February, including our processes for assessing proposals and the criteria we would apply. We have engaged extensively with the parties who submitted funding proposals, to ensure that our process is transparent. The proposals were naturally submitted to the Government in commercial confidence and noble Lords will understand that I cannot disclose details now. However, I can confirm that in line with the process set out in February, the UK Space Agency is currently considering these proposals with independent expert advice, and I expect it will announce the outcome of the process later in the year.

A number of noble Lords, including the noble Lord, Lord McNally, raised questions around the European Space Agency. The Government's policy to exit the EU does not affect the UK's membership of the European Space Agency. The UK has a strong and

[LORD CALLANAN]

healthy space economy with an international outlook. We have a long history of collaboration and participation in European space programmes and missions through the European Space Agency. The Government will continue to take an active role in European space programmes, supporting UK industry in its bids to win contracts overseas and developing our national capability to keep the UK competitive in the global market.

The issue of affirmative regulations was also raised by my noble friend Lord Moynihan. We need a proportionate approach for aviation. Section 60 of the Civil Aviation Act enables all aviation safety rules to be made by negative procedure. These safety rules are likely to be amended frequently. We aim to lay statutory instruments in summer 2019, and licences can be issued once these are in force.

The noble Lord, Lord Hunt, raised the issue of range ownership. Our intention is for these to be privately owned. Foreign ownership is not prohibited. A licence cannot be granted of course unless the applicant is a fit and proper person.

My noble friend Lord Dunlop asked me about the number of spaceports. The Bill does not restrict the number of licences that could be issued for spaceports. However, the decisions on licensing would be based on eligibility, alternative criteria requirements and safety standards. I noted his strong advocacy of Scotland, along with that of my noble friend Lord Moynihan—we have a lot of interest from Scotland, particularly given the rural nature of many of its locations. We are working closely with the devolved Administrations, but I hope that my noble friends would not expect an Englishman with Irish roots to adjudicate on this process. My noble friend Lord Dunlop also asked me about ITAR and knowledge transfer. The Bill includes provisions for entering into agreements with other countries, including the provision for knowledge transfer and to ensure that we can meet the ITAR constraints that may be imposed on us by the United States.

The issue of liabilities was raised by a number of noble Lords. We have taken the power in the Bill to cap liabilities. However, we can assure industry of our intention to cap liabilities only in circumstances for which analysis has already been carried out to determine the current liability cap policy under the Outer Space Act 1986, as amended by the Deregulation Act 2015. For other circumstances, we hope to carry out the analysis as quickly as possible to further promulgate our policy decision.

My noble friend Lord Balfe and the noble Lord, Lord Rosser, raised the issue of drones. Your Lordships will be aware that the department completed a consultation on the safe use of drones in the UK in March. We are considering the responses received and developing outcomes on this, and I hope the Government's position will be released very soon.

My noble friend Lord Suri asked me about consultation. We will discuss the proposed structure of the statutory instruments and how this fits with industry views. We intend to publish a database containing more detail on regulatory functions including spaceflights, on existing international best practice under each of

those functions, and on initial assessments of risks associated with each of these functions before and after regulatory activity has taken place. We expect that this will start the conversation on the licensing framework and can inform discussions with insurers about the level of residual risk, and therefore start to gauge the potential appetite for insurers to enter the market.

The noble Lord, Lord Fox, asked me about timetables for launch. I am slightly hesitant on this, but we intend to lay statutory instruments in summer 2019. Once these have entered into force, regulators will be in a position to accept licence applications, which we expect will be processed in roughly 12 to 18 months. Please take that with a slight pinch of salt—these things can change and there are lots of considerations still to go through—but it might help as a rough timetable.

I take the point made by the noble Lord, Lord Rosser, about the policy scoping notes. Please accept my apologies that they came out late, but I wanted to get them issued before we sat down today. I appreciate it is very difficult to read a 94-page document in advance of this debate, but the policy scoping notes are not provided for discussion: they are our initial statement of intention with regard to the use of delegated powers and the need to consult on the use of powers given their importance and impact and the need to carry out analysis and assessment of criteria for determining safe levels of risk, for example. I confirm that it is not currently our intention to take Committee immediately after the holiday break in September. It will be a few weeks after that, subject to the vagaries of the Whips, and not immediately we return after recess.

Lord Rosser: I thank the Minister for that comment. It had certainly been my understanding that it was not going to be in September anyway. What is of concern—given the extent of devolved powers, with further information still to come—is if on the first or second day back in October, the Committee stage of the Bill is scheduled. What I meant by breathing space was a breathing space in October before we start Committee.

Lord Callanan: I am not in a position to confirm that yet. As soon as I get further information from those who deal with these matters, I will let the noble Lord know. I intend to work as closely as possible with all noble Lords on this; when I have further information, I will share it with him.

On the question of licensing and insurance for mega constellations, space activities are risky in nature and the Government may be required to pay compensation for damage caused as a result of spaceflight and related activities carried out by UK entities or launched from the UK. The insurance requirement is one of the provisions in the Bill to protect the Government and the public by ensuring that there is a resource to meet such claims. We do not believe that small satellites pose the same risks to the space environment. Further work will be undertaken on the insurance requirement for the different activities licensed.

The UK has played a major part in developing the main EU space programmes—Galileo and Copernicus—and space surveillance and tracking, which have supported

the rapid growth of the UK space sector and contributed directly to our prosperity and security. It is a global success story, leveraging our best talent to deliver highly innovative products and services every year, and we want that to continue if at all possible.

The noble Lords, Lord Fox and Lord Rosser, asked me about delegated powers. The Bill contains 71 clauses, 12 schedules and 100 delegated powers. This large number of delegated powers—I accept that it is a lot—is required because the commercial spaceflight environment is innovative, highly technical and fast changing. It is important that we have the flexibility given by secondary legislation to adapt to keep pace with this emerging market, as both UK regulators and the space industry develop expertise in this area. The Bill sets out the regulatory framework for a novel, dynamic and diverse industry, accommodating a wide range of different technologies. It aims to provide sufficient certainty and assurance to Parliament, regulators, industry and the general public while simultaneously having the flexibility to allow industry to grow. Early feedback so far from industry is that this flexibility is seen as vital. A rigid approach that offered limited opportunity to keep pace with either the development of spaceflight or the enhanced experience of the regulators would be restrictive for the sector.

The noble Lord, Lord Rosser, asked me about horizontal and vertical launch. He is correct: currently, we expect existing aerodromes to be most interested in conducting horizontal launch activities. I would expect vertical launch activities to be from a mixture of existing aerodromes and new facilities, subject to the strict licensing conditions that we have put in place. The noble Lord, Lord Hunt, asked me about flags of convenience. Responsible operators may be attracted to launch from the UK, but our vigorous approach to safety should deter less responsible persons.

Lord McNally: Before the Minister leaves the point about consultation, there is concern in the industry about the machinery by which the players influence regulations as they become firmer and clearer. They want to be sure that they can continue to influence the development of policy, rather than be faced with a fait accompli.

Lord Callanan: I can confirm that we are in extensive consultation with industry players. My honourable friend was visiting Surrey Satellites this morning for discussion on various aspects of the Bill and its commercial operations.

I think it was the noble Lord, Lord Rosser, who asked me about international environmental obligations under the Bill. They are covered by duties of the regulator in Clause 2 and under numerous other clauses, including Clause 8. We would not grant a licence if it were inconsistent with our international obligations. We have reviewed the relevant international, environmental treaties and obligations and the national requirements that may apply to spaceflight activities, and have concluded that we do not need any specific new provisions in the Space Industry Bill, but spaceflight activities and spaceports will, of course, have to fully comply with all existing planning and environmental requirements.

In relation to cyber interference, for conventional aviation we keep transport security under constant review, and we will do the same for spaceflight activities. We already work closely with partners across government and industry on restrictions between horizontal and vertical spaceports. I hope that I have responded to most points put by noble Lords, but if not there will perhaps be an opportunity to explore these issues further.

We have covered lots of vital areas and extremely important issues in this debate. Noble Lords were right to focus on issues of safety, environment and growth of the industry. I am sure that we will return to many of these issues in Committee. Once again, I thank all noble Lords for their general warm welcome for the Bill, notwithstanding some of the concerns expressed. As I said earlier, I look forward to working with noble Lords both in and outside the Chamber to ensure that we strengthen the Bill's provisions as it makes its passage through the House

Lord Rosser: Before the noble Lord sits down—I thank him for the responses to the questions raised—if he finds that he has been unable for very good reasons to respond to all the questions raised, and I will not confine this to my questions, can we take it that he will write in response to those questions he has not dealt with?

Lord Callanan: Of course. We have a meeting planned for next week anyway, when we can perhaps discuss these issues further. I will be very happy to clarify and give more detail on any of the points we have spoken about. With that, I conclude by asking the House to give the Bill a Second Reading.

Bill read a second time and committed to a Committee of the Whole House.

Brexit: Risks to NHS Sustainability

Question for Short Debate

5.37 pm

Asked by Lord Warner

To ask Her Majesty's Government what assessment have they made of the risks to NHS sustainability arising from the United Kingdom's departure from the European Union.

Lord Warner (CB): My Lords, we now come down to earth from outer space. This debate combines two public policy areas with what I would say are well above average risks of disaster and on which there seems to be a collective governmental denial of the seriousness of the challenges and dangers we face in both areas. Even without Brexit, the NHS has to cope with major challenges to its sustainability, which is why this House set up the Select Committee on this subject. I was a member of that committee which, after collecting and analysing a massive amount of evidence, published on 5 April its report, *The Long-term Sustainability of the NHS and Adult Social Care*.

[LORD WARNER]

Let me start with what that evidence revealed. We have unrealistic and inconsistent funding for both health and social care, relative to the demands placed on both by the disease profile of an ageing population. The UK has historically spent less per capita on health than France, Germany, the Netherlands and Sweden. There is no long-term strategy to secure an appropriately skilled, well-trained and committed workforce. We have expected staff to work, for approaching a decade, under a system of unrealistic pay restraint; and we are overdependent on EU-trained staff for whom, since the Brexit result, the Government have shown little appreciation.

The NHS performs poorly on many acute area indicators compared with similar European countries in terms of survival rates from stroke, heart attacks and cancer. We are on a trajectory of worsening service access and increased rationing of that access. There are wide variations in provider performance; and the NHS is often a slow adopter of innovative technologies that could save money and improve patient care. Significant health inequalities persist, and we have failed to protect public health and prevention budgets in the middle of an obesity epidemic that could easily overwhelm us—and we are still restricting those budgets.

The provision of publicly funded adult social care is now at a tipping point, which presents the biggest immediate threat and challenge to the NHS. The Government's proposed funding increases to 2020 are at least £2 billion too little, and they come too late; service providers are leaving the publicly funded care market in big numbers; and quality is falling, often to unsafe levels. A longer-term solution looks as far away as ever after the election fiasco on social care, and the Government will not even commit to a Dilnot cap on personal liability for social care costs, despite having the powers to do so.

The British public still strongly support a tax-funded NHS, free at the point of clinical need, and the Select Committee could find little international evidence to change fundamentally this funding system. But the public are losing heart and now 55% of them expect the NHS to deteriorate. Both these services—health and social care—need a much more consistent funding system, agreed on a more long-term basis, with a stronger real-terms link to GDP growth, which in turn requires an economy that is growing.

There is strong evidence that the way in which we deliver health and care services has to change radically and rapidly if the NHS and publicly funded adult social care are to be sustainable. We have to integrate fully health and care, with much more care delivered in primary and community care settings, and with a greater focus on public health and prevention, especially with our obesity epidemic. All this requires investment and the Government paying attention quickly to the kind of changes set out in the Select Committee's report, with 32 significant recommendations for the changes required. Crucial to that service transformation are service transformation plans, which are now at various stages of development and implementation around the country. Many are controversial with local communities in terms of closure of hospital beds

and services. They often need a supportive and robust Government to amend the failed Health and Social Care Act 2012, which all too easily hampers local reforms. A weakened Government now lack the authority and capacity to do this, as the Queen's Speech made clear.

I am not going to discuss the Select Committee's recommendations now. They are matters for debate another day, when the Government finally get around to responding to our report. What I am trying to do today is demonstrate that our health and care system is not in a good place. It requires a lot of political investment of time and money, preferably on a cross-party basis. It also requires a buoyant economy over the next few years to provide the investment that these critical and publicly supported services need. Yet the Office for Budget Responsibility last year projected a £15.2 billion hit to the public finances by 2020-21 after the UK leaves the EU, which would mean a loss of about £2.4 billion a year to the NHS—and even more if there is a more severe economic downturn than the OBR thought.

The harsh Brexit reality is that we face an exit from the single market, with poor transitional arrangements, the loss of trade with our near neighbours, fewer tax-producing financial services jobs, higher inflation and a shrinking economy. We have a dysfunctional Government with no credible plan for leaving the EU without serious damage to our economy over the coming years and not even any agreement on a sensible transitional arrangement. This Government continue to delude themselves about the willingness of the EU to compromise on its fundamental, treaty-prescribed principles.

I do not usually quote trade union leaders, but the head of the Transport Salaried Staffs' Association seemed to me to sum things up rather well when he said:

"If Brexit goes ahead, future historians will look back and see a carpet-bombing of the British economy and the freedoms enjoyed by people living here".

This set of circumstances does not bode well for our already fragile health and care system, and the prospects could become worse as a result of other things the Government seem willing to sacrifice in their rush to the EU exit. We have already virtually lost the EU pharmaceutical regulator—the EMA—from London, with the loss of high-quality jobs and the adverse impact on our life sciences sector that this brings.

The Government's obsession with escaping from the European Court of Justice's jurisdiction has led to the bizarre and ill-considered decision to quit Euratom, with no credible alternative civil nuclear regulator in prospect and—by the Government's own admission, it would appear—without any proper assessment of the impact of quitting Euratom. Leaving Euratom now poses another threat to the NHS and its patients, as the Royal College of Radiologists has pointed out. Thousands of NHS cancer patients rely for diagnosis and treatment each year on radioactive isotopes imported from EU countries. The safety regulator for this activity is Euratom, governed by an EU treaty. The best interests of the UK and its citizens would be served by us remaining a member of Euratom, but the ideologues

in No. 10 seem to have decided otherwise—despite the European Court of Justice never having made a ruling on Euratom.

On top of this, the health and care system depends on about 150,000 doctors, nurses and other care staff from the EU, because of our failure to train and retain enough home-grown staff. About 7% of our doctors are EEA-trained, and 40% of social care staff in London are from the EU. But the biggest problem may well be a shortage of nurses, because we import about 10,000 nurses a year from the EEA. Already the number of EU nationals registering as nurses in England has dropped by over 90% since the referendum. All this is becoming a serious problem. Because of the Government's failure to move quickly to reassure EU nationals of their right to remain here after Brexit, many of these EU nationals no longer trust the Government's belated assurances—in part because EU political leaders do not trust them, either.

In conclusion, this is a hell of a mess. A fragile health and care system badly needing reform and new investment from a growing economy is now facing economic retrenchment, political uncertainty, loss of a key staffing source and collateral damage from ideological obsessions with the ECJ. This is today's reality, in contrast with the leave campaign's lies on its red bus about Brexit providing £350 million a week more for the NHS. In the coming months, more people will realise where the Government's approach to Brexit is taking this country economically and its implications for public services. Then we will see how committed they really are to Brexit. I ask the Minister: what plans do the Government have to protect our fragile health and care system over the next two or three years of great political uncertainty?

5.48 pm

Lord Cormack (Con): My Lords, the noble Lord, Lord Warner, has performed a very signal service in introducing this debate and I congratulate him most warmly on the way that he did so. We desperately need clarity from the Government—we have not had it, but I hope that tonight we might begin to see it. It could all have been so much more simple. The noble Lord, Lord Warner, referred to the pledge to EU nationals in this country. Would the number of nurses have declined in the way that he illustrated, with that figure of 90%, if we had in fact used our sovereign power, taken control, and said from the onset, as the leave campaign did say from many a platform, “Your position, for those of you who came here in good faith, who have paid your taxes, who have become part of our communities, is not at risk”? It is still not too late for Ministers, led by the Prime Minister, to say this.

The Prime Minister has appealed recently for cross-party work and consensus. When I spoke in the Queen's Speech debate, I suggested that one way of dealing with these matters was to have a joint Grand Committee of both Houses, which could look at these things. I did not get any answer to that; I hope that I will. The previous week, I was sacked from the Home Affairs Sub-Committee of the European Union Select Committee of your Lordships' House, on which I enjoyed serving, for my vote on the Article 50 amendments. That is hardly consistent with the principle of appealing for

cross-party accord. When we have a Government who do not have a majority and who lost their majority in a thoroughly needless general election, we need a new start and to call upon the talents sitting on all the Benches in your Lordships' House.

This afternoon, I had the pleasure—I think that others in the Chamber probably also had this pleasure—of hearing in the Royal Gallery a very moving and inspiring speech from the King of Spain, who expressed his wish and determination that relations between our two countries should continue to thrive and prosper. We would all say amen to that. However, he made equally plain his sadness at our leaving the European Union, where we and Spain have, as constitutional monarchies, played a constructive part. We must not be hamstrung by doctrine, particularly the doctrine of those behind the £350 million pledge pasted on buses, to which the noble Lord, Lord Warner, has already referred. We need a real route map; we need to know where we are going and how we are going to get there.

The speech of the noble Lord, Lord Warner, illustrated very graphically that the greatest of our national services—our National Health Service—is teetering on the brink of collapse. We desperately need plurality of funding and to look at some of the proposals of the committee so ably chaired by the noble Lord, Lord Patel, at the end of the last Parliament, which I think reported on 5 April. We have all the pointers. We have diagnosed the disease. The Government seem unable to accept that there is a remedy and it is in their hands. We need to work together across this House and the other place to address matters of enduring importance and continuing worth, of which the National Health Service is perhaps the greatest and most important example as it touches all our citizens at unpredictable as well as predictable points in their lives.

I just hope that my noble friend, for whom I have a high regard—he has competently mastered his brief since he took on his responsibilities—will be able to give us some hope this evening. I hope that he will also talk to the Secretary of State and others because we desperately need a leadership that is not hamstrung by doctrine. Brexit will dominate all our debates for the foreseeable future, but let it not dominate them in a totally negative way.

I accept, with great reluctance, the result of the referendum—of course I do, like others in your Lordships' House. But we have to start talking in detail about transitional periods. All this cannot be accomplished in under two years, especially as the real negotiations will not begin until after the German election later this year. That gives a period of a little over 12 months. Therefore, if we are to avoid what the Prime Minister has called the cliff edge, we have to have proper transitional arrangements, in particular when we are considering the invaluable, and in the short term irreplaceable, contribution of EU nationals to our National Health Service. That 90% figure is alarming, and if it is replicated across the National Health Service, it will place countless British citizens at risk.

Therefore, in supporting the noble Lord, Lord Warner, I ask my noble friend to forget the lies on the bus and put aside the doctrine that Brexit means Brexit—which I think is the most meaningless slogan I have ever

[LORD CORMACK]

heard in my 50-odd years in politics. Let us now tackle the real issues with a real programme and bring parliamentarians of all parties and both Houses together to contribute their suggestions and their solutions.

I therefore end more or less where I began, by asking my noble friend to pass on to those in high authority—I do not want him to tell us that it is above his pay grade—the idea of something unique: a joint Grand Committee of both Houses of Parliament. A committee can put party political considerations to one side and concentrate on trying to ensure that, from what the noble Lord, Lord Warner, called the mess that we are in at the moment, a stronger nation can indeed emerge.

5.57 pm

Lord Clark of Windermere (Lab): My Lords, I am delighted to participate in this debate and to follow the noble Lord, Lord Cormack, and his clear, erudite and free-thinking contribution to the debate. I especially congratulate the noble Lord, Lord Warner, on allowing us an opportunity to debate this issue. When he approaches anything, he approaches it in a meticulous manner. Securing this debate today and concentrating our minds on sustainability and the risks involved with Brexit is a useful exercise for us to undertake, so I thank him for that.

I approach the debate with some hesitation, and I am sure that other noble Lords will feel likewise. At one level, none of us wants to say or do anything that will shake people's confidence in the National Health Service. It is indeed the most efficient health service in the world, and it still delivers a wonderful service to the general population of the United Kingdom. I would hate to think that anything that I might say might cause distress to patients. However, as the noble Lord, Lord Cormack, hinted, as parliamentarians we are privy to information that is not available to other people. I suspect that I know quite a lot more about what goes on in hospital than even the Minister, whom I hold in the highest regard. I understand his sincerity and his commitment to the NHS, but so much of his information is, naturally, fed to him by his civil servants—I understand that, and I am not attacking civil servants. I looked after the Civil Service in my previous existence.

As the Minister may have noticed, I have tried to take a different approach to collecting information. Of course I accept the facts and look at the statistics but over the years, through my friends and associates, I have tried to build up contacts in the health service. People who work in the health service and in hospitals give me the picture as they see it—how it actually is—and it is up to me whether I believe it or not. I have to say that the picture is far worse than I had imagined, and I will try to develop some of those points today.

However, I start with a point raised by the noble Lord, Lord Warner—Euratom. I spent seven years as a director at Sellafield and I suspect that I know a little more about nuclear reprocessing than perhaps most of the general public do. I simply do not understand the Prime Minister's obsession with leaving Euratom. Perhaps she does not understand what it is—Euratom is a legal entity separate from the European Union—yet she took a decision on it, apparently against the advice of

other Cabinet Ministers. I hope that after this debate the Minister will feel empowered to feed the information up to the Secretary of State.

The issues surrounding Euratom are very serious, and I want to spell them out in words of one syllable because that is the only way that I can understand them. Quite simply, leaving Euratom could—I emphasise “could”—restrict the UK's access to radioisotopes, which are critical to scans and treatment for cancer. It is as serious as that. We do not have reactors in this country capable of producing radioactive isotopes. We import them largely from France, Germany and Holland, and the control and safety monitoring of those isotopes is carried out by Euratom. By cutting our links with Euratom, we expose ourselves.

To put this issue in context, half a million scans are performed every year in Britain using imported isotopes and, on top of that, over 10,000 cancer patients have treatment involving their use. I just think that it is too big a gamble to take a decision on what I can only think are ideological grounds. That is a big, big error and I hope that the Government will rethink their position.

Going back to the basic issue, I suppose there are two basic problems. One is clearly finance. We spend less on healthcare than any of the other G7 nations, with one exception. I believe that the Government should make a commitment to go for at least the average spend on health among the G7. That would give us an opportunity in the years ahead to start an expansion.

A second problem is staffing—at every level. Throughout the National Health Service there is a panoply of overwork, low morale and staff working in what I can only describe as desperate conditions. Nurses finish their shifts in tears time after time. They are frustrated because they simply do not have the time to perform their job—their vocation of care—and they feel that they let the patients down, simply because they are understaffed. I have heard reports of nurses working a 12-hour night shift—that is the average length of a night shift—without being able to stop to have something to eat. That is happening regularly. The Minister might say, “Ah, but the numbers are made up with agency nurses”—and they are. But one only has to think about it to realise that, as the reports I get confirm, agency nurses can do the mundane things but most of them are not familiar with the work of the hospital or ward in which they are working. So even with the numbers increased by agency nurses, the onus on the regular staff of the hospital is increased.

It is not only about nurses, where we are 40,000 short of what we need, let us consider doctors. Where I live, the north Cumbria trust has 48 vacancies for consultants—we cannot get any consultants or nurses to work on the west coast of Cumbria. Right next to Sellafield, the largest industrial site in Europe, there is no hospital of any quality within an hour-and-a-half's drive. That is the seriousness of the problem.

For the first time ever, more nurses are leaving the profession than joining. The worry is that the greatest drop was among the English or British-trained nurses, which was far higher than among the European-trained nurses.

I hope the Minister will consider looking again at the abolition of the bursary scheme if the indications at the beginning of September show that there is going to be a fall in the numbers. We cannot stand another decrease in the number of nurses. I say this to the Government because they need reminding: their track record is not good. They were the Government who cut nurses' training by 10% in the years following 2010, and it has taken us a long time to recover.

I end with a thought on the residency of European Union-educated nurses. From exchanges with the noble Baroness, Lady Williams, I understand that after five years of working in the health service, or any permanent employment, European Union citizens can get the right to residency. Then, after a further year—six years in total—they are entitled to UK citizenship. That seems straightforward, but what concerns the nurses and the European Union is this: can those rights be withdrawn willy-nilly by any British Government in the future? That is a serious problem that the Government have to address in order to reassure people working in the health service.

Lord Winston (Lab): Before my noble friend sits down—

Noble Lords: Order.

Baroness Chisholm of Owlpen (Con): My Lords, I am sorry, but this is a time-limited debate and that is not the way it works.

6.08 pm

Baroness Ludford (LD): My Lords, I warmly thank the noble Lord, Lord Warner, for initiating this important debate. As he said, we are very reliant on EU workers in the NHS and social care, which includes around 10% of doctors and 7% of nurses. Sadly, there is already evidence that they are leaving or not coming to the UK. As well as the alarming drop in nurses cited by the noble Lord, more than half of the 10,000 European doctors working in the NHS are now considering leaving, according to a survey conducted by the General Medical Council.

In social care, 7% of staff, or 90,000 people, are from elsewhere in the EU, but numbers are already dropping. The Brexit squeeze on social care workers is likely to hit the elderly hardest, as it is predicted that there will be almost 3.5 million more over-65s by 2030. That figure could be supplemented by many UK pensioners returning from places like Spain if their rights to residence, public services and especially to healthcare are not safeguarded. We could be losing fit, younger skilled workers just as the pressure of more older people needing the NHS and social care builds ever higher. The exodus of EU staff exacerbates the shortage of doctors, nurses and care staff, which puts a heavy workload on current staff, causing many to leave the service. So we absolutely need to attract EU workers into the NHS and social care rather than deterring them in order to fill the vacancies.

The Liberal Democrats regard the Government's proposals on EU citizens' rights as inadequate, and in particular are calling on the Government to guarantee an immediate "NHS passport" for the 60,000 EU nationals

who work directly for the NHS. In the future under Conservative plans, the NHS faces an "immigration skills charge" of £2,000 a year for each doctor, nurse and health worker that it brings in from the continent. Will the Government exempt the NHS from this charge?

Then there are all the teachers and academic staff in universities helping to train the next generation of medical professionals. We are already short of STEM specialists and Brexit is going to make this even worse. We will also be outside the EU systems for mutual recognition of qualifications, which will make it more difficult to recruit as well as more difficult for our UK citizens to get experience in other EU countries. As was said by the noble Lord, Lord Warner, both the NHS and social care are already underfunded and they both need immediate injections of cash as well as long-term sustainable funding. Brexit puts this at risk because of the threat to the British economy and the tax take. You cannot have a hard Brexit and a strong NHS.

Some 190,000 pensioners live in other EU countries and can use local health systems thanks only to reciprocal EU arrangements. If those arrangements fall away, UK citizens will have to pay for their treatment abroad, and many may choose to return to the UK. The cost to the NHS of the return of all UK citizens of pension age would be nearly half a billion pounds a year.

As soon as the result of the referendum was announced, there was an immediate effect on international collaborative research projects involving UK researchers. Our scientists were asked to withdraw from funding applications, as it was seen that their presence in a team could put an application at risk. The UK has done extremely well from EU funding for life sciences research, receiving almost €9 billion between 2007 and 2013. How do the Government plan to replace all this money in the future? Apart from the money, the medical, scientific and industry benefits from international collaboration are enormous and I do not know one single scientist who is other than deeply unhappy about Brexit.

I am associated with the Juvenile Diabetes Research Foundation, which has told me that:

"Without EU funding a number of vital research programmes would not exist, as comparable funding, especially to support consortia, is not available elsewhere".

The foundation participated in a €6 million award for immunotherapy to treat type 1 diabetes, which involved small and medium-sized firms as well as research institutes. It also said that researchers,

"depend on personal funding from the EU, including Fellowships, to enable them to pursue a career in research and start-up their labs".

I understand that the European Research Infrastructure Consortium, which facilitates cross-border research partnerships, requires that all signatories have to accept the jurisdiction of the European Court of Justice for arbitration. How will our researchers continue to participate in this consortium post Brexit? How will British researchers and those coming here from the rest of the EU be able to move seamlessly across borders in an era without free movement? The then Minister, the noble Viscount, Lord Younger of Leckie, told us in March about a high-level stakeholder working

[BARONESS LUDFORD]

group for universities, research and innovation that the Minister, Jo Johnson, had established to look at the risks and opportunities of Brexit—although no one has actually suggested any opportunities to me. What are the conclusions so far of that working group?

There is great concern that Brexit will mean increased cost, reduced access for UK patients to new medicines and medical devices, reduced patient safety and damage to business prospects. Leaving the customs union will cause delays and extra costs in medical devices and access to medicines. Most of these products cross country borders several times during the process of development, clinical trials, licensing and regulation. The single market has built up a complex and detailed web of protection.

The coalition Government carried out reviews on the balance of EU competences. The review on health noted how collaborative action at European level on medicines and medical devices can be more effective and thus beneficial for patient safety because the EU can,

“effectively tackle ... counterfeit medicines, which involve complex global supply chains; share safety information on medicines once they are on the market and quickly detect”,

risks to safety. Far from wanting to pull out of this system, industry welcomed it, stressing,

“the advantages of the common regulatory framework for ensuring a high level of patient safety and secure supply”.

Not only are we losing 2,000 jobs through the loss of the European Medicines Agency, but, as the Association of British Pharmaceutical Industry told that review in 2012:

“The introduction of the centralised procedure, along with the creation of the EMA, not only greatly simplified”,
the processes,

“but also resulted in a system where medicines information such as the patient information leaflet are consistent across all EU Member States, which is good for public health protection”.

How do the Government plan to recreate the regulations that will allow us to buy and sell medicines in the EU? What system will be put in place to ensure that UK regulations keep up with those in Europe? Can the Minister explain more fully what the Secretaries of State for Health and for Business had in mind in their wish expressed in a letter to the *Financial Times* last week for,

“deep, broad and dynamic cooperation”?

The MHRA chairman, Professor Sir Michael Rawlins, has warned that withdrawing from the EMA could put the UK behind Japan, the US and EU nations in the queue when new drugs are introduced.

Brexit will mean that dangerous or defective drugs that pose a threat to patient safety may be available to British consumers for longer than on the continent. Leaving the EU medicine safety system means the UK will be slower to respond to safety issues, putting patients at risk. Relevant to research and clinical trials is the framework for data protection. How will the Government ensure that UK law keeps up with the future development of EU regulation and ECJ case law, without which we could be excluded from collaboration?

I will not mention Euratom as other noble Lords have done so and we are fortunately going to have a debate, initiated by my noble friend Lord Teverson, next week, but I will mention the business opportunities for our pharmaceutical and life sciences industries, which not only EU research collaboration but EU common regulation open up. They have been very vocal in insisting on those opportunities in improving competitiveness and exports. What will the effect be of the UK losing the life sciences section of the EU patent court if we can no longer participate?

How will all these benefits of being part of the single market in health be replicated if we are outside the EU? No free trade agreement will cover the myriad networks and systems that 45 years of EU membership has created. Finally, the Brexit Secretary, David Davis, says it is an aspiration to keep the benefits for individual travellers of the European health insurance card. A lot of people will realise just how useful European red tape is if they lose the EHIC.

6.19 pm

The Lord Bishop of St Albans: My Lords, I thank the noble Lord, Lord Warner, for introducing this important topic for us this evening and for his helpful and comprehensive opening remarks.

Ensuring the sustainability of the NHS is undoubtedly a significant challenge, even before the potential consequences of Brexit are considered. The uncertainty surrounding the Brexit negotiations has created significant stress for many working in already pressurised health and social care systems. There is no doubt that urgent action must be taken to ensure the stability of the current system. That being said, I wonder whether we might be able at this time of significant pressure to begin to confront some of the deeper challenges that our health system faces. The challenges of Brexit for our health and social care services might only reveal the deeper, long-term problems of these systems as a whole. It would be unfortunate for Brexit to be only the latest in a long line of short-term crises rather than an additional opportunity for reflection.

The report of the Select Committee on the Long-term Sustainability of the NHS, published in April of this year, stressed:

“Whatever short-term measures may be implemented to muddle through today, a better tomorrow is going to require a more radical change”.

I note particularly its recommendation of,

“a new, independent standing body enshrined in statute to safeguard the long-term sustainability of the NHS and social care”.

The nature of the political cycle means that it is difficult for politicians to rise above the fray and consider the long-term sustainability of the system as a whole, and there is substantial room for a body to oversee and scrutinise independently and to report directly to Parliament. National health and social care service provision affects the lives of citizens in profound ways, quite literally from cradle to grave. It is no surprise that it is of paramount importance to both individuals and politicians, and we should consider novel ways to safeguard these systems. Bold leadership is required, but this should be an area where politicians can show courage in finding common ground to make meaningful and lasting change.

Much has been said in this Chamber about the deep feeling of division in this country in the light of the Brexit referendum. Nevertheless, the NHS, and the importance we place on caring for one another, is at the core of the “British values” discussed in the Queen’s Speech. Indeed, these values are a part of many faiths, including Christianity. Part of what it means to be British is to care for one another, even when it comes at significant cost. We must acknowledge, however, that that cost is increasing, and adjustments must be made at both an individual and societal level. We have a duty to one another and to future generations to ensure that necessary resources are in place and are safeguarded in order for care to be maintained.

It is unfortunate that the NHS is not in a better position to be able to respond to the challenge of Brexit; we are still suffering the consequences of short-term thinking and acting. The waiting list for elective treatment has risen to 3.78 million, which is 5% higher than a year ago, and the number of delayed discharges from hospital caused by waits for home care rose by 45% in 2016-17. Even within my own diocese, two wards in St Albans hospital are scheduled to be closed to cut costs despite the clear demand for beds. By taking a more long-term approach to healthcare, even in the light of Brexit, we may be able to address the issues that have weakened the system substantially and prepare for the additional challenge of our ageing population. If we can work towards preventing weakness in the system, we will be far better placed to respond to sudden challenges.

The potential loss of EU personnel in both the health and social care systems will be an enormous short-term challenge. More than 60,000 people from EU countries outside the UK work in the English NHS and around 90,000 work in adult social care. Support must be provided for these individuals, many of whom work long hours in difficult circumstances and have made significant sacrifices to make the UK their home. We need to take account of them, not just in negotiated discussions but also in any plans, after we leave the EU, to alter immigration policy.

It should never be overlooked that the NHS is heavily reliant on workers from outside the UK. Despite this, the Royal College of Physicians describes our hospitals as chronically understaffed, almost half of community mental health teams had staffing levels judged as less than adequate in 2013-14, and the Royal College of Midwives believes that in England we need 3,500 more midwives to ensure that every woman can receive one-to-one midwifery care in labour.

Not only must we have sufficient numbers of personnel, we must ensure that they have the correct skills and training that the service needs. This means that we need to invest in those currently serving in the NHS, as well as making sure that we train enough doctors and nurses here in the UK. However, in 2016 there were unfilled nursing places in UK universities, and we know that care homes would collapse without their non-UK workforce. This is in part because these roles are not sufficiently valued and hence do not attract UK applicants. Sustainability of the workforce cannot be achieved, even if all EU workers remain, unless attitudes to some health and social care roles change significantly.

As we seek to manage the staff of the NHS wisely—that staff is undoubtedly one of our greatest assets—prudent financial planning will also be required. The quality of care which we have come to expect and demand comes at a significant cost. Some 86% of the NHS’s sustainability and transformation fund of £2.1 billion has been set aside to sustain current services and meet expected deficits. As deficits increase year on year, a radical rethink of healthcare funding is required. We need a broader social dialogue about funding for health and social care, one to which the Church and other faith communities can contribute.

Along with the right to healthcare, which we are undoubtedly privileged to enjoy, as users of health and social care services we have associated responsibilities. In remembering that we both benefit from and contribute to the NHS, we must consider the impact of our own lifestyles on our ability to care for others. In treating others as we wish to be treated, we must be prepared to think creatively and make sacrifices for all to enjoy a good standard of care.

6.27 pm

Lord Hunt of Kings Heath (Lab): My Lords, it is a great pleasure for me to congratulate the noble Lord, Lord Warner, on this debate, which I think has been very good and wide ranging. He linked the long-term sustainability of the NHS with the UK’s departure from the EU and demonstrated amply that, even without Brexit, the NHS faces a very difficult challenge in terms of its long-term sustainability. The report of the Select Committee chaired by the noble Lord, Lord Patel, demonstrates very comprehensively some of the questions that we need to consider.

It is abundantly clear that the NHS does not have the required funding. The question we need to put to the Government is: what is their plan for the NHS? Essentially, are they engaged in a wind-down of the NHS’s activities? We know that CCGs are rationing increasingly. We know that the key targets are being missed and I do not know anyone in the health service who thinks that the health service will ever get back to meeting those targets under current circumstances.

A similar question has to be asked of the Government in relation to social care, following the débâcle over the dementia tax. I put it to the Minister that we are still waiting on an answer as to why Dilnot is not being implemented. There has not been a straight answer. We had the report; we had legislation—we spent months taking the Bill through this House. The Government announced the cap at £72,000. They then announced a postponement, but we have yet to hear one reason as to why Dilnot is not being proceeded with. I think we are owed some explanation of why we are in the position we are in.

No doubt the Minister will talk about STPs and the transformation process that is being undertaken in the health service—but there are two things to ask him about that. First, it was the Government’s intention to introduce legislation to amend the 2012 Act to allow the STP process to proceed in a legal way, because clearly it drives a coach and horses through the 2012 legislation. My question for the Minister is: what is now going to happen? I cannot see that the kinds of

[LORD HUNT OF KINGS HEATH]

things that NHS is seeking to do at local level are at all legal in terms of the 2012 Act.

Secondly, the right reverend Prelate put the point very well when he asked: how can it be that in his diocese, in a hospital which is under huge demand, you can justify closing two wards without seeing the commensurate investment in the community, when we are told that if you do that, you will reduce demand on acute hospitals? By the way, I have to say to the Minister that there is no evidence that that will actually happen. No respectable institute has produced any hard evidence that suggests that investing in primary community care reduces demands on acute care. It is much more likely, as Nye Bevan found in 1948, that it deals with unmet demand, but that demand within acute care is likely to continue.

My other question for the Minister is this. The word in the service is that the Government will not support any controversial change in service locally if it will cause angst to local MPs. If that is the case, it is quite clear that the whole STP process will grind to a stop over the next few months as more and more people recognise that it is not the game in town that the Government thought it was going to be.

These are major questions that the Government need to consider. How much worse does the problem become when we come to Brexit? Noble Lords have eloquently described some of the issues that we face—but I put to the Minister the point made by his noble friend Lord Cormack: why are the Government so reluctant to support a Joint Committee of both Houses to consider these matters? After all, part of the debate on Brexit was about the so-called sovereignty of the UK Parliament. Why are the Government so resistant to the UK Parliament exercising sovereignty over the biggest decision this country has faced in 50 years?

The Prime Minister has talked about bringing the country together. How do you bring the country together when your interpretation of a very narrow majority for Brexit is to take an obdurate view that the red lines are around migration and the European court? How on earth is that bringing the country together? Surely a consensus approach would be to find some kind of middle way through the Brexit negotiations, rather than the cul-de-sac the Prime Minister has got herself into—which, of course, in the end she will have to get herself out of because she does not have a majority in the other place for the proposals that she is putting.

We then come to the issues facing the health service. The noble Baroness, Lady Ludford, has already raised the seemingly simple issue of our rights to health treatment in the EU and vice versa. But we are told by the Brexit Secretary that this is now an aspiration. I ask the Minister: what is our policy on this in the future?

We then come to the workforce. We have reached the ludicrous position where the pay policy and the way that professional staff are treated in the health service mean that we have fewer people from this country coming into nursing in the NHS than are actually leaving. We have completely choked off people coming from the EU because of the atmosphere the Government have created with their wretched approach to Europe. My chief exec contacts in the health service

tell me that we have dozens of teams in the developing world—India and the Philippines—recruiting nurses to substitute for the nurses we would have had, happily, from the EU. How can that possibly be a sensible approach to the way the NHS is run? It just beats me; it is bizarre. The end of the line is that the Prime Minister will not get anywhere near her immigration target because she will desperately have to approve the recruitment of thousands of nurses from the developing world. Is there any more nonsensical position than that taken by this Prime Minister?

Then there are the life sciences. There are problems around European research. Already universities are losing out on research bids because other European universities will not go into partnership with them. This can have a devastating effect on our life sciences. Our universities are reeling under the ludicrous position taken by the Prime Minister—both as Home Secretary and as Prime Minister—over students coming from overseas to study in our universities. They are a huge earner. Britain has a fantastic reputation. Why on earth are we trying to prevent these people coming to this country? It again defies all understanding.

We then come to medicine regulation. The risk is that if companies continue to develop drugs in this country, they have to have an assurance that when they get a licence from our regulator, the MHRA, it will be recognised throughout the whole of Europe. If they do not get that, we will lose drug development in this country—that is £4 billion of investment. We have seen the letter that the Minister's right honourable friend the Secretary of State and Mr Clark wrote to the *FT* a week ago, which makes the right noises in relation to regulation, safety and the interrelationship between what we do in this country and what happens in the EU, but does the Minister agree that in the end the only way forward is an agreement on mutual recognition, even if that involves the European court, as it may well do?

Finally, my noble friend Lord Clark speaks with great authority on Euratom. Why are we risking our energy supply, in many cases, and the safety of patients? For what? It is for some bizarre view that anything with any relationship to the European court is completely out of court.

I fear for the future of the NHS and for the future of this country if this is the Government's approach. I am confident that Parliament will assert itself to ensure that the Government will have to change course. I hope the Minister will give us a little bit of movement on this in relation to the NHS.

6.38 pm

The Parliamentary Under-Secretary of State, Department of Health (Lord O'Shaughnessy) (Con): My Lords, I thank the noble Lord, Lord Warner, for obtaining this debate, and I assure him and your Lordships' House that this Government are committed to making leaving the EU a success for the health and social care sector as well as for the UK as a whole. I thank all noble Lords who have contributed to the debate.

I have to say, as noble Lords probably expect, that I do not share the gloomy prospectus that has been set out for the NHS in the years ahead or for Brexit.

My noble friend Lord Cormack asked for a bit of optimism and hope. He might be interested to know that my youngest daughter is called “Hope”, so I am a great optimist. I will explain why I am an optimist about how the years ahead will pan out for this country and for the NHS.

The sustainability of the NHS is, of course, a timely issue, not least because of the excellent report *The Long-term Sustainability of the NHS and Adult Social Care*, which the noble Lord, Lord Warner, produced earlier this year. I pay tribute to how well that was marshalled by the noble Lord, Lord Patel, who was in his place earlier. I reassure noble Lords that the response to that report is being drafted, so work is in progress and the response will be coming shortly.

As noble Lords will know, the organisation and delivery of healthcare is a member state competence, and this means that the vast majority of the work to implement the NHS five-year forward view will remain relatively unchanged and will continue to have the full support of this Government. While I am on the subject of policy, the noble Lord, Lord Hunt, asked what happened to Dilnot and social care. As he will know, and as I have said before on the Floor of the House, we intend to consult on both a cap and a floor within the social care funding sector, which is in essence what is at the heart of Dilnot. We will be coming forward with proposals that build on that later this year.

The ongoing work of the department and of the entire health sector is to transform how the NHS delivers care to ensure that it is properly configured for the future and that it remains both sustainable and fit for purpose after we exit the EU, and for many years after that. I completely concur with the statement made by the noble Lord, Lord Clark, that not only is it the most efficient healthcare system in the world but that it delivers wonderful care. Despite the ageing and growing population, it has had a number of successes in recent years: real-terms increases in funding, a greater share of public spending, more people being seen in A&E and seeing specialists for cancer, more doctors and nurses, and rising life expectancy. Public perception as measured in a ComRes poll at the start of the year shows support of the statement that the NHS provides a high standard of care to patients was up 13 points to 71% compared to 2014.

The noble Lord, Lord Clark, who speaks with experience on this, is quite right to point out the issue with sources of information. I can reassure him that I have plenty of friends who are either doctors or nurses, so I do hear from the coalface, if you like, and I know that it is not an entirely rosy picture at times. I pay absolute tribute to the work that our NHS staff and staff in social care do, often in very challenging circumstances. I reassure him that I try to expose myself to the realities of life in the NHS as much as I can.

As noble Lords know, following the publication of its *Next Steps on the Five Year Forward View*, NHS England is working with local areas to develop them into sustainability and transformation partnerships—moving beyond plans to develop tangible delivery organisations with clear partnerships between local organisations, fairly appointed leaders and clear governance structures. I welcome the support of the

right reverend Prelate the Bishop of St Albans for this process, which has been backed by Treasury capital funding announced in the Budget. This is enabling the most advanced STPs, as they are known, to evolve into accountable care systems, which will provide joined-up, better care, breaking down the barriers between GPs and hospitals, physical and mental healthcare, and social care and the NHS.

The noble Lord, Lord Hunt, asked what the legislative framework for this is. I am sure that in the long run, the creation of ACSs, or ACOs as they are sometimes known, may require legislative change, but it is not currently necessary, and we can move ahead with the kind of integration that we all want to see. We are serious about improving care for local communities, and these steps towards integration and collaboration provide a mechanism to do just that.

By redesigning services to make it easier for patients to access health and social care at the right time, in the right place, we can make real progress in improving care for local communities. We can begin to move beyond sterile debates about reorganisation, while making sure—in response to the question asked by the noble Lord, Lord Hunt—that the five principles of when reorganisations should happen stay in place. Of course that became five recently with the addition of patient safety, which I think was a point raised by the right reverend Prelate and others.

As this debate has helped highlight, our work will need to be supported by a strong outcome from the Brexit negotiations. Since the result of the referendum, the Department of Health has worked hard to identify areas of the NHS that will be affected and to put in place plans to mitigate any risks and seize any opportunities. I completely agree with my noble friend Lord Cormack on the importance of working together. The Prime Minister has said just that, and it was rather disappointing to hear the leader of the Labour Party be so scornful of such an approach—I am sure that noble Lords on the Opposition Benches would not share their leader's dismissal of the idea of working together.

The noble Lord, Lord Warner, described in his speech what could be rightly called the doomsday scenario. I think he is perhaps allowing his own beliefs and views of the referendum to cloud the reality. There is a strong desire to have a positive new relationship, and that is shared by the UK and the European Union. That is one that respects the nature of the European Union. That is precisely why the Lancaster House speech set out the position on the ECJ, the single market and the customs union: to respect the nature of the European Union, rather than to have our cake and eat it. It is important to note that more than 80% of votes in the most recent general election were cast for parties that support the process of leaving the European Union.

One of the main areas that noble Lords have highlighted is the ability to maintain our superb NHS workforce. I reassure noble Lords that we are doing our best to provide as much certainty as possible to the 3 million EU citizens in the UK, including the many who dedicate themselves to the work of the NHS and the wider social care system. It is simply not true that we do not value them; we do, and I never miss an opportunity to say so at this Dispatch Box.

[LORD O'SHAUGHNESSY]

Noble Lords will have seen that the Prime Minister has put forward a fair and serious offer on the rights of EU nationals already residing in the UK, and we expect it to be reciprocated by member states for UK nationals in the EU. There are approximately 150,000 staff from the EU doing a vital job for patients, and we expect and are confident that we will be able to negotiate for them to continue to do so post Brexit.

My noble friend Lord Cormack and the noble Baroness, Lady Ludford, asked about the impact of Brexit on recruitment from EU countries. As we have discussed in this House before, the introduction of the language test has been a much more significant factor affecting the flow of EU nationals into the health service. It is important to note that there are more EU nationals than ever working within the NHS.

In the same vein, we intend to protect the current healthcare arrangements for EU citizens who are ordinarily resident in the UK, an issue highlighted by the noble Baroness, Lady Ludford. We are confident that we can reach an agreement on this important issue early in negotiations. Indeed, there is already much common ground between the UK and EU positions. That is in respect of both the EHIC programme and pensioner benefits. The aim here is to achieve reciprocity, as my right honourable friend the Brexit Secretary, David Davis, has set out.

More broadly on immigration, we will continue to welcome the contribution that EU migrants make to our economy and society. We are considering options for a future immigration system very carefully. New UK immigration rules will be decided taking into consideration the prevailing social and economic circumstances, aiming to recruit the brightest and the best for our life sciences industry and to fill any skills gaps. It is important to state—and I state it to the noble Lord, Lord Hunt, and others—that the purpose of leaving the European Union is not to end immigration; it is to get control of immigration and to build public trust in the immigration system. Any immigration system will clearly need to take account of the economic and social needs of the country.

Turning to medicines, the UK is committed—through the *FT* article by my right honourable friends Jeremy Hunt and Greg Clark, as many noble Lords have noted—to continue a close working relationship with the EU on matters such as public health and medicines regulation. Indeed, we are planning an ambitious life sciences industrial strategy to make sure that we are one of the three global hubs for medical innovation. Our aim is to ensure that patients in the UK and

across the EU continue to be able to access the best and most innovative medicines and to be assured that their safety is protected through the strongest regulatory framework. I point out to noble Lords the three principles set out in that letter: that patients should not be disadvantaged; that innovators should be able to get their products into the UK market as quickly and simply as possible; and that we continue to play a leading role in promoting public health. Whatever happens, as I said, we have set out our desire for a strong and positive relationship with the EU. Those will be our guiding principles.

Of course, that must be backed up by excellent research. As a nation, we have a proud history of leading and supporting cutting-edge research. Indeed, many of the innovations that take place in health systems around the world come from research that took place in the UK. I reassure noble Lords that the Treasury is honouring all Horizon 2020 and other EU-based research funding beyond the time horizon of leaving the European Union.

Finally, I turn to the issue of Euratom, which was raised by several noble Lords—the noble Lords, Lord Warner, Lord Clark and Lord Hunt. I understand that this evokes strong feelings, but it is simply wrong to say that cancer patients will be at a disadvantage after we leave Euratom, because it places no restriction on the export of medical isotopes to countries outside the EU. I acknowledge, in particular, the wisdom and experience of the noble Lord, Lord Clark, in this area, and I would be delighted to discuss it with him in person if he were able to make the time.

I now want to return to the beginning of the theme and talk about optimism. Uniquely, possibly, in the history of the negotiation of free trade agreements, we start from the position of regulatory equivalence. So we can do harm only by deciding to go our separate ways. I do not believe that there is any desire on behalf of the UK and the EU to do that. There are, of course, lots of questions to be resolved, and they have been highlighted in the debate today. I think they can be resolved if we take a positive view of what can be achieved as we go about honouring the decision of the British people to leave the European Union.

I can assure noble Lords that the Department of Health is working hard with a large range of stakeholders, and indeed with Members of this House, to work through the upcoming changes. We remain committed to ensuring that we have a sustainable NHS, free at the point of use, which continues to deliver high-quality care now and after Brexit.

House adjourned at 6.51 pm.