

## Agenda – Economy, Infrastructure and Skills Committee

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Meeting Venue:

Committee Room 1 – Senedd

Meeting date: 5 December 2018

Meeting time: 09.45

For further information contact:

**Gareth Price**

Committee Clerk

0300 200 6565

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**Private pre-meeting (9.45–10.00)**

### **1 Introductions, apologies, substitutions and declarations of interest**

### **2 Paper(s) to note**

(Page 1)

**Attached Documents:**

EIS(5)–29–18(P1) Letter from the Minister for Welsh Language and Lifelong Learning to Chair



Cynulliad  
Cenedlaethol  
Cymru

National  
Assembly for  
Wales

### **3 National Grid and Western Power Distribution: Electric vehicle charging in Wales evidence session**

(10.00–11.00)

(Pages 2 – 20)

Graeme Cooper, Project Director for Electric Vehicles, National Grid

Roger Hey, Future Networks Manager, Western Power Distribution

#### **Attached Documents:**

EIS(5)–29–18(P2) Research Brief

EIS(5)–29–18(P3) Evidence from National Grid

EIS(5)–29–18(P4) Evidence from Western Power Distribution

### **4 Motion under Standing Order 17.42 to resolve to exclude the public from item 5**

(ix) any matter relating to the internal business of the committee, or of the Assembly, is to be discussed.

### **5 Forward Work Programme 2019**

(11.00–11.15)

(Pages 21 – 22)

#### **Attached Documents:**

EIS(5)–29–18(P5) Forward Work Programme 2019

**Break (11.15–11.30)**

## **6 Rail Franchise and Metro Scrutiny with the Cabinet Secretary for Economy and Transport**

(11.30–12.30)

(Pages 23 – 47)

Ken Skates AM, Cabinet Secretary for Economy and Transport

Simon Jones, Director of Economic Infrastructure, Welsh Government

### **Attached Documents:**

EIS(5)–29–18(P6) Research Brief

EIS(5)–29–18(P7) Evidence from the Cabinet Secretary for Economy and Transport

**Eluned Morgan AC/AM**  
**Gweinidog y Gymraeg a Dysgu Gydol Oes**  
**Minister for Welsh Language and Lifelong Learning**

Llywodraeth Cymru  
Welsh Government

Russell George AM  
Chair Economy, Infrastructure and Skills Committee  
National Assembly for Wales  
Cardiff Bay  
Cardiff, CF99 1NA

23 November 2018

Dear Russell

Further to my attendance at the Economy, Infrastructure and Skills Committee on 7 November, I can confirm ESF funding is currently approved for Communities for Work until December 2020. To maximise the drawdown of ESF funding and ensure continuity of delivery, my officials are in discussions with the Welsh European Funding Office to extend the programme until 2022/23. This extension would be covered by the Treasury guarantee.

Yours sincerely



**Eluned Morgan AC/AM**  
**Gweinidog y Gymraeg a Dysgu Gydol Oes**  
**Minister for Welsh Language and Lifelong Learning**

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Rydym yn croesawu derbyn gohebiaeth yn Gymraeg. Byddwn yn ateb gohebiaeth a dderbynnir yn Gymraeg yn Gymraeg ac ni fydd gohebu yn Gymraeg yn arwain at oedi.

We welcome receiving correspondence in Welsh. Any correspondence received in Welsh will be answered in Welsh and corresponding in Welsh will not lead to a delay in responding.

# Agenda Item 3

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## National Assembly for Wales Economy, Infrastructure and Skills Committee inquiry 'Electric Vehicle Charging in Wales', evidence from National Grid

### Executive Summary

- 1.1 The UK needs to speed up its preparations for the uptake of electric vehicles. As prices fall and range increases, the take up of electric vehicles could accelerate rapidly. However, a key reason for not purchasing an EV is 'range anxiety'. This is consumers' anxiety that they will run out of charge in their car due to a lack of charging points, the time taken to charge and the limited distance you can travel on a full charge.
- 1.2 Consumers will only switch to EVs if there are widespread charging points, which are easily accessible, and can charge at appropriate speed. As set out in the National Infrastructure Assessment, the most convenient and cost-effective way to address 'range anxiety' would be to locate ultra-rapid (up to 350kW) charging infrastructure at existing Motorway Service Areas (MSAs).
- 1.3 To make the most of the opportunity to improve air quality, reduce emissions and develop one of the best electric vehicle infrastructure networks in the world, government needs to provide the right environment to support and encourage the switch to electric vehicles. With the right conditions, including a national network of electric vehicle charge points, the UK could become a global leader in electric vehicles.
- 1.4 As the owner and operator of the Electricity Transmission network in England and Wales, National Grid are planning for the impact of mass adoption of electric vehicles. We have spoken to a range of equipment manufacturers, MSA's owners, EV charging providers, industry experts and analysts to understand future infrastructure requirements. We are exploring how we can best support a backbone of charging points at the UK's MSAs, and exploring the practical steps that will need to be taken to realise the benefits and opportunities from transport decarbonisation.
- 1.5 Under any likely scenario of EV uptake, most MSAs will require a reinforced power connection to allow for the additional numbers of charge points needed. We have identified 54 MSA charging locations across the strategic motorway network in England and Wales, which once delivered would allow 99% of drivers to be within 50 miles of an ultra-rapid charging station with the ability to charge a vehicle in the time it takes to buy a cup of coffee.
- 1.6 While hundreds of millions of pounds of investment has already been made into the UK charging infrastructure sector, by their nature MSAs tend to be in rural areas. A market led approach will result in an unequal distribution of chargers across the UK, with many rural areas likely to be left with insufficient capacity required for their electric vehicle charging needs. To make the most of the opportunity to improve air quality, reduce emissions and develop one of the best electric vehicle infrastructure networks in the world, the government needs to provide the right environment to support and encourage the switch to electric vehicles.
- 1.7 If the government truly want to encourage and leverage private sector investment to build and operate a thriving, self-sustaining public network, we believe a targeted investment approach, coupled with a proactive strategy to planning network connections, is needed. The Government should designate which MSA sites should be part of a new core network of ultra-rapid chargers by the end of the 2018/19 to ensure EV targets are achieved.

### How does the infrastructure need to develop to support an increase in EVs on our roads?

- 2.1 Consumers will only switch to EVs if charging points are widespread, easily accessible, able to charge at appropriate speed and compatible with a range of vehicle models. The availability of charging infrastructure could significantly delay the speed of electric vehicle adoption and materially impact the ability to hit government carbon targets.
- 2.2 While charging at home will be a convenient option for some, around 40% of households do not have access to off street parking and therefore millions of vehicles will still require adequate facilities to charge. A comprehensive network of car chargers, at appropriate speeds to suit the time spent at each location, will be vital to ensure we are ready for EV uptake. In addition to home, destination, local fast and fleet charging, a network of chargers along the strategic motorway network will be needed.
- 2.3 A recent AA survey<sup>1</sup> found that 79% of members surveyed, who do not yet own an EV, were concerned by the lack of rapid charging points on motorways for long distance journeys. Approximately 90% of MSAs do already have some chargers on site. However, while these are often described as 'fast' they are usually 50kw chargers,

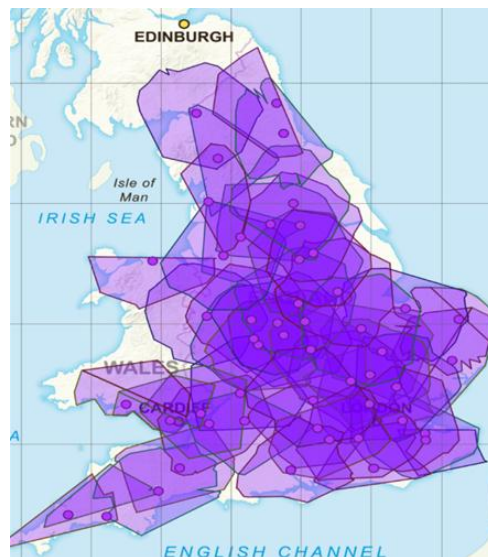
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<sup>1</sup> [AA June 2018 Survey](#)

which can take more than an hour to suitably charge a vehicle. Where there are 'rapid' chargers (~10% of sites) they are often incompatible for most vehicles.

- 2.4 While the government is encouraging the switch to EVs through funding programmes for local infrastructure, there is currently little funding support for ultra-rapid charging along the motorway network. We agree with the National Infrastructure Commission that the most convenient and cost-effective way to address 'range anxiety' would be to locate ultra-rapid charging infrastructure, suitable for any vehicle model, at existing MSAs, with the ability to charge a vehicle in the time it takes to buy a cup of coffee.
- 2.5 To address consumer needs around charging on longer journeys, a network of ultra-rapid chargers will be required at key sites along the motorway network. We have been reviewing the power capacity at these sites and the synergy with our transmission network, identifying that approximately 60% of the 165 MSA sites in England and Wales are within 5km of our existing high voltage electricity network infrastructure, with most requiring a reinforced power connection before 2030 to ensure they can facilitate the additional numbers of faster charge points.
- 2.6 We have identified 54 strategic MSA sites where an upgraded electricity network connection would allow 99% of drivers in England and Wales to be within 50 miles of an ultra-rapid charging station, as shown in Fig.1. This will enable people to charge their vehicles rapidly (5-12 mins) and drive further, accelerating the shift to EVs.

**Fig 1.** Map showing the potential 99% coverage, in England and Wales, if the 54 strategic sites were delivered.



- 2.7 When reinforcing power connections to MSAs, it will be important to ensure that the upgrade has the capacity to cope with future EV growth. An upgraded transmission connection offers a reliable and future-proof solution. However, while a transmission connection is likely to be the most economic and efficient option at many of the sites, there are sites identified where there is enough existing capacity and the connection costs are likely to be lower to upgrade the distribution network.

### **How can the Welsh Government, private sector and third sector work together to develop EV charging infrastructure?**

- 3.1 While hundreds of millions of pounds of investment has already been made into the UK charging infrastructure sector, without some targeted intervention in specific areas, such as MSAs, to unlock the market, there is considerable risk the roll-out will not happen fast enough, or with sufficient capacity to be able to scale up to meet the needs of the future number of cars that will require charging. A national core network of ultra-rapid EV chargers needs to be delivered by 2025, the time at which vehicle cost parity is reached, to ensure infrastructure is not the remaining barrier to consumer EV uptake.
- 3.2 By their nature however MSAs tend to be in rural areas. These locations can often be expensive to provide the additional electrical capacity required to meet future EV demand, with some sites also initially having low utilisation and hence attract low returns, in the early years, for investors. While it is feasible for the market to deliver the low cost, high utilisation MSAs these will not to be delivered within the timescales required to ensure consumer uptake of EVs. A market only led approach will likely result in an unequal distribution of chargers

across the UK, with many rural areas likely to be left with insufficient capacity required for their electric vehicle charging needs.

- 3.3 We believe the Welsh Government should focus their public-sector funding support in areas that best facilitate the adoption of EVs, assists the industry with gaining mass market appeal, and which helps to unlock private investment. National Grid supports the National Infrastructure Commission's recommendation for investment in a national core network of rapid EV charge points to be delivered by the time at which vehicle cost parity is reached<sup>2</sup>. The National Infrastructure assessment also recommended that government should subsidise, by 2022, the provision of rapid charge points in rural and remote areas, where the market will not deliver in the short term, which we support.
- 3.4 We commend the foundational investment of £2million funding secured as part of the two-year Budget agreement, which will be used to help create a publicly accessible national network of rapid charging points by 2020. We also support the drive for further investment in this field.
- 3.5 A key aim of National Grid's proposal is to serve UK consumers universally and we would emphasise the importance of learning from the mistakes of mobile phone and broadband rollout, which remains incomplete. Those communities already facing inadequate mobile and broadband coverage could also be underserved by EV infrastructure if investment is not made now, which may result in the need for more government intervention at a later stage. The roll-out of broadband and mobile coverage provides important learnings around the need for Government intervention and the role of the market in delivering basic utility needs for UK consumers. Today, we are seeing communities resort to seeking further financing and organising their own ultra-fast broadband upgrades to bring them up to the standard found in urban areas. We need to apply the lessons learnt from other infrastructure programmes for EV charge points.
- 3.6 If the Government truly want to encourage and leverage private sector investment to build and operate a thriving, self-sustaining public network, we believe a targeted investment approach, coupled with a proactive strategy to planning network connections, is needed. The Government should designate which MSA sites should be part of a new core network of ultra-rapid chargers by the end of the 2018/19 to ensure EV targets are achieved.

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<sup>2</sup> ['Revolutionising Road Transport', in National Infrastructure Assessment](#), National Infrastructure Commission (July 2018)



## **The Economy, Infrastructure and Skills Committee inquiry into electric vehicle charging in Wales**

### **Response by Western Power Distribution**

<b>Q1. To understand the current charging infrastructure in Wales, and to what extent it is fit for purpose.</b>
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WPD understands the locations and power requirements of registered EV chargers in South Wales, the current total stands at 939 (as of 22<sup>nd</sup> October 2018). However we think there may be more unregistered charge points in operation due to installers failing to notify us. WPD would like better access to EV ownership data so we can fully assess the impact on the network. This could be done by interlinking charge point grant schemes or car sales with the DNO registration process; this is something which could be done on a national basis through the ENA as we believe other DNO's are experiencing similar issues.

We also have some concerns that customers are being told by manufacturers/retailers that they can charge a car from a household socket on a 13A plug. This can lead to potentially unsafe practices such as leads being left across public footpaths and users hanging leads out of first floor windows across to their vehicles. Plugging in EV's from household sockets also contradicts the IET code of conduct with regards to safety compliance including electrical earthing. The installation of a dedicated EV charging point is a similar to the reasons why an electric oven in a house which is typically wired on its own dedicated circuit. Large constant loads are not suitable for connection to a general ring main.

Currently the South Wales distribution network has enough capacity to connect additional EV chargers without the need for intervention or reinforcement. There will however be some occasions where clusters of EV connections exceed available capacity. In these cases the network would be reinforced.

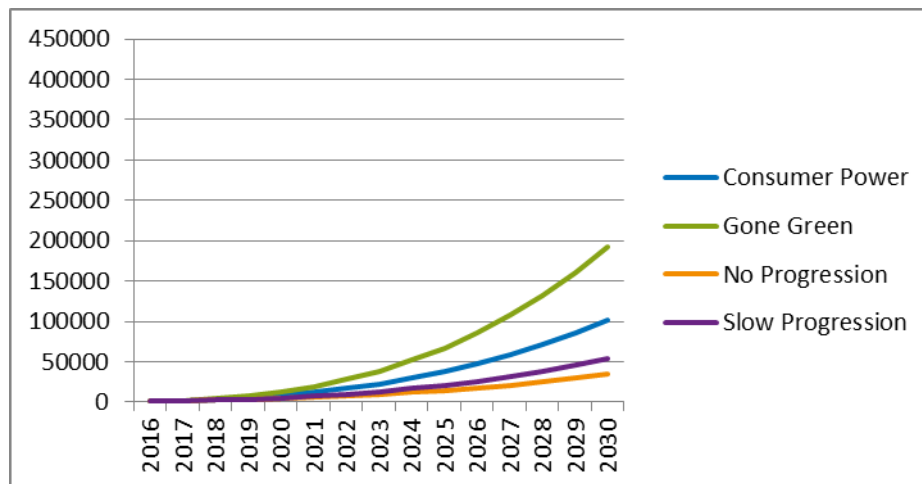
With a rollout of chargers, rural areas may see an impact first as typically the transformer size and cables are smaller so will require upgrading with significant EV uptake. Such works are not major at an individual substation level, costing typically £10,000 per transformer. Where network reinforcement is necessary, transformer and network upgrade costs would under current regulations be socialised between the 1 million customers in South Wales.

Our modelling is showing that we will also see an impact on urban networks once uptake exceeds 15% in certain locations. Further, we believe that up to a 40% uptake in EV's could be managed effectively by modest levels of smart charging.

The impact cannot just be measured on the numbers of chargers installed, but when they are used to charge EV's, for how long and size of battery. Time of Use Tariffs will have a big impact on solving this.

**Q2. How the infrastructure needs to develop to support an increase in EVs on our roads. How the Welsh Government, private sector and third sector can work together to develop EV charging infrastructure.**

Western Power Distribution is planning for several scenarios with regards to EV uptake. We have a dedicated regional set of future energy scenarios for South Wales. We have been working with REGEN to predict the EV uptake levels in Wales. Currently, the number of electric vehicles in South Wales stands at approximately 2,200 (REGEN) out of 1.5 million total vehicles (Statista). As shown in the graph below, there could be as many as 100,000 EV's by 2030 under our mid-case 'consumer power' future energy scenario. The graph below was taken from the WPD 'Shaping Sub transmission in South Wales' report published in January 2017.



We have been re-running the results for a round 2 report that is due to be published in early 2019. Due to the shifting policy and consumer landscape we are now predicting an increased uptake in EV's, with EV numbers at about 300,000 by 2030 under the same scenario.

We regularly carry out technical electrical analysis on each of our four licence areas to determine any network capacity issues on the 132kV, 66kV and 33kV network up to 2032. The first round of analysis for South Wales was published in 'Shaping Subtransmission' in January 2017 and can be viewed on our website here <https://www.westernpower.co.uk/our-network/strategic-network-investment/south-wales>. These reviews are carried out in turn on a 2 yearly basis, the round 2 'Shaping Subtransmission' report for South Wales will be published early 2019. WPD is also working on a new 'Network Assessment Tool' to assess the impact of EV's on the Low Voltage network, which is detailed in the answer to the question below.

These reports propose major long term investments in our network in areas that will be most affected; this includes new Grid Supply Points and Bulk Supply Points. Sites that have been identified for potential upgrade in South Wales as highlighted in the 2017 'Shaping Subtransmission' report include Rassau GSP near Abergavenny and construction of a new GSP at Ferryside near Carmarthen.



We have recently committed to testing all new reinforcement of significant value against market led flexibility services. This is being conducted under our Flexible Power work and will allow us to ensure we continue to deliver network requirements at minimum costs.

With any new infrastructure or roll out of EV chargers, we attempt to engage with local authorities to ensure that the chargers are being put in the most efficient place possible with regards to transport needs and our network. In some cases we may advise against the construction of new infrastructure as there may be ample capacity within the existing network. We welcome a co-ordinated approach between WPD, local authorities and third party chargepoint providers to ensure that the charging network is rolled out without incurring unnecessary costs or lengthy delays. In November 2018 we are holding a series of EV workshops with local authorities including representation from South Wales.

WPD is also preparing new innovation projects on EV fuelling stations and EV on-street charging. We have recognised that there will be a need to install service stations with rapid chargers to facilitate longer journeys. We have already connected banks of rapid chargers at several motorway services areas for Tesla and are in discussion with other operators. Our innovation projects aim to explore more effective and tailored methods of connection for the specific needs of an EV filling station. These sites may also include energy storage.

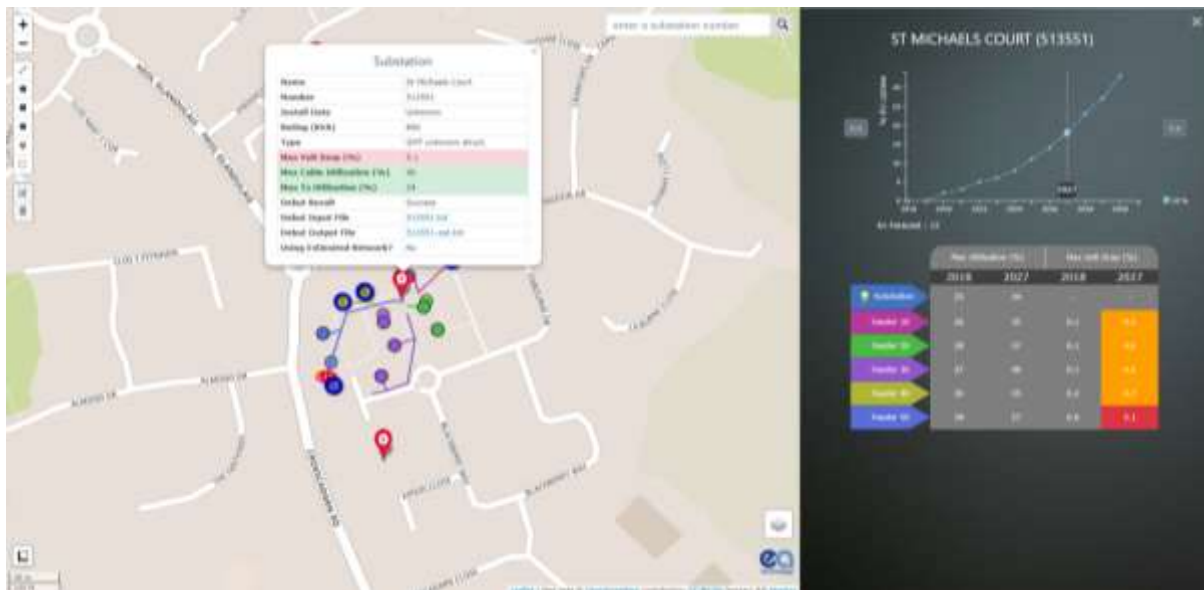
There are currently very limited places where chargers can be retrofitted to existing street furniture. This is because of the small size of existing cables and safety requirements, making locations limited. We aim to work with partners to explore new technologies and connection methods to enable on street charging and a simplified connection process.

**Q3. Whether the electricity grid in Wales is able to deal with a significant increase in EV infrastructure, particularly in rural areas;**

Inevitably there will be situations where mass connections of car chargers will cause network issues, particularly if EV users charge at common times such as the tea-time peak (as proven in WPD's Electric Nation initiative – see response to next question). However, this depends a lot on charger sizes and charge timings. Options to alleviate the additional stress could include the introduction of smart charging in areas where the network is at full capacity, or the introduction of time of use tariffs to incentivise users. Vehicle to Grid is another option that is being looked at to relieve network stress.

Charging in rural areas will likely have a bigger impact. In rural areas it is more likely that EV users will have bigger batteries due to the user consuming a higher percentage of range in the batteries on journeys.

WPD is producing a 'Network Assessment Tool' as part of Electric Nation. The aims of this tool are to assess the condition and capacity of our LV networks and the individual assets on them. The tool uses REGEN data to then predict EV uptake in network areas up to 2030, with the percentage of EV's applied; the tool then models the applied load to the network and assets and produces new capacity values. This tool is due to be completed by October 2019 and will provide our network planners with a tool to be able to plan ahead for EV uptake now in works that they may be completing.



Where additional infrastructure is needed to support electrification of vehicles in rural areas, Western Power Distribution will welcome early engagement with local authorities and stakeholders to ensure that appropriate capacity is available.

**Q4. To explore the potential for electric vehicles to promote behaviour change, for example in terms of vehicle ownership and car sharing initiatives.**

The innovation projects that we are currently running are not testing a modal shift of transport from cars to car clubs; however WPD is leading Electric Nation – The world's largest domestic EV charging trial ([www.electrification.org](http://www.electrification.org)) The aims of the trial are to see how drivers charge their EV's and how smart charging affects customer satisfaction.

Initial findings from the 'charge at will' part of the trial show that most EV users plug in and start to charge in evening around tea time, this causes us issues as we already have a 'tea time' peak in domestic loadings, adding an EV peak on top may cause network overloads. (See Graph Below).





Customers were then put into demand management (smart charging) where we could either limit or pause charging during periods of high network stress, this was done using two systems to control the chargers, Greenflux and CrowdCharge. All of the participants were invited to download and use an app for their system which would notify the user when their charge is being limited or paused, and with an override facility to request a priority charge. Only 48% of the 248 participants on the Greenflux system downloaded the app and of those 15% only used it once. On the CrowdCharge System only 38% of the 209 invited to use the app downloaded and used it. This could be an early indication that smart charging doesn't concern users as much as might be expected. We carried out initial surveys and one of the questions asked was "Are you happy with your current charging arrangements?" pre demand management 75% answered with a yes, compared with a 78% who answered yes in the survey during smart charging period of the trial.

The final part of the trial which has just commenced, is to impose a simulated 'time of use' tariff onto the trial participants to see if we can change their behaviour and push the EV demand peak later into the night. We hope to understand if a monetary incentive, i.e. saving money on time of use or economy 7 tariffs would be enough to change customer's behaviour and in turn help balance the network.

'Connect and Manage' is another WPD led project which manages EV chargers to within the available capacity of the networks. In this system, the LV network is monitored and the available capacity autonomously shared equally between all of the customers on that network. This system is deployable on a temporary basis by fitting a Load Controller in front of the Charger. Once the network has been reinforced, the load controllers could be re-deployed and used again on another network.

**Q5. To what extent the Welsh Government has acted upon the recommendations in the Low Carbon Vehicle Report.**

No Response.

**Q6. Examples of best practice from Wales and further afield.**

Please see earlier responses.

# Agenda Item 5

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# Agenda Item 6

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**ECONOMY, INFRASTRUCTURE AND SKILLS COMMITTEE  
WRITTEN EVIDENCE – Rail Franchise Scrutiny**

**Purpose**

1. The purpose of this paper is to provide written evidence to the Economy, Infrastructure and Skills Committee for its Rail Franchise Scrutiny

**Background**

2. Since the Economy, Infrastructure and Skills Committee conducted scrutiny of the Wales and Borders rail services and South Wales Metro in 2017 we have successfully completed the innovative procurement process. Transport for Wales (TfW) our not-for-profit arm's length company, have partnered with KeolisAmey to launch the new Wales and Borders rail contract on a 15-year contract running from 14 October, 2018 until 16 October, 2033.
3. This is the very first 'made in Wales' rail service, designed and delivered by the Welsh Government. The opportunity to re-design and re-purpose our railway network in Wales is a once in a generation opportunity. In the coming months and years we will deliver groundbreaking transformation of transport across the country and in the borders region.
4. With investment totalling almost £5bn over the next decade and a half, our network will be transformed. We have committed £800m to deliver new trains across the network, which by 2023 will see 95% of rail journeys made on new trains. A further £194m will be put to improving the passenger experiences at our stations across the Wales and Borders network.
5. The new rail contract will put passengers' key priorities at the centre, with a focus on alleviating concerns around seat capacity, journey times and service frequency and ensure fair, affordable fares and quality, clean trains. Passengers will enjoy the benefits of the introduction of smart ticketing across the network, and through the extension of free travel to under-11s with half-price fares for 16 to 18 year olds, they will see economic improvements also.
6. There is £738m earmarked to modernise the central metro lines, support the next phase of Metro and run more trains every hour. Transport for Wales rail services will offer 600 new jobs and 450 apprenticeships over the 15 year lifespan of the contract.
7. It is important to understand that our bold ambitions will take time to bring this to fruition and won't be achieved overnight but I am confident that by 2033 it can be the best passenger rail service in the UK.

**Relationship between the Welsh Government and Transport for Wales**

8. The Welsh Government has ultimate responsibility for transport matters, and is able to ask TfW to deliver its functions on its behalf.
9. The Welsh Government retains sufficient power to protect the public interest and hold TfW to account without the need to intervene directly in the daily activities of the company.



**ECONOMY, INFRASTRUCTURE AND SKILLS COMMITTEE**  
**WRITTEN EVIDENCE – Rail Franchise Scrutiny**

10. TfW was set up to discharge certain transport functions on behalf of the Welsh Ministers, to:
- act in a professional advisory and consultancy capacity in connection with transport projects in Wales by providing support and expertise to the Welsh Government;
  - provide compliance with the Welsh Government's requirements for projects in respect of the statutory administrative stages of preparation, engineering standards, construction, propriety and financial and contractual control by providing support and expertise to the Welsh Government;
  - provide project management services in connection with transport projects in Wales by providing support and expertise to the Welsh Government.
11. TfW was remitted, in the first instance, to design and undertake the procurement process for the next Wales and Borders rail services and the South Wales Metro, and to develop options for the North Wales Metro.
12. TfW's remit has been extended to include the management of the rail services contract, and delivery of the South Wales Metro and the North East Wales Metro.
13. TfW Rail Services (KeolisAmey Cymru) will operate the Wales and Borders rail service contract from 14 October 2018, for 15 years until 16 October 2033.
14. The Welsh Government's Economic Action Plan states that the public transport network will be increasingly directly owned or operated by TfW. As an expert delivery body, separate to the Welsh Government, TfW has a clear and specialised dedication to a single ambition: to support the delivery of transformational integrated transport system in Wales.
15. To the Economic Action Plan commitment, consideration is being given to what day-to-day management elements of the Wales' transport network can be transferred to TfW.
16. This is not privatisation nor is it out-sourcing. As a wholly owned subsidiary of the Welsh Ministers, TfW is part of the public sector in Wales. Both risk and opportunity is retained in the public sector, but within a specialised dedicated delivery organisation.
17. There are a number of different delivery models across the UK, including Transport for London, Transport Scotland, MerseyTravel and Transport for Greater Manchester. How these organisations operate – their constitution, structure, legislative framework and funding – vary, but they all have a consistent and clear remit: to coordinate the transport system across their respective region.

**Procurement process**

18. In line with best practice, assurance reviews were undertaken at key decision points throughout the procurement of the ODP. A Lessons Learnt report on the procurement process is in progress and will be published in the new year.

**ECONOMY, INFRASTRUCTURE AND SKILLS COMMITTEE**  
**WRITTEN EVIDENCE – Rail Franchise Scrutiny**

19. A redacted version of the ODP Grant Agreement will be published on Transport for Wales' website before the end of this calendar year.

**Monitoring and Management of TfW**

20. TfW is a wholly owned subsidiary of the Welsh Ministers. It has a clear, legal identity within a robust and well-established framework. There is a distinct separation between the Welsh Government and TfW, allowing TfW to make independent operational decisions.
21. Accountability is secured by a series of strategic levers including the Company's Articles of Association, the Framework Agreement (currently the Management Agreement) and the Remit Letters. Some elements, such as the Articles of Association, are required by law; others help to guide the interaction between TfW and the Welsh Government.
22. The day-to-day relationship with TfW is overseen by the TfW Sponsor Team and the TfW Client Team(s) within the Welsh Government's Department for Economy, Skills and Natural Resources.
23. The purpose of the TfW Sponsor Team is to support TfW in being an accountable, high-performing organisation, delivering value for money services as outlined in their business plan and supporting the Welsh Government in achieving its objectives.
24. The TfW Client Team(s) is responsible for setting the programme of works and is the single point of delegated authority, contract ownership and management for specific activities remitted to TfW.
25. The relationship between the sponsor and client team will ensure a good degree of challenge from having separate, yet overlapping, delegations with clear single point for accountability. Together the sponsor and client teams provide assurance on:
- TfW business plan development (sponsor team, supported by client team)
  - appropriate operational strategies to best implement policies set by Ministers (client team, supported by sponsor team)
  - governance of TfW (sponsor team)
  - working relationship on the delivery of investment projects (client team)
  - budget allocation (sponsor team, supported by client team)
  - progress against business plan milestones and metrics (sponsor team)
  - progress and status of projects (client team)
  - performance against efficiency metrics (sponsor team)
  - performance against delivery metrics (client team)
  - risk management (client team)
  - scrutiny of performance of TfW (sponsor team, supported by client team)
  - management of information relating to the use of resources compared to budgets (sponsor team, supported by client team)

**ECONOMY, INFRASTRUCTURE AND SKILLS COMMITTEE**  
**WRITTEN EVIDENCE – Rail Franchise Scrutiny**

26. The Client team receives monitoring reports on a suite of delivery metrics that link back to the outcomes the Welsh Government set out to procure, which forms part of the process to provide assurance that TfW is delivering against its remitted activity. These delivery metrics cover both rail service and infrastructure delivery.

**Funding**

27. At present, TfW relies solely on the funding provision from the Welsh Government. The cumulative funding available to the Company to date to meet their current remit is:

Cumulative Revenue Funding	£48,917,000
Cumulative Capital Funding	£21,487,000

28. The Cumulative Revenue Funding includes the contractual payments due to the ODP under the Grant Agreement that are paid directly by TfW on behalf of the Welsh Government.
29. The balance of the revenue funding includes the Company's operating costs to manage the ODP on behalf of the Welsh Government, to deliver its wider remit and its corporate operating costs.
30. The Cumulative Capital Funding covers the delivery of rail infrastructure projects, including, but not limited to, projects to support the delivery of the South Wales and North East Wales metro, Bow Street Station and Llanwern Station and Major Events Stabling Line.

**North Wales Metro**

31. The North Wales and North East Wales Metro seeks to connect communities to jobs and services and encourage modal shift through an accessible and integrated transport system that includes modern rail, bus, active travel and park and ride facilities. We plan to identify and develop further initiatives that meet the needs of people in both Wales and England, enabling access to existing and planned employment opportunities.
32. A cross-border officer steering group has been established and is developing further the vision published in March 2017. The focus is on developing integrated transport hubs across the region, improving connectivity between the hubs and to /from the rural hinterland.
33. The initial work has concentrated on Deeside and Wrexham. The intention is to develop other hubs across the wider region focusing on the Abergele/Rhyl/St Asaph, the Colwyn Bay/Conwy/Llandudno and Bangor/Menai areas as well as key hubs in the Mersey Dee catchment. Work is currently underway to identify a programme of interventions to improve connectivity within the hubs, to the hubs and between hubs, including across the Wales – England border and to Liverpool.

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34. TfW's leadership role in delivering the South Wales Metro provides the route to build our capability to develop and deliver the Metro model elsewhere in Wales, accelerating our delivery of the North Wales Metro. TfW will be establishing a North Wales Business Unit. TfW will begin delivering the North Wales Metro by increasing the frequency on the Wrexham to Bidston Line to 2 trains per hour from 2021 with fully refurbished Metro style trains.
35. The North East Wales Metro transformation will benefit from the station investment programme, TfW will invest in an integrated Shotton Station and Wrexham General Station from April 2024, to enable North Wales Metro capability. TfW will also invest to co-fund new station buildings at Blaenau Ffestiniog.
36. Other planned train service improvements include introducing a new one train per hour service from Chester to Liverpool Lime Street in May 2019, revising timetables in December 2022 to introduce a new Liverpool to Llandudno and Shrewsbury service (one train per hour) and Liverpool to Cardiff (one train every two hours), plus direct services between Manchester Airport and Bangor.
37. As part of TfW's commitment to north Wales, they will:
- Introduce a new fleet of diesel multiple units (DMUs) to the North Wales Coast in 2022.
  - Reduce walk-up and season fares to, from and within North Wales by 10% to encourage travel.
  - Create a true intercity experience on the North-South long-distance services, bringing 12 newly refurbished Mark IV carriages to Wales.
  - Introduce two new Community Rail Partnerships on the North Wales Line and the Crewe to Hereford line. These will be supported by the recruitment of two new Community and Stakeholder Managers and 13 Community and Customer Ambassadors.
  - Provide ticket machines at more stations.
  - Introduce a pay-as-you-go facility for users of the TfW app from April 2021, finding the lowest available fares.

**Swansea Bay Metro**

38. The South West Wales region remains one of our priorities for improving the connectivity and transport links for the benefit of the public and the economy of the area.
39. £115,000 was allocated to Swansea Council in 2017-18 to develop their concept vision for the South West Wales Metro and Welsh Government have provided further funding of £700,000 this financial year for a more detailed business case for the South West Wales Metro via the Local Transport Fund. Swansea County Council is coordinating this work in partnership with the other local authorities in south west Wales.
40. The next phase of work will involve analysis of datasets to ensure that the current and planned trip generators, attractors and travel habits are well understood before any proposals are made with respect to how Metro principals might be applied.

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41. Swansea Council will continue to lead on the development of the concept in 2018-19, where works will be undertaken to apply a more thorough assessment and testing of the concept through a strategic outline business case. My officials have met Swansea Council to discuss governance arrangements necessary to co-ordinate the various projects being undertaken in the South West region and to agree the next steps for developing the transport model for the area. Further meetings have now been planned with the four local authorities and TfW to progress with these activities and to agree a programme of work.
42. Professor Mark Barry has led the development of the case for investment in rail infrastructure in Wales, including the south Wales mainline, which supports the transfer from road to rail. The summary of the case for investment was published in the summer and sets out an overarching vision and set of objectives for rail in the Swansea Bay area. These will inform the individual scheme strategic outline business case for enhancements currently being developed by the Department for Transport. Mark Barry is working closely with Swansea Council to ensure his work continues to help to inform the business case work for the South West Wales Metro.

**Asset transfer process**

43. Subject to the satisfactory outcome to the due diligence process, the Welsh Government will become responsible for the rail infrastructure that operates on the Valley lines north of Queen Street station. This vertical integration of track and train will give us greater flexibility to manage and control investment for the timely delivery of cost effective enhancements to the Metro that will meet the needs of communities in the valleys. The agreed intention is to transfer the rail asset by the end of 2019, alongside the transfer of the appropriate funding, from the UK Government, to operate, maintain and renew the rail infrastructure transferred. Discussions on the detail of the mechanism for transferring the asset, alongside the due diligence work, are ongoing. The Chief Secretary to the Treasury has already agreed to the principle that the transfer should be fiscally neutral.
44. Once the asset is transferred TfW will become responsible for managing the infrastructure and the trains that operate on it, bringing a closer synergy between track and train. TfW will be able to explore infrastructure enhancements and extensions to enable further services to be introduced along existing rail corridors.
45. Responsibility for the operation, maintenance and renewal of the rail asset resides with Network Rail, and will do so until its transfer.