

PARLIAMENTARY DEBATES

HOUSE OF COMMONS
OFFICIAL REPORT
GENERAL COMMITTEES

Public Bill Committee

VEHICLE TECHNOLOGY AND AVIATION BILL

Seventh Sitting

Thursday 23 March 2017

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New clauses considered.
Bill to be reported, without amendment.
Written evidence reported to the House.

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Monday 27 March 2017

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The Committee consisted of the following Members:

Chairs: † JAMES GRAY, JOAN RYAN

† Baker, Mr Steve (*Wycombe*) (Con)
 Brown, Alan (*Kilmarnock and Loudoun*) (SNP)
 † Burden, Richard (*Birmingham, Northfield*) (Lab)
 † Doyle-Price, Jackie (*Thurrock*) (Con)
 † Foxcroft, Vicky (*Lewisham, Deptford*) (Lab)
 † Fuller, Richard (*Bedford*) (Con)
 † Hayes, Mr John (*Minister of State, Department for Transport*)
 † Hendry, Drew (*Inverness, Nairn, Badenoch and Strathspey*) (SNP)
 † Knight, Sir Greg (*East Yorkshire*) (Con)
 † McDonald, Andy (*Middlesbrough*) (Lab)

Malthouse, Kit (*North West Hampshire*) (Con)
 † Marris, Rob (*Wolverhampton South West*) (Lab)
 Matheson, Christian (*City of Chester*) (Lab)
 † Prentis, Victoria (*Banbury*) (Con)
 † Selous, Andrew (*South West Bedfordshire*) (Con)
 † Snell, Gareth (*Stoke-on-Trent Central*) (Lab/Co-op)
 Stewart, Iain (*Milton Keynes South*) (Con)
 Tugendhat, Tom (*Tonbridge and Malling*) (Con)

Ben Williams, Farrah Bhatti, *Committee Clerks*

† **attended the Committee**

Public Bill Committee

Thursday 23 March 2017

[JAMES GRAY *in the Chair*]

Vehicle Technology and Aviation Bill

New Clause 4

AIR POLLUTION AND VEHICLE TECHNOLOGY

“The Secretary of State must, within 12 months, lay a report before Parliament setting out a strategy for using vehicle technologies, including electric vehicles, to contribute to meeting Government ambitions relating to air pollution and the UK’s climate change obligations.”—(*Richard Burden.*)

This new clause would require the Secretary of State to bring forward a strategy for using vehicle technology to address the issue of air pollution in the UK.

Brought up, read the First time, and Question proposed (21 March), That the clause be read a Second time.

11.30 am

Question again proposed.

The Minister of State, Department for Transport (Mr John Hayes): With your indulgence, Mr Gray, may I say a few words? As we stood together in silence and sorrow earlier, so we stand together for all time; Parliament and people. Our Committee, in its modest way, tells all that should be known about this place, our work: debate without rancour and difference without disputation; and mutual regard and respect. Parliamentary politics is, in my judgment, far from broken, and it will not be broken by the enemies of decency.

In that sombre way, we continue our consideration of this important Bill. The hon. Member for Birmingham, Northfield proposed the new clause when we last met, which seems an age ago. It would require the Secretary of State to bring forward a new strategy for using vehicle technology to address climate change and air quality. The hon. Gentleman and others heard me say that we are indeed looking to do so. We will bring forward an updated strategy for promoting the uptake of ultra low emission vehicles in the next 12 months. Our intention is that that strategy will go further than just low-emission vehicles and reference support for low-emission road transport more widely, such as the use of advanced fuels, to help air quality in exactly the way that Opposition Members have invited us to. That strategy will of course be parallel to, but synergous with, the national air quality plan that we will develop. Our work on that plan will focus on low-emission vehicles—it is of course not wholly about that, but we see low-emission and zero-emission vehicles as a critical component in the delivery of that plan.

I was pleased yesterday to attend the opening of a new factory for electric black taxis in Coventry, where we announced our support for precisely the kinds of things that Members across the Committee have called for. Taxis can be one of the biggest contributors to urban air pollution, for obvious reasons, so we announced £64 million of funding to encourage the uptake of electric cabs and installation of a dedicated charging

infrastructure. It is worth sharing the detail of that funding with the Committee, because it affects most of the areas of the country that we represent. We will work with a series of local authorities to invest £14 million to deliver around 400 rapid and 150 fast dedicated charge points for electric taxis in those areas.

Andy McDonald (Middlesbrough) (Lab): I am grateful to the Minister for giving way, and I will not detain him for long. While I was trying to gain access to the estate yesterday—I was not able to cross Westminster bridge—I was with Transport for All, which pointed out to me the need to consider wheelchair access to taxis. As they are currently constructed, taxis will take only the smallest and narrowest of wheelchairs, not the sorts of wheelchairs—especially electric wheelchairs—that some disabled people need.

Mr Hayes: That is an excellent point. The hon. Gentleman and other members of the Committee probably know that I am passionate about disabled access, having been the co-chairman of the all-party parliamentary group on disability for many years. I always say that Jack Ashley was the real chairman—I was there only as his assistant, really. Disabled access is something that the Department takes seriously, and the Under-Secretary of State for Transport, my hon. Friend the Member for Harrogate and Knaresborough (Andrew Jones), who has responsibility for access, has done immensely good work on it. I recently held a cross-party meeting with him and others about precisely that matter. The hon. Member for Middlesbrough makes his point forcefully, and he can be sure that it will certainly be part of our considerations as we move forward.

I was coming to the exciting news about the areas that will benefit from the extra investment in charge points for taxis. The hon. Member for Birmingham, Northfield will be delighted to know that Birmingham will receive £2.9 million for that purpose, and the hon. Member for Wolverhampton South West will be delighted to learn that Wolverhampton will receive nearly half a million pounds—£478,000. The hon. Member for Lewisham, Deptford will want to know that London will receive £5.2 million. I know my right hon. Friend the Member for East Yorkshire, who is not in his place, will be excited to find out that Yorkshire will receive £1.98 million. My Parliamentary Private Secretary, my hon. Friend the Member for Banbury, will want to know that Oxford will receive £370,000. The Scottish National party spokesperson, the hon. Member for Inverness, Nairn, Badenoch and Strathspey, will want to know that Scotland has not been forgotten, because half a million pounds will make its way from here to there in the form of support for the city of Dundee. Other areas to benefit are Coventry, Nottingham, Cambridge and Slough.

We are determined to create an electric charging infrastructure that is suitable and appropriate to need. It will be dedicated to taxis, which we see as a critical element—I do not want to exaggerate—in delivering the change that I think we all seek and wish for.

Rob Marris (Wolverhampton South West) (Lab): Wolverhampton is very grateful for that money. The council tells me it will install 24 charging points in the next three years. Can the Minister try to encourage quicker take-up than that?

Mr Hayes: The work that we do will need to be conducted with the same kind of rigour and vigour that I bring to all of my work. As the hon. Gentleman knows, I like to drive my team hard in the Department for Transport, and I am always prepared to listen to the advice of Members from across the House. He has made his point very effectively.

What I did yesterday is again relevant to the amendment and our considerations, because the new factory being opened in Coventry will build the electric taxis that will populate this city and others in the coming years. It is the first brand-new car plant to be built in Britain for more than a decade, the first dedicated electric vehicle manufacturing facility in the UK and the first major Chinese investment in UK automotive manufacturing, bringing with it many new jobs. It is an exciting development that I am proud to be part of, which is why I was out of the House yesterday.

Before we adjourned on Tuesday, several hon. Members raised the issue of liquid petroleum gas. The Government are already taking a number of steps to support gaseous fuels through the renewable transport fuel obligation, the low-emission bus scheme, the low-emission freight and logistics trial and the clean bus technology fund to name a few. Projects funded via the Government's £8 million clean vehicle technology fund include the conversion of more than 60 black cabs from diesel to LPG in, again, Birmingham. This is the neat idea that was advocated by my hon. Friend the Member for South West Bedfordshire. When complete, the project will provide valuable information about the costs and benefits of retrofitting black cabs with LPG. My hon. Friend made the powerful point that this is about what we do with the existing fleet as well as with the new cabs that are required.

More widely, my officials are currently analysing the environmental impacts of different fuels, including LPG, in different vehicles. We are grateful for the data that the industry provided to feed that work. We shall use that analysis to inform our approach to alternative fuels across Government, including in respect of future decisions about fuel duty, of course. That was mentioned, but as Members will know, any fiscal matters are beyond my scope.

Andrew Selous (South West Bedfordshire) (Con): I should have mentioned on Tuesday that I drive an LPG car. Will the Minister say a little bit about what the Government will do in relation to the current constraints on the LPG market? We do not have any vans made with warrantee, which is a barrier to take-up at the moment, particularly for fleet purchases. There is also the issue of the fuel duty escalator, which he might want to mention to the Chancellor in the run-up to the autumn Budget, so that we can get this interim solution to help us to meet our critical air quality targets.

Mr Hayes: I will deal with those points, for the sake of interest and glamour, in reverse order. I dealt with the second matter that my hon. Friend raised—perhaps rather too briefly for his taste, but none the less definitively—in my final remarks a moment ago when I said that all such matters are beyond my ken. Of course, others—no doubt including him, with his usual assiduity—will make precisely that argument to the Chancellor as he goes about his considerations.

On the first point, however, we can perhaps do more. Warrantees in these terms are important, and I have given that some consideration. People want to know that if retrofits take place, it will not detrimentally affect their vehicle or have a deleterious effect of any kind, and that the retrofit itself will be something of which they can be sure. I take the point. I will take it away and certainly want to say more about that during the passage of the Bill, perhaps between now and Report. As ever, my hon. Friend makes a helpful contribution to our considerations. I was about to conclude, but I can see my right hon. Friend the Member for East Yorkshire eyeing me, with the possibility that he is about to add further expertise to our considerations.

Sir Greg Knight (East Yorkshire) (Con): I am grateful to the Minister for noticing that I was giving him a rather quizzical look. He said he would say more about that matter between now and Report. Does he mean in today's proceedings or is he envisaging some other get-together before Report?

Mr Hayes: My right hon. Friend's urgency has coloured all he has done in his long and distinguished career in this House. If I can meet that objective, I will. I think that would be fair enough.

I ought to have said at the very outset that I committed to write all hon. Members a note following our last meeting. I have done so, in an email. I have further hard copies that could not be distributed last night, for obvious reasons. If any Committee member seeks a hard copy for their convenience, I have them available here and will happily distribute them.

With those remarks, I wish to conclude this part of our consideration. We are taking action already to increase the uptake of ultra low emission vehicles, which is an important part of our wider plans. As with new clause 3, we consider it both disproportionate and unnecessary to insert a further requirement for a strategy in primary legislation, because we are going to do what the new clause seeks in any case. I feel that the Opposition will reasonably conclude that they have encouraged, endorsed and perhaps even stimulated a new determination on the part of Government to do exactly what has been set out in this discussion.

11.45 am

Richard Burden (Birmingham, Northfield) (Lab): May I start by completely associating myself and Opposition Members with the Minister's opening remarks? There was no doubt that yesterday's attack was an attack on the kind of things that our deliberations represent; he was right to mention that.

If you will indulge me, Mr Gray, I want to say something as a Birmingham Member of Parliament. Last night the library of Birmingham was lit up with the colours of red, white and blue, as a mark of respect to PC Keith Palmer, and indeed all the victims of yesterday's atrocity. It was also a gesture of solidarity with us and the values we represent in this place. I have no doubt that there will be those who will try to seek to use yesterday's events as a way of dividing people, but I am equally in no doubt that those colours lit up on Birmingham library yesterday spoke for my city of Birmingham. That is what spoke for the people of

[Richard Burden]

Birmingham, irrespective of their colour and whatever faith they may or may not have. Thank you for allowing me to say that, Mr Gray.

I was very pleased that the Minister was in the West Midlands yesterday. He is right that decarbonising taxis and ensuring clean taxis will play a vital role in crafting a strategy that can tackle the air quality crisis facing our towns and cities. I welcome the investment he has announced today. It is also welcome to hear that the strategy that we seek in the new clause, to try to determine how stimulating greater uptake of low-emission vehicles can contribute to an overall air quality strategy, will come forward within 12 months. I would ask him to approach that with some dispatch, because he will know that the air quality strategy that the Government are charged with producing, to avoid the infraction proceedings that Britain is on course to incur, needs to come forward well within those 12 months. I hope that the contribution that low-emission vehicles will make to improving air quality will be laid out as quickly as possible.

The hon. Member for South West Bedfordshire made the good point that when we look at the contributions to be made to improving air quality, we must talk about low-emission, ultra low emission and zero-emission vehicles. There is a massive role for conventionally charged electric vehicles—that has occupied most of our discussions in the Committee—but there will also be a role for hydrogen-electric vehicles and other hydrogen vehicles. He is right that, on the way to getting there, intermediate technologies such as LPG have a role to play. It is important that that is reflected in public policy and the fiscal arrangements adopted. That is a good point that the Committee is grateful for.

As ever, the Minister has got what the Opposition have been saying. He has guaranteed that the kind of strategy we seek will be brought forward. We look forward to that, and when it is brought forward we will give it the scrutiny that it will no doubt deserve, as I am sure the Minister would want us to do. With that, I beg to ask leave to withdraw the motion.

Clause, by leave, withdrawn.

New Clause 6

LICENSING AND ACCREDITATION SCHEME FOR TECHNICIANS WORKING ON AUTOMATED AND ELECTRIC VEHICLES

“(1) The Secretary of State must by regulations establish a scheme for the licensing and accreditation of technicians working on automated and electric vehicles.

(2) The scheme must include details of—

- (a) which professional body will operate the licensing and accreditation of technicians,
- (b) how the licensing and accreditation scheme will operate,
- (c) a minimum level of training for technicians working on automated and electric vehicles, and
- (d) how a list of accredited individuals will be prepared and kept up-to-date.

(3) In this section “working on automated and electric vehicles” includes isolating, inspecting, repairing and maintaining vehicles that are listed under section 1 of this Act.”—(Richard Burden.)

This new clause would require the Government to bring forward regulations for technicians working on automated and electric vehicles in order to ensure they are properly trained, accredited and licensed to carry out that work. This would be regulated by a professional body who would operate a licensing scheme for those technicians.

Brought up, and read the First time.

Richard Burden: I beg to move, That the clause be read a Second time.

We know that the automotive industry relies on hundreds of thousands of individuals in a range of roles to support work on and to maintain vehicles, and it will continue to do so in the future, but as technology develops, so too must the skills of those working on vehicles. We have already heard that the automotive industry faces a skills gap, and as technology develops that gap could widen.

The Bill as it stands does not address that worsening skills gap. We could soon face a gaping hole in the support structures needed for ultra low emission vehicles and for connected and autonomous vehicles, including automated vehicles. The Government need to have a laser-like focus on building our skills base, as people across the automotive industry have told us time and again, not only for electric and automated vehicles but for other car technologies too. That means we need a skills base in automotive research, development and manufacturing, as well as for technicians working on vehicles, so that we can boost job prospects and personal development for the hundreds of thousands of livelihoods linked to this industry.

All that is much needed and important, but the new clause goes deeper than that. It asks whether it is not time for the proper accreditation of qualifications for maintaining and servicing this new generation of sophisticated vehicles. I think the evidence indicates that it certainly is.

I declare an interest as a fellow of the Institute of the Motor Industry. It has shown that 81% of independent garages find it difficult to recruit technicians with the skills and competences they need to undertake work on the kind of technologically advanced vehicles that we have been talking about. It thinks that of the 180,000 technicians in the UK, only about 2,000 are qualified to work on electric vehicles, all of whom are employed in manufacturer dealerships.

Sir Greg Knight: Does not the hon. Gentleman’s new clause have three defects—it is bureaucratic, costly and unnecessary? Does he agree that, if a licensing system of the kind he is envisaging were brought in, the customer would have to pay for it through higher bills? Why would one need a licensed, accredited mechanic if one just wanted a lightbulb or a tyre changing?

Richard Burden: The short answer to the right hon. Gentleman’s questions is: no, no and no. The new clause would not require a licensed technician to check the tyres or change a lightbulb. That is why it asks the Government to bring forward regulations for the kind of accreditation scheme that would be brought in. I also do not believe it would lead to a high cost—in fact, quite the reverse, for reasons I will come on to talk about.

The main thing is that there is a high risk if untrained technicians attempting to work on these kinds of vehicle. I make no bones about this: it could put lives at risk. The battery pack on an electric vehicle carries up to 600 V. If someone needs certification—it used to be called CORGI certification—to repair a gas boiler, is it too much to say that they need some kind of accreditation or qualification to work on future vehicles? Even electricians conducting electrical work in our homes have to be licensed to do so. That is for households that typically run on 240 V AC. For EVs, we are talking about 600 V, and sometimes more. This is about the safety of the vehicles themselves, the people who work on them, those who drive them and other road users around them.

The new clause's main purpose is safety, but it is not just about that. It is also about enhancing skills, providing mobility and progression for technicians, and giving market certainty about safety standards. I think it could have a wider impact on issues such as insurance uptake and viability. That is the answer to the right hon. Gentleman's question. I think that if it is not addressed, the skills shortages could result in higher repair and insurance costs. In some ways, that is already happening. There are already concerns about the insurance costs of some electric vehicles and ultra low emission vehicles. Some insurance charges for EVs are estimated to be as much as 50% higher than their petrol and diesel equivalents. That is because of the assessment made of the nature of the technologies involved.

We believe, as do a number of stakeholders, that the Government should consider introducing an accreditation scheme for technicians who will work on those future vehicles. They have to look at the details of that and at how it can avoid the kind of unintended consequences that the right hon. Gentleman mentioned. If the Government introduce a scheme, they will be promoting safety and supporting the growth of the new generation of vehicles, in the way that we all want to see.

Drew Hendry (Inverness, Nairn, Badenoch and Strathspey) (SNP): May I, too, associate myself with the remarks made by the Minister? We share the view that acts of violence such as those we witnessed yesterday must never deter us from our duties in this Parliament. We also share the gratitude and appreciation for those who seek to protect us in discharging our duties here.

I rise to support the new clause. It is important to consider safety, not just for vehicle users, but for those who work on them. Clearly, that should be of the utmost importance. It is also important for another reason: to provide reassurance and underpin safety for consumers. We want to encourage further uptake of these vehicles and ensure that people have confidence in them. Prospective owners need a degree of trust and security that the vehicles will be safe, secure and not liable to faults or malfunctions. Having accredited technicians will help to alleviate those issues greatly and will build consumer trust with approved regulated training.

It is important to look at opportunities for people to gain the skills we need. I particularly ask the Minister to look at measures that might encourage girls and young women into the sector to take advantage of new opportunities. As a result of the UK leaving the EU, it is more important than ever to have the protections and regulations in place to make sure that safety measures are covered. We support the new clause for those reasons.

Mr Hayes: Once again, the hon. Member for Birmingham, Northfield has made a helpful contribution. He will know that I am interested in and reasonably knowledgeable about—it does not pay to overstate one's knowledge—the subject of skills, having been the Skills Minister, as well as the other things I have mentioned during the Committee, and I take extremely seriously the development of practical competencies and their effect.

The hon. Gentleman is right that ensuring that we have a suitably skilled workforce is important to secure the bright new automated future that we seek. That future will be both automated and electrified, not merely by my rhetoric, but by the technological changes. The skills associated with the vehicles will need to develop in parallel with those changes. The design, development and deployment of vehicles must be matched by competencies in their repair and maintenance, of which people can be sure and of which we can be proud. As he said, motorists with these new types of vehicles will clearly expect the same levels of knowledge, expertise and customer service as they expect for the vehicles that we drive now.

It is important to recognise that the technology is different at developing stages. Just as development will be incremental, the acquisition of skills needs to keep pace with the changes. Although other vehicle technologies are more mature, automated vehicles are still in their infancy—they are just starting to be tested. As the professional body for the automotive industries, the Institute of the Motor Industry is well placed to help the Government understand the challenge of ensuring that vehicle maintenance and repair are carried out in a professional and safe manner for both technicians and drivers. We have already made some progress. The institute has already developed an accredited levels 1 to 3 qualification in EV maintenance and repair. It is estimated that there are between 30 and 50 UK colleges and training providers offering these courses. City & Guilds also offers equivalent qualifications.

12 noon

That is a good start, and engaging through those means seems to me to be the right thing to do, but we can do more. I have been discussing that with my officials this morning. Earlier this week I met my successor, the Minister for Apprenticeships and Skills, my right hon. Friend the Member for Harlow (Robert Halfon), and yesterday I was able to discuss the issue with the Secretary of State for Business, Energy and Industrial Strategy when he joined me in Coventry. There will be a need for intergovernmental and cross-departmental work and for continued engagement with the industry.

In the roundtable meeting I held last week with the Society of Motor Manufacturers and Traders, we began to develop the idea of a subset of the Automotive Council, which Members will know is a well established means by which what was once the Department for Business, Innovation and Skills and is now the Department for Business, Energy and Industrial Strategy engages regularly with the automotive sector. A subset of that council might look specifically at the area of the development of skills, working with my Department and through my Department engaging the other elements of Government as necessary.

I do think that work would be helpful, and the Secretary of State for Business, Energy and Industrial Strategy was able to confirm to me yesterday that he shared my view. As a direct result of our discussions in Committee and my further consideration, I would like to feel we could, as well as the work I have outlined here, take forward an extra piece of work of that kind. I do not have any greater detail, but as soon as I do I will let the House know, including members of this Committee. My hope is that we can make progress on this matter during the course of the Bill's passage to respond to some of the points raised today.

For automated vehicles, the situation is clearly different because of their very early stage of development, which makes it hard to develop an equivalent training, licensing and accreditation scheme. We need to continue to liaise with the relevant technology professional bodies, and those initial discussions will help to shape thinking, at least. It is not unfeasible that the work on automated vehicles can to some degree mirror the work we are doing on electric vehicles. It will be underpinned by exactly what the hon. Member for Birmingham, Northfield described: sufficient certainty through accreditation to guarantee standards and safety. That is the minimum that consumers will want.

We have spoken of some of the barriers to entry facing those who choose to drive these new kinds of vehicles. Price has been mentioned, and electric charging infrastructure is dealt with centrally in the Bill. There are doubts about battery technology, which we may be able to assuage through further development. It is right to say that a further barrier might be the concern that we do not have people who can repair and maintain vehicles at an affordable price. We need to consider that with the industry and across Government in the way I have described.

In response to the point made by my right hon. Friend the Member for East Yorkshire—I have shared this with colleagues on the Committee, with others and with the industry, and I do so again—it is important to ensure that there is a broad and deep spread of expertise. We certainly need people with depth of knowledge and skill to alleviate the fears I described, but we also need to ensure that they are accessible. We do not want a situation where there are few repair centres, largely in urban areas and probably owned by manufacturers, that are the only places where one can have one's car repaired. That would not serve our intended purpose, which is to embed skills in a way that allows people, with confidence, to purchase, drive and continue to own an electric vehicle or, later, an automated vehicle. We will consider that in our work.

I hope that Committee members know how enthusiastic I am about technical, vocational and practical learning. They can be sure that I will apply that enthusiasm and diligence to the work that we do in this area. On that basis, I hope that the hon. Gentleman will withdraw his new clause.

Richard Burden: The Minister is right about the prospect of a situation in which the only place that people can find trained and qualified technicians to work on the new generation of vehicles is in manufacturers' dealerships, often in urban centres. That is the scenario that we could face unless we do something along the lines of the new clause. The same kind of thing is happening now: the 2,000 qualified technicians I spoke about are all in

manufacturers' dealerships. The Minister is right that we need to determine how we can spread and deepen the skills base.

My hon. Friend the Member for Wolverhampton South West has decided that if there is to be an accreditation and licensing scheme, it should have a title just as catchy as CORGI—which is no longer used; it is now called Gas Safe. He came up with “Member of the National Generic Register of Electric Vehicle Licensees”, which comes out as MONGREL. My hon. Friend has many talents, but I gently put it to him that working out the names and acronyms for accreditation for a skill set and array of qualifications in occupations that we want to promote is probably not his strong suit.

Mr Hayes: I must confess to a certain disappointment. As the hon. Member for Wolverhampton South West has become my principal advocate in the House, I rather hoped that he might weave my name into the new qualification.

Richard Burden: The Minister should not have tempted him. He will be working hard on it.

Rob Marris: I will write to the Minister about it.

Richard Burden: My hon. Friend says he will take a leaf out of the Minister's book. Although it will not be on the record of this Committee, it might end up on the face of the Bill.

Labour Members feel strongly about this issue. I am grateful to the Minister for his assurance that he is thinking about it and is engaging with the Department for Business, Energy and Industrial Strategy and with the Automotive Council to see what role they might play in developing such accreditation. We are still keen to see something about it in the Bill if possible. I accept that the new clause, as it stands, may not be exactly the right way to do so, but we would still like something in the Bill. We will think about it before Report, and I ask the Minister to do so as well. If there is consensus about doing something along these lines, let us put it in the Bill. For now, I beg to ask leave to withdraw the clause.

Clause, by leave, withdrawn.

New Clause 8

CONSULTATION ON THE COLLECTION AND USE OF DATA FROM AUTOMATED AND ELECTRIC VEHICLES

“The Secretary of State must consult with such persons as the Secretary of State considers appropriate on the collection and use of data from automated and electric vehicles. The consultation must address—

- (a) who is responsible for collecting data from automated and electric vehicles and from any associated charging or network infrastructure used by such vehicles,
- (b) how the data is shared between different parties, and
- (c) any limitations on the use of such data.”—(*Andy McDonald.*)

This new clause would require the Government to consult on how that data should be handled, who should own the data and what it should be used for.

Brought up, and read the First time.

Andy McDonald: I beg to move, That the clause be read a Second time.

I associate myself with the remarks made by colleagues on the events of the past 24 hours. It is a delight to be here going about our proper parliamentary business; we are all delighted to be getting on with that.

Automated vehicles are likely to produce huge amounts of data on such things as car location, traffic information, maps or footage of surrounding areas, details of accidents, weather information and the car's route, as well as information about passengers or indeed parcels inside the vehicle. Information associated with the charging of electric vehicles will inform Government policy on the legislation and infrastructure needed to support and encourage the uptake of electric and automated vehicles. The data will be a valuable resource.

There are many advantages to gathering such information. For example, if a car is self-driving and makes a mistake, the information gathered by the vehicle can be used to prevent other cars on the road and future generations of cars from making the same mistake. Information about accidents can better inform how we design our roads, and information about traffic could lead us to reconfiguring our towns and cities in order to reduce congestion and improve air quality. However, there are risks as well, as some of the information gathered by the car might be sensitive. Information about a car's history could make identifiable a person's place of work, who their friends are and what they have been doing, which is information that people may wish to keep private and which could be damaging in the wrong hands. Therefore, it is important that the Government ensure that the gathered data are secure, private and open, if we are to best take advantage of the new technologies.

That is not going to be an easy task, and the new clause recognises that it is important that the Secretary of State consults widely on it. That is why the new clause is tabled in these terms. It would require that the Secretary of State consults appropriate persons on the collection and use of data from automated electric vehicles, that the consultation addresses who is responsible for collecting the data from such vehicles and from any associated charging or network infrastructure used by such vehicles, how the data are shared between different parties and any limitations on the use of such data. I trust that the Minister is supportive of the intention behind the new clause and I look forward to his comments on whether it is acceptable to the Government.

Sir Greg Knight: I can appreciate the thinking behind the new clause, because this is a very important area. I personally think that the new clause is defective, in that it does not require action but requires the Minister to consult. The Minister does need to go through with his officials the areas where it is permissible for data to be collected and those areas where it is not. For example, I think that we would all agree that where an automated vehicle has been involved in an accident, the data should quite clearly be made available to the insurance companies and, if the accident has involved personal injury, to the police as well.

I can also envisage certain circumstances in which the automated vehicle has not been involved in an accident, but where the authorities might wish to access the data and should be given the right to do so, for example where it is suspected that an automated vehicle has been used in a burglary or a crime such as that which we

witnessed yesterday. There could be circumstances in which the police suspect that the vehicle has been used for a criminal offence and they wish to access the data to confirm that that is the case, and perhaps to find out where the vehicle has been on other occasions.

There are then other circumstances in which I am far from convinced that it is either desirable or necessary for the data to be shared. If an automated vehicle is used in a company situation by an employee, should the employers have the right to access the information to see where the employee has been? In the absence of the Minister taking any action in that area, what would the status of a freedom of information request be to the owner of the vehicle asking to see the data? Would that be allowed? I pose the question because I do not know the answer—as a lawyer, perhaps I should not do that, because we are taught to ask only the questions to which we know the answer. I honestly do not know whether the Freedom of Information Act would apply if the Bill remains silent on this issue.

Andy McDonald: Perhaps the right hon. Gentleman will consider whether the intended target of the request is subject to the Freedom of Information Act if they are not a Government body or a manifestation of the state.

12.15 pm

Sir Greg Knight: That is an interesting point, but we should have further and better particulars from the Government, who have people who are paid to definitively know the answer to that. What about a situation in which there has been a breakdown in trust between two partners in a business or perhaps between a husband and wife? Should a divorce lawyer who suspects that the wife has committed adultery be allowed to have access to information from the wife's automated vehicle? I would be very uneasy if that was the case. The hon. Member for Middlesbrough has performed a service in tabling the new clause, because we need to focus on these issues, and I think that there are circumstances in which such information should not be made available to those who seek it.

Drew Hendry: Many important comments about data have already been made this morning. Clearly there is the opportunity for data to be collected to improve performance, for safety, and for reasons of tracking a potential crime. That is one set of uses for the data, but we have heard about other possible uses as well. Given the enormous amount of data that will be collated by this future technology, real thought has to go into how the data will be handled. The Minister might reflect on the fact that, in the case of mobile technology, already too much personal data are given away to companies and bodies that we might not want to have the right to have access or ownership of those data, so it is important to consider how the data will be used in future. I suggest that the Minister considers the principle of the user being the owner of the data wherever that is possible and wherever it is practical or useful for the data to be used for the purposes of safety, protection or development.

Sir Greg Knight: Reflecting back on the intervention I took about the Freedom of Information Act, would the Government car service be covered by such a provision?

Drew Hendry: It is an interesting question that I cannot answer, for obvious reasons. It underlines the fact that because this is a big issue there needs to be a serious piece of work undertaken on data alone to decide who is allowed to access the data in future.

Rob Marris: The new clause calls for consultation. I must say, with appropriate humility, that had the Labour Government accepted my amendment to road traffic legislation in, I think, 2006, this measure would already be on the statute book. I tabled an amendment on vehicle data recording devices. Black boxes in other jurisdictions around the world since—again from memory—about 2002-03 have been used for such purposes. For example, when a road traffic collision occurs, the vehicle's black box—the vehicle data recording device—in many vehicles will tell us the speed of the vehicle 10 seconds, five seconds or one minute before the impact, so that we can have an indication as to whether the alleged tortfeasor was in fact speeding.

We need something, but I would speak in support of new clause 8 rather than the concept put forward by the right hon. Member for East Yorkshire that he hoped to move in new clause 2, the difference being that new clause 8 seeks consultation, not regulations now. We need consultation on these tricky devices because of the reasons put forward by my hon. Friend the Member for Middlesbrough, and also because of what the right hon. Member for East Yorkshire said about the adultery clause, as it were, or the freedom of information clause, because there are technical aspects concerning who possesses and who owns the information. Generally, the owner of a vehicle with a vehicle data recording device can be said to possess the information in the black box. However, without specialist equipment and technology from the manufacturer, the owner cannot access that information to disclose it to anybody else, whether under freedom of information or whatever. I hope that the Minister will look carefully at consultation on these issues.

Mr Hayes: I am minded to be quite brief on this new clause. I am clear that none of the contributors has sought to illaquate the Government in an unhelpful or disputatious way. The clarity of the argument that has been advanced seems persuasive. It is absolutely right that, as our transport networks become increasingly digital, the collection and sharing of data becomes a more vital element in those developments. Of course, that includes data from electric vehicles as well as connected and automated vehicles.

We will have to consider carefully who owns the data and on what basis they are exchanged. The balance between public good and private interest here is equally clear and we will need to consult widely on that. To do so would be beneficial and necessary to engage the industry, as we have up until now, to understand both the pace and character of those developments.

We have throughout our work, as the Committee has heard, been engaged in just such consultation. The automated vehicle insurance clauses in the Bill came as a result of careful consideration, following the kind of consultation recommended by the hon. Member for Middlesbrough and others. We have a set of good consultation principles, which will underpin all we do as we move forward, but I think I can go further than that. I do commit to exactly the sort of consultation that the

hon. Gentleman has called for. As we progress with these matters, we will engage with the House on the outcomes of that consultation. More than that, we will consult colleagues here. The House will have its own part to play in the discussion about how these matters develop.

For the record, I should point out that freedom of information applies only to the public sector, whereas data protection laws apply to all. I hope that provides some assurance to my right hon. Friend the Member for East Yorkshire. He is right to say that there is a potential risk to security unless we get this right, a point the hon. Member for Inverness, Nairn, Badenoch and Strathspey also made in his contribution. Yes, we are going to consult. Yes, we know that this is important. Yes, we will come back to the House during that process of consultation. I give that absolute guarantee now, which will be supported in writing, if the hon. Member for Middlesbrough wishes, because it is the right thing to do.

Andy McDonald: I am grateful to the Minister for his acceptance of what we are trying to achieve. In response to the comments from the right hon. Member for East Yorkshire, we live in a world of equal opportunities, so we should point out that husbands are also capable of committing adultery and could be on the receiving end of such fishing expeditions.

The Minister has committed to the consultation we have called for, is happy to put that in writing and will come back to the House. I am grateful for his approach to our proposed new clause, which I do not need to press. I beg to ask leave to withdraw the motion.

Clause, by leave, withdrawn.

New Clause 11

MEMBERSHIP OF EUROPEAN AVIATION SAFETY AGENCY

“Within three months of this Bill receiving Royal Assent the Government must publish a report setting out its preferred option on the future of the UK's membership of the European Aviation Safety Agency.”—(*Richard Burden.*)

This new clause requires the Government to set out its position on UK membership of the European Aviation Safety Agency after leaving the European Union.

Brought up, and read the First time.

Richard Burden: I beg to move, That the clause be read a Second time.

The Chair: With this it will be convenient to discuss the following:

New clause 12—*Single European Skies Movement Research project*—

“Within three months of this Bill receiving Royal Assent the Government must publish a report setting out its position on the Single European Skies Air Traffic Movement Research (SESAR) project.”

This new clause will require the Government to set out its position on the Single European Skies Air Traffic Movement Research project (SESAR) after leaving the European Union.

New clause 13—*Membership of the European Common Aviation Area*—

“Within three months of this Bill receiving Royal Assent the Government must publish a report setting out its preferred option on the future of the UK's membership of the European Common Aviation Area.”

This new clause requires the Government to set out its position on UK membership of the European Common Aviation Area (ECAA) and maintaining current access with the EU and third party countries after the UK leaves the EU.

Richard Burden: We are back to aviation, Mr Gray, with the three proposed new clauses. They are all about trying to find the means to end some of the uncertainty that exiting the European Union will bring to the aviation sector. Our aviation sector is the largest in Europe and the third largest in the world. It is worth in excess of £50 billion to GDP, it supports a million jobs, and it secures for the Treasury some £9 billion-worth of taxation each year.

What happens to aviation will be absolutely critical from day one of any life outside the European Union. However, before we arrive at that destination, we must recognise—this is what the new clauses deal with—that there are a number of partnerships that will need to be confirmed not after we leave the EU, but as soon as possible after article 50 is triggered.

The new clauses would give the Government the opportunity to express in detail their preferred options for three key partnerships that are integral to civil aviation, safety and the aerospace industry, as well as to inbound and outbound UK business travellers and holidaymakers. I will go through each of the three partners, to put on the record their importance and to explain why the Government should consider accepting these new clauses.

First, there is the European Aviation Safety Agency, which is the chief certification authority on the safety of aircraft products. It is the steer for research and development, for action on the environment, and for new markets, such as drones, which I will talk about in a little while. As a member of EASA, the UK benefits from having a seat at the table, helping to develop one set of regulations for the whole of Europe. EASA also develops bilateral agreements with key markets, including the USA and Canada. Retaining our membership of EASA and remaining part of its framework must therefore be a top priority. It has been put forward as a considerable priority by large parts of the aviation sector, including the Airport Operators Association, the ADS Group, which represents aerospace, defence, security and space companies, and Airlines UK.

Not seeking to retain that membership would be costly and time-consuming, and it would also put huge pressure on the CAA, because our membership of EASA, which the CAA feeds into, is hugely beneficial, and not only to ourselves but to our European partners. The UK has valuable expertise and our staff are integral to shaping and developing the practical solutions that do as much to guarantee aviation safety in Estonia and Lithuania as in the UK and Ireland.

On new clause 12, which concerns the second partnership to which I am referring, it is important that the Government make clear their goals and their preferred future relationship with the Single European Sky programme and other airspace partnerships. Airspace management matters, particularly for improving capacity and protecting the environment. Capacity and efficiency have already been improved through the Single European Sky programme, but we need to know whether it will be part of the Government's negotiating process after they trigger article 50. Will the functional air blocs, such as the UK and Ireland, be retained?

We have already talked, earlier in our consideration of the Bill, about the changes to NATS and how the licensing modification procedure and the appeal process will be streamlined. That is with the expectation that SESAR—Single European Sky Air Traffic Movement Research—will bring forward many changes in practice. However, we need to know whether those SESAR arrangements will continue to apply. I hope that the Minister will reflect on that when considering these new clauses.

Finally, new clause 13 seeks to report on whether we expect to be part of the single aviation market after Brexit. As the Minister and his Department will know, aviation is in many ways distinct from other areas of the economy. We must realise that clarifying these three relationships has to be a precondition before the UK negotiates on other aspects relating to trade and market access. We currently rely on the single aviation market for airlines to operate inside the EU without restrictions on capacity, frequency or pricing. The single aviation market is also the basis for many global agreements, spanning no fewer than 155 countries. If we leave the European economic area as well as the EU, we could no longer be part of the single aviation market and we could lose access to those external air service agreements.

The worst possible scenario, as I am sure the Committee agrees, would be simply to fall back on the World Trade Organisation. That would be the worst of all worlds for aviation, because aviation agreements are not covered within the scope of the WTO. If we are talking about aviation, the Prime Minister's mantra that "no deal is better than a bad deal" with the EU means nothing; it says nothing about the agreements that we will need, whatever happens, about how aircraft fly and how we manage our skies.

12.30 pm

It is estimated that 76% of UK holidays are enjoyed in the European Union and about two thirds of all inbound visitors to the UK are from EU countries. If UK airlines lose full or even conditional access to operate within the EU area, we will end up not only damaging trade but restricting holiday choices and damaging airlines and airports. We already know from reports in the *Financial Times* that easyJet is set to establish a European base outside the UK. That presents a clear risk of jobs being lost as a result of lack of certainty. An article in *The Guardian* just the other day underlined that, in order to stay within the rules of the European Union, many airlines may well need to establish a base outside the UK to retain access to the kinds of agreements and facilities on which they rely.

I hope that the Committee sees the need for the UK to confirm its intentions about our future relationship with EU partners and for those to be a key negotiation priority. It is important to emphasise, both to the Government and to those on the other side of the negotiating table, that overhauling or upsetting the existing agreements too significantly will harm both sides and bring huge costs in adaptation, expertise and safety.

We tabled the new clause because we have been told that article 50 could be triggered within a matter not of months, but of days—or, at most, weeks—so these matters need to be resolved now and we need to see the direction of travel now. We should take the opportunity

to ensure that the Bill includes a commitment to retaining access to the key partnerships that we need for our aviation industry, for holidaymakers and for business generally.

Andrew Selous: I will not detain the Committee for long, but on the role of the European Aviation Safety Agency, I want to go back briefly to laser threats, which are covered in clause 22. During Tuesday's sitting, the Minister said that if he had time he would try to discuss with the Secretary of State the next day—yesterday—whether we might regulate the sale of very high-powered lasers for legitimate uses. I remind the Committee that the written evidence submitted by the British Airline Pilots Association states that

“figures from the Civil Aviation Authority...show that in 2016 there were 1,258 reported laser attacks in the UK against UK-registered aircraft”

and that that is

“likely a drastic under-reporting.”

That is three or four reported laser attacks every day. Given the events of yesterday, we should always be mindful of prevention. The new offence created by clause 22 is welcome, but I have to confess to being slightly sceptical about whether it will be adequate, because I am worried about the police's ability to detect and really get on top of this growing problem, which could have catastrophic consequences.

Drew Hendry: I will try not to repeat too many of the comments made by the hon. Member for Birmingham, Northfield, but I agree with his analysis. The European Aviation Safety Agency plays a crucial role in excluding from European airspace and European airports any aircraft that originate from countries or companies that have a poor safety record. It safeguards the security and wellbeing of people across the continent. Given the importance of that role, the Government need to clarify whether the UK will retain full participation in the agency.

The open skies agreement created a number of freedoms for EU-registered airlines, which allowed them to have a base in one member state and to operate cabotage in another. As we have heard, airlines are now actively preparing to move operations. There is no guarantee at present that the UK would stay in the open skies agreement, and the outcome could have serious knock-on effects for the aviation industry in the UK, and in Scotland in particular. It is unclear at the moment what will happen when the UK leaves the EU, and the UK Government need to explain to us how things will work. Passengers and consumers, the aviation sector and the Government know that staying in the open skies agreement is right for the sector. The Government need to tell us their position, and how they will fight to ensure that we stay in.

Tourism is enormously important to the Scottish economy. In the UK aviation is vital to the economy as a whole and to business, and no more so than in tourism. In 2015, UK aviation transported 251 million passengers and contributed £1 billion a week to the UK economy. It supports 1 million jobs. There is a need to set out clear and transparent information about the future of aviation. Will the UK consider joining the European common aviation travel area, or are the Government going to go down the route of umpteen

bilateral agreements? We simply do not know, and not knowing causes great uncertainty, which affects airlines' business decisions about where they want to locate. Those are critical decisions for aviation and the people employed in the sector.

Businesses now openly say that they are having difficulty with their business plans; they are terrified that they will get no forward vision from the UK Government about how things will work in future, and that directly affects investment.

Mr Hayes: We have had an interesting debate. I might describe the contribution of the hon. Member for Birmingham, Northfield—this is, by the way, meant without hostility or even implicit criticism—as more of an exhortation, recommendation or perhaps even plea than a speech in support of a new clause. I understand why he makes it, as it is perhaps something that I might do were I in his shoes. He will, equally, understand that it is impossible for me to prejudge the negotiations that will take place.

The hon. Gentleman has put his view, and it is a measured one, mindful of the fact that planes and boats are by their nature pan-national, transnational or international, that they know no national boundaries, and that agreements developed over time have reflected that. As I have said, his case is an exhortation from a position that may well be shared by many across this continent and others.

As you probably know, Mr Gray—in your case there is no question of “probably”—I am never terribly inspired by the common conceptual preoccupations of this age. By and large I find them fairly unappealing, and so I am always a bit doubtful about certainty, having always rather preferred uncertainty. I am still holding out for an opaque, hard-to-access and exclusive world, really—largely because love is all those things, is it not?

I appreciate, however, that in some areas of life and work certainty matters, and the case that the hon. Gentleman made for it is entirely understandable. I cannot give him more than that today. To do so would be to, as I said, prejudge a negotiation that is taking place a long way above my pay grade and of which our future relationship with all aspects of the EU aviation sector is bound to be part. It would therefore not be appropriate for me to reveal our tactics in that regard.

However, I will say this—I hope it is sufficient—above and beyond what I have already said about respecting the hon. Gentleman's position. The Government recognise the crucial economic role of the aviation sector, as demonstrated by various actions we have taken over time, not unlike actions taken by other Governments of other colours. We will seek, in this regard as in all others, the best possible outcome for the UK from those negotiations. The hon. Gentleman, and indeed other hon. Gentlemen, have made their case; they have it on the record, and I have no doubt that their contribution, like many others, will inform our thinking in those negotiations.

Richard Burden: The Minister has said, perfectly properly, that the ramifications of the new clauses go well above his pay grade and will involve negotiations in which I am sure he will play an important part, but which will involve many other Members. I accept that. It may well not be appropriate, because of those restraints and restrictions, to vote on the new clause in Committee.

However, the essential case remains that the future of our membership of the aviation partnerships that we have referred to has to be tackled, and it has to be tackled soon. The new clauses provide a mechanism through which it could be tackled. Even though I will not press the new clause to a vote, we may well wish to return to it before the Bill completes its passage. I beg to ask leave to withdraw the motion.

Clause, by leave, withdrawn.

New Clause 14

SAFE USE OF UNMANNED AERIAL VEHICLES (UAVs) IN THE UK

“(1) The Secretary of State must bring forward regulations on the safe use of Unmanned Aerial Vehicles (UAVs) in the UK within six months of the Bill receiving Royal Assent.

(2) The regulations may include, but are not limited to, measures which—

- (a) require all new UAVs sold in the UK to have inbuilt geofencing,
- (b) establish the Civil Aviation Authority, as UAV regulator, to be the official authority on approving—permitting exemption—of “restricted areas” applied to geofencing, and
- (c) establish the formulation of a registration system—considering exemptions for members of model aircraft organisations.

(3) In subsection (1) an Unmanned Aerial Vehicle (UAV) refers to an aircraft without a human pilot on board with a weight of no more than 20kg without its fuel but including any articles or equipment installed in or attached to the aircraft at the commencement of its flight, and whose flight is controlled either autonomously or under the remote control of a pilot on the ground or in another vehicle.

(4) In subsection (2)(a) geofencing refers to the use of GPS or radio frequency technology to create a virtual geographic boundary, enabling software to trigger a response when a mobile device enters or leaves a particular area.”—(*Richard Burden.*)

This new clause instructs the Government to bring forward regulation on the safe use of UAVs in the UK, which could include: mandatory geofencing, and establishing a responsibility for the CAA as existing UAV regulator to approve restricted areas.

Brought up, and read the First time.

Richard Burden: I beg to move, That the clause be read a Second time.

The new clause instructs the Government to bring forward regulations within six months of the Bill receiving Royal Assent on the safe use of unmanned aerial vehicles—that is the technical term, but most of us know them as drones.

When the Government announced in the Queen’s Speech last year their intention to bring forward a modern transport Bill, it seemed to all of us that drones and the regulation of drones would be a key part of that Bill. When the Vehicle Technology and Aviation Bill was published, many eyebrows were raised at what seemed to many to be a missed opportunity for the UK to get in place a more robust regulatory framework for drones that will equip us for the future.

I say that because the drone market offers huge promise and potential for growth. That was recognised by the other place’s European Union Committee in a thorough report in 2015. Back then, there were already hundreds of companies—mainly small and medium-sized enterprises—using drones in photography, film, land

surveying, building inspection, crop analysis and a number of other areas. A PricewaterhouseCoopers report in May last year estimated that the drone market may boom to more than £100 billion.

12.45 pm

Drone technology could be at the very core of the fourth industrial revolution that we have discussed in this Committee. It will disrupt and transform current markets and has the potential to create new opportunities that, at this point, may seem implausible. For the UK to make the most of those opportunities, we need a regulatory framework that is clear, safe and secure. Failure to do so could result in the worst possible scenario: an avoidable drone incident that then leads to a knee-jerk regulatory response. We genuinely risk that coming sooner rather than later unless we act. In 2016, there were 70 reported near-miss incidents of drones being flown in such close proximity to manned aircraft that they could have brought into conflict. BALPA believes that the real figure for near misses may be much higher.

We have also heard from the Government themselves about the problems that drones cause to our prisons system, although there was an astonishing response from the Secretary of State for Justice, who said in a recent debate that dogs were being trained by prisons to try to deter the use of drones. I have not come across a drone, using whatever technology, that is particularly scared of a dog, but perhaps I am missing something. We are clear that we need a robust regulatory framework that prioritises safety but does not hinder innovation and certainty, which businesses need for the UK drone boom to which I have referred.

New clause 14 is a reasoned and flexible proposal that asks the Government to get on with developing proposals, while taking into account the hard work that is already being done by the Civil Aviation Authority and, indeed, the UK through the European Aviation Safety Agency. The new clause would give the Government six months to bring forward proposals. That should give the UK time to take full account of the recommendations that will be made by EASA, whose review is expected to be published in April—next month.

At this point, we should recognise that this is another area where EASA is demonstrably helping to shape the market, and consider the difficulty of our developing domestic solutions for the drone market without any say over the EU. That is a practical example of what we were talking about under the previous new clauses. The six-month deadline would also fit with the Government’s latest commitment to publish this summer their response to the all-encompassing drone consultation.

As for the more substantial criteria that the new clause sets and which the Government may consider—I emphasise that it is “may”, not “must”—we do not want to be binding. Rather, we genuinely want to be constructive in shaping the priorities of the future framework.

First, on geofencing, we recognise that that is not a silver bullet. Indeed, no measure will be 100% effective in preventing the kind of security risks to which I have referred, but a form of mandatory geofencing could help to minimise unintended flights into restricted areas. On that point, we recognise the efforts by the CAA and partner organisations to improve education and awareness through their recently launched drone code. That is a

good start, which further measures such as geofencing should be able to complement. It is also worth noting that the technology is widespread and many leading manufacturers already include a capability for geofencing. Therefore, the grounds for seriously considering a form of mandatory geofencing are very substantial.

The second area is mapping regulation. We see that as a key area that needs clarification as soon as possible. Whether geofencing is mandatory or not, the technology is already being used to safeguard and protect many restricted areas, such as airports. However, for that to work, it relies on up-to-date mapping information, and that relies on third parties, including manufacturers, being responsive to permitting and exempting drone use in defined “restricted areas”. Subsection (2)(b) would mean the Government confronting that, with a view to giving the CAA the authority and responsibility for approval and overseeing official mapping of the kind that will need to be used for geofencing. I would be grateful if the Minister reflected explicitly on the need for mapping governance, because I do not believe that that featured in the drone consultation that the Government launched a few months ago.

Finally, on drone registration, that measure has already been introduced in the United States and Ireland. A form of registration after purchase and before first use was endorsed strongly by the British Airline Pilots Association in its oral evidence to the Committee, and in its written evidence. The premise is simple. Registration would achieve two objectives: raising awareness of the rules and improving traceability. At the point of registration, users would be exposed to the rules and perhaps have to complete a couple of questions about appropriate practice before the drone could be unlocked for use. The registration scheme could also help to identify owners. Currently, if a drone is airborne and in a place that it should not be, there is no means at all to track or trace it easily. With a registration scheme, drone users could be traced, which would reinforce the idea that owners and operators have a responsibility to behave safely.

None of the measures I am talking about is a silver bullet that will stop all threats of misuse or, worse, terrorist use of drones, but they are steps that could minimise misuse of drones. I am interested to hear the Minister’s response to my suggestions. On registration, perhaps he will reflect on the review that he and his officials have undertaken so far. Registration schemes are already in place in the United States and also some EU member states, such as Ireland.

Mr Steve Baker (Wycombe) (Con): May I begin by thanking the Minister for the kind invitation he extended to me on Second Reading to respond to the consultation? I regret that it had closed by the time I picked it up on the Monday before the Bill Committee and that he will not receive a submission from me.

I want to make a couple of points. First, in general I dislike agreeing with Opposition Members, but when I look at their clause, I think it is a pretty good start. I particularly endorse the principle of mandatory geofencing. There are two principles that we should apply. The first is an absolute approach to excluding amateur-flown drones from airfields. It is fair to say that that could be easily done with geofencing of regions as directed by the CAA, so I am attracted to those first two parts of subsections (2)(a) and (2)(b).

I am wary of registration because of the cost of registering, particularly as some of the drones available are, really, tiny toys and it would be going too far to implement a registration system for such things. The other principle I want to raise relates to the idea of applying a scheme such as one might have with the autonomous cars we have been discussing, where basically we allow progress to be permissive, provided people take responsibility for their actions. The Government might consider what kind of insurance might be made available for drones, and then the combination of insurance and geofencing might be the right approach to ensuring that people can make best use of those items of equipment.

I am incredibly enthusiastic about drones. I do not own one, but I am enthusiastic about them. They can be used for precision farming, for instance, and can revolutionise the way in which various things are applied to crops and the way that crops are inspected with various cameras in various frequencies. Videos that I have found are available on YouTube. Also, I could swear I heard a drone fly down the railway line next to my house early one morning. That struck me as an indicator that the example I used on Second Reading is not the only one relevant to industry. My example was of the tiler who uses a drone to inspect roofs, because he would otherwise need to put up scaffolding at considerable expense. On the one hand, we can apply regulations for safety, which requires expense for householders and businesses; on the other, we must be cautious that we do not further exclude the solution to the regulatory problem by applying aircraft-style regulations to drones.

There is joy to be had in drones. This is not necessarily a dry subject. The photography that is possible with a drone is beautiful and artistic. I know that the Minister is a great fan of beauty and nature, so I hope he appreciates that if people wish to have a 360-degree aerial photo of their first wedding kiss, that is not something we should inadvertently prevent by over-regulating the use of drones.

Although I am substantively attracted to the idea of mandatory geofencing, with the CAA defining the boundaries—I certainly approve of that—I am also slightly concerned. We do not want to go ahead too soon and I would not support registration.

Andrew Selous: Having a very large Amazon logistics distribution centre in my constituency, I wondered whether my hon. Friend had given any thought to how in future logistics companies such as Amazon might use drones to wing even more quickly than they do at the moment those things that those of us who shop on the internet seek to buy all the time.

Mr Baker: My hon. Friend raises a very good point. Only the other day, I happened to be walking through the corridors of the House when I discovered the former Member Lembit Öpik with Starship Technologies and their small-wheeled delivery robot. If that was scaled up and people were put in it, that would be the future of motoring that we have been discussing—my right hon. Friend the Member for East Yorkshire shares my despair at that prospect.

My hon. Friend the Member for South West Bedfordshire is absolutely right. Why should we have slow, ground-based robots delivering things where people might trip over

them and so on, when we could have unmanned aerial vehicles flying briskly through the air? Provided that they are safe and there are insurable risks, it is a jolly good idea that we should be able to innovate in those ways. I certainly endorse his point.

I have covered what I wished to say. I am genuinely excited about the prospects, in industry and agriculture and recreationally, that will arise from UAVs and drones. A few minutes spent by any Member on YouTube looking at what is possible with drones would cause them to share my enthusiasm. I very much hope that the Government, in considering the issues, will not over-regulate so that we lose the potential for joy and beauty that they will bring.

Mr Hayes: I spend a good deal of my life trying to take those I know and care for to the stars in all kinds of ways. Today, we have begun that journey. As I heard of dogs, I felt we should cast Pavlov in an entirely new light. It is right that we think of the changing technology in that broad-minded and far-sighted way, as illustrated in the contributions from across the Committee Room.

Drones are here and they are likely to stay. How we now cope with that is the question for parliamentarians. That is precisely why the Government have set about a consultation on these matters.

Attention was drawn to the evidence that was submitted to the Committee. The hon. Member for Birmingham, Northfield emphasised that 70 incidents of drones being flown into conflict with manned aircraft have been reported to us. The concerns of BALPA and others that we need to do more are patent, on the basis of that evidence. What we do, and how we do it, is the purpose of our consultation.

There are several proposals in the consultation, all of which are designed to help the safety of the devices. They include the possibility of a registration scheme, making drones electronically identifiable and strengthening the penalties for breaking the law. The proposal for a registration scheme for all owners and their drones weighing 250 grams and above—whether bought new, second hand or home built—would obviously go a considerable way to dealing with some of the doubts and concerns that have been raised today, without jeopardising the whole existence of drones. I know that enthusiasts such as my hon. Friend the Member for Wycombe would not want us to do that. They may have virtuous purposes—we should not assume the use of drones is entirely a matter of threat and doubt—so the framework for drone regulation needs to create a culture of accountability among drone users, aid enforcement and enable direct targeting of leisure drone users on the law and safe flying. The data set that that kind of policy will produce will also be used to inform the policymakers of the future and to assess risk as the technology develops and changes. As I have said, safety is of paramount importance—I know that is a concern of the whole Committee.

I am unsurprised that the new clause has been tabled, given the character of the Bill and the importance of this problem—or rather the importance of this issue, if I might put it with that prejudice. There will be problems unless we get the regulation of drones right; that is clear from what has been reported to us in evidence.

When the consultation is completed and the Government produce their response this summer, we will have a chance to consider what further steps, including legislative steps, might need to be taken. To anticipate that outcome would not be appropriate at this stage. I hope Committee members will bear with us: there is a determination to take the necessary steps and ensure an understanding of both the opportunities and risks posed by drones.

To that end, it may well be that the matter can be raised again while the Bill is enjoying its passage through Parliament. I have to be frank and say that Members of the other House have expressed a number of the same thoughts, arguments and doubts expressed here today. When the consultation response has been produced, there will be further opportunity to take this matter on in the way that several have recommended. I think I had better stop there.

1 pm

Richard Burden: The hon. Member for Wycombe rightly cautioned us to be wary of over-regulation. What is needed is appropriate regulation to ensure both safety and the right regulatory framework to promote and liberate the kind of innovation that drones offer. He was right to give that warning, but I do not think the new clause would have over-regulated; rather, it would have regulated appropriately.

I am grateful for the Minister's response and I thank him for the very helpful briefing that his officials gave us about the work done on drones so far. There is useful work going on, but I would express a bit of frustration about the timescale. We have been asking for action on this for a considerable time.

The Government launched a good consultation, with a comprehensive consultation document that asked some pertinent questions, but everybody expected this to be an area that the Bill would cover. Frankly, the timing of the consultation and the Bill were matters entirely in the control of Government. Through the fault of no one other than Government, those two things are now out of sync. We cannot put anything in the Bill because the consultation has not finished, but by the time the consultation has finished and its recommendations come out, we will have missed the opportunity to do anything about it in the Bill, if that were felt appropriate.

Mr Hayes: Perhaps I can take the heat out of the hon. Gentleman's argument without taking the wind from his sails. The consultation was completed on 15 March. We will now consider that and, as I said, without undue delay we will bring forward our response.

Richard Burden: I am grateful to the Minister. My wording was sloppy. I am aware that the consultation has finished, but we do not yet have the response to the consultation and its conclusions. Those are the kinds of things we should have had to inform our deliberations on the Bill. We are facing a delay.

I take in good faith the Minister's assurance that the recommendations that the Government will make in response to the consultation will come forward with as much dispatch as possible. I would simply say that we did not need to be here with that dislocation in the timetable. We are where we are, and on that basis I beg to ask leave to withdraw the motion.

Clause, by leave, withdrawn.

New Clause 16

REVIEW OF PART 1

“(1) By September 2019, the Secretary of State must lay a report before Parliament assessing the effectiveness of the system for defining and insuring automated vehicles introduced by Part 1 of this Act.

(2) The report must consider—

- (a) the impact on the insurance industry,
- (b) the impact on the cost of insurance premiums for automated vehicles,
- (c) the impact on the uptake of automated vehicles, and
- (d) the levels of disagreement between manufacturers and insurers on liability.”—(*Andy McDonald.*)

This new clause would require the Government to lay a report before Parliament assessing the effectiveness and impact of the system introduced in Part 1.

Brought up, and read the First time.

Richard Burden: I beg to move, That the clause be read a Second time.

We are back to automated vehicles again. In our previous sitting, the Minister absolutely understood and articulated the theme of our amendments and new clauses to part 1, which is that there has to be adequate consultation, scrutiny and willingness to review. The Minister has said on several occasions that he is prepared to have all those things, which we welcome. That is why the new clause makes sense. It is about the third of those objectives: a review. It asks for a report to look at the Bill’s

“impact on the insurance industry...impact on the cost of insurance premiums for automated vehicles...impact on the uptake of automated vehicles, and...the levels of disagreement between manufacturers and insurers on liability.”

Those are all things that we have talked about. In our first sitting we spent a good deal of time exploring those issues, and we were aware that we did not yet have all the answers. The Opposition have therefore asked for consultation before measures are introduced, which the Minister has agreed to.

We are giving the Bill as much scrutiny now as we possibly can, but even after it is passed we still will not have all the answers. We still will not know the impact on the insurance industry, precisely what will happen to premiums, or whether the Bill’s provisions for sorting out the insurance market in the way that it needs to be sorted out will be adequate to give people the confidence to buy automated vehicles. That is all the new clause says: be prepared to look at the Bill again after a reasonable period to see whether it is working. If it is, great—we can all pat ourselves on the back—but if it needs to be changed in some way, the new clause would give us the opportunity. I hope that the Minister will feel able to accept the new clause, not only because of the Opposition’s arguments, but because of his own acknowledgment of the need for review, following consultation and scrutiny.

Mr Hayes: Understandably, the hon. Gentleman calls once again for the approach that he has recommended throughout our deliberations; it is a measured and cautious approach that takes account of the dynamism of the changes we have discussed, and that recommends that the Government be mindful of that dynamism and repeatedly—one might say continually—reconsider what steps must be taken.

As the hon. Gentleman kindly said, I have previously mentioned our agile, step-by-step approach to regulatory reform in response to automated vehicles. Where the evidence base for change exists, we will act to safely remove barriers to use, so that the public and business can benefit from the technology. Each of those steps, taken through primary and secondary legislation or guidance, will be subject to a process of scrutiny and ongoing review, and they will be preceded by the kind of consultation that we have enjoyed and continue to enjoy in anticipation of the Bill, for example in relation to drones.

I entirely identify with the purpose of the new clause. It is critical that we—not only the Government, but Parliament—recognise that in this rapidly changing area, which has widespread public interest, we need to move forward on the basis of the measured approach that the hon. Gentleman recommends.

I have a long list of things that I have committed to do. I could read it out, Mr Gray, but I fear that it might tire you, delay the Committee unduly and do nothing to further persuade the hon. Gentleman that I share his opinion about these matters. However, having asked my team to produce it, it would seem harsh if we did not turn it into a piece of written work in a form suitable to be sent to the Committee.

We spoke about the development of standards in respect of skills in these developing technologies. We spoke about the regulatory regime and the need to adapt it in respect of automated vehicles. The continuing evaluation of fitness for purpose, for example of the insurance products that are the inevitable consequence of the catalyst provided by the Bill, we will need to consider in the round. The roll-out of electric vehicle infrastructure is something that we need to look at afresh as technology changes. That ongoing process of engagement and review is absolutely necessary. I wholly and entirely commit the Government to it in the areas of legislation and regulation associated with the Bill. In doing so, I hope that the hon. Gentleman, in eager and excited anticipation of my letter setting that out in detail, will see fit to withdraw the new clause.

Richard Burden: I am grateful for that response. Who could ask for more than a commitment that is whole and entire? The Minister has said, with regard to the purpose of the proposed new clause, that he will write in suitable form to the Committee to set out the Government’s commitment to meet those objectives.

Without in any way undermining our welcome of that commitment, I still do not see why there is reluctance to put the matter in the Bill. I detect that the Committee is drawing to its denouement, and no one will applaud me for delaying that unnecessarily. However, this is a matter that may need to be referred to before the Bill completes its passage. Although I absolutely accept the Minister’s assurances, I am not still convinced why this should not be in the Bill. For now, I beg to ask leave to withdraw the motion.

Clause, by leave, withdrawn.

Bill to be reported, without amendment.

Mr Hayes: On a point of order, Mr Gray. As we conclude our work on the Bill, I would personally like to thank you and your fellow Chairman, the Committee Clerks, all those who have informed us, kept us secure,

delivered messages to us and recorded our words for posterity in the *Official Report*, for their work and service.

I also wish to thank all the members of the Committee. Committees vary in their tone and character, but I think that this Committee has been what I would describe as a gilravage. For those not familiar with that word, gilravage is a merry meeting with noise, but without injury to anyone. That is precisely what we have had: a gilravage.

Governments sometimes like to pretend that they have all the answers. All but those who are blinded by self-aggrandisement know that no Government have all the answers because no Government know all the questions. This Committee on this subject has allowed us to be reminded of that fact, as we have improved our ideas, thoughts and the condition of the Bill, through really good debate.

I must end with a quote. I think that I have done Burke and Chesterton to death during the course of my consideration of the amendments and my responses to them, so I have picked something inspired by my right hon. Friend the Member for East Yorkshire, who I know is a great admirer of this late gentleman: it is Ronald Reagan. That will not cause celebration in all parts of the Committee. None the less, hon. Members will perhaps remember one of Reagan's most famous quotes:

“With our eyes fixed on the future, but recognising the realities of today, we will achieve our destiny to be as a shining city on a hill for all mankind to see.”

The Vehicle Technology and Aviation Bill will certainly be the UK's opportunity to pave the way towards a world-leading future. Looking to that future, but mindful

of the realities of the day, it will place this country at the forefront of this technology, so to shine not just in our cities, but across our kingdom.

Andy McDonald: Further to that point of order, Mr Gray. I will not detain the Committee for any length of time. I will simply record my thanks to you and to Ms Ryan for your expert chairing of our proceedings. I would also like to thank the Clerks, the Doorkeepers and, in particular, the police officers. I was greeted this morning with a polite and gentle request to put my badge on. I thought, “My goodness, here we are coming into this place to conduct what we call the ordinary business of our parliamentary democracy.” It is far from ordinary; it is precious. The line-by-line scrutiny of this Bill has been a living example of why we hold this so dear. With that, Mr Gray, I thank you again. I will not provide a quotation with the eloquence of my right honourable friend the Minister. I will perhaps quote Paul McCartney and say that this has been “a long and winding road” and we are at the end of this particular one.

The Chair: Both the hon. Gentleman and the Minister know that those are entirely bogus points of order. None the less, I will pass on their thanks to the right hon. Member for Enfield North, and I know that the Clerks and other staff are grateful for what they had to say.

1.17 pm

Committee rose.

Written evidence reported to the House

VTAB 12 UK Petroleum Industry Association

VTAB 13 Addison Lee

VTAB 14 Direct Line Group

VTAB 15 BLM

VTAB 16 POD Point

VTAB 17 Energy UK

VTAB 18 Kennedys Law LLP

VTAB 19 Petrol Retailers Association

VTAB 20 Association of Convenience Stores

VTAB 21 Disabled Persons Transport Advisory
Committee (DPTAC)

VTAB 22 Ageas