

ANNUAL MONITORING REPORT 2020

ANNEX B: Assessment of progress against open recommendations in 2019

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High Speed North

This study focused on northern connectivity. The study identified priorities for future investment in the North's strategic transport infrastructure to improve connectivity between cities, especially east-west across the Pennines. The Commission's central finding was that the North needed immediate and very significant investment for action and a plan for longer term transformation to reduce journey times, increase capacity and improve reliability. For rail, this meant kick-starting Northern Powerhouse Rail, integrating it with HS2 and planning for the redevelopment of the North's gateway stations. For roads, the Commission recommended that investment should be brought forwards for an early boost in capacity on the M62, the North's most important east-west link, alongside funding to identify and assess proposals for tackling a range of other strategic challenges.

The indicators of progress listed below capture whether decisions were taken, plans made, or funding committed in 2019, in line with the recommendations in High Speed North. The Commission will review the relevant indicators for the next Annual Monitoring Report following its assessment of the rail needs of the North and Midlands.

The indicators of progress for the Annual Monitoring Report 2020 are:

- commitment of funding to Northern Powerhouse Rail and to the northern road network in the second Roads Investment Strategy
- an updated single integrated strategy from Transport for the North
- agreement by all parties over the route between Manchester and Leeds
- agreement to the preferred long-term option for Manchester Piccadilly station.

Data sources and publications

- HM Government (2019), The Queen's Speech 2019
- Transport for the North (2019), Strategic Transport Plan February 2019.

Recommendation	Indicator of progress	Assessment at AMR 2020
2: To connect northern cities faster and more reliably than today, the Commission recommends that funding be provided to further develop the long-term plan for Northern Powerhouse Rail, which should be conceived as a high capacity rail network, rather than a single piece of entirely new infrastructure. This plan must be fully integrated with proposals for maximising the benefits from currently planned investments.	Funding committed to Northern Powerhouse Rail.	The government has made a commitment to invest in Northern Powerhouse Rail. Further details on this commitment are expected soon.

Recommendation	Indicator of progress	Assessment at AMR 2020
<p>3: Transport for the North should work with the Department for Transport, Network Rail, HS2 Ltd and other stakeholders to prepare by the end of 2017 a single integrated strategy, combining short-term action with an ambitious long-term vision, which supports the overall plan for the Northern Powerhouse Rail network and brings together:</p> <ul style="list-style-type: none"> • the upgrade of the TransPennine line between Manchester and Leeds • the design of the northern phase of the HS2 network, including connectivity between Leeds – Sheffield and Liverpool – Manchester • proposals for the redevelopment of Manchester Piccadilly station. 	<p>An updated single integrated strategy from Transport for the North.</p>	<p>Transport for the North produced a Strategic Transport Plan in early 2019.</p>
	<p>An agreement by all parties over the route between Manchester and Leeds.</p>	<p>The route has not yet been agreed.</p>
<p>6: Proposals for the redevelopment of Manchester Piccadilly station should be prepared jointly by TfN, Transport for Greater Manchester, Manchester City Council, Network Rail, DfT and HS2 Ltd. These organisations should work together to deliver:</p> <ul style="list-style-type: none"> a. detailed plans for the new east-west platforms 15/16 to facilitate delivery early in Control Period 6 and unlock the development potential of the Mayfield site b. a masterplan for the longer-term development of Manchester Piccadilly station as a whole, incorporating capacity for HS2 services and options for the delivery and timing of platform capacity for Northern Powerhouse Rail c. proposals for funding and financing the station redevelopment, including for private sector and local contributions. 	<p>A preferred long term option for Manchester Piccadilly station agreed.</p>	<p>This has not been agreed between Transport for the North and the Department for Transport.</p>
<p>9: Development funding should be prioritised for a package of further enhancements to the northern road network, so that these can be completed as early as possible in the next Roads Investment Period. This package should include: upgrades to the M56 (junctions 6-8) around Manchester Airport; the redevelopment of the Lofthouse Interchange and Simister Island junctions; and capacity enhancements to the M1 (35a-39) between Sheffield and Leeds.</p>	<p>Funding committed to the northern road network in the second Roads Investment Strategy.</p>	<p>The second Roads Investment Strategy, which was due to be published by the end of 2019 but was delayed by the election, was expected to include funding for these improvements. The Strategy is now expected in spring 2020.</p>

Recommendation	Indicator of progress	Assessment at AMR 2020
10: Highways England, the Department for Transport and TfN should continue the current programme of longer-term studies. This work should take due consideration of consistency with strategic objectives, feasibility, affordability, forecast demand and congestion levels, and environmental factors.		The Commission is content that this has been implemented and will no longer monitor this recommendation.

Smart Power

This study focused on energy, particularly exploring how the UK can better balance supply and demand, aiming towards an electricity market where prices are reflective of costs to the overall system. The Commission's central finding was that smart power – principally built around three innovations, **interconnection**, **storage**, and **demand flexibility** – could save consumers up to £8 billion a year by 2030, help the UK meet its 2050 carbon targets, and secure the UK's energy supply for generations.

Key indicators of progress for the Annual Monitoring Report 2020 are:

- an increase in capacity of flexible technologies, measured by:
 - the capacity of **interconnectors** deployed, where capacity must increase from 4GW, the level of deployment at the publication of Smart Power
 - the capacity of **storage** deployed in the electricity Capacity Market, where capacity must increase from 2.7GW
 - the capacity of **demand flexibility** deployed in the Capacity Market.

The study also made recommendations that the government and others should undertake specific activities, where the indicators of progress for the *Annual Monitoring Report 2020* are:

- the National Grid Electricity System Operator finishing the delivery of the Electricity System Operator roadmaps
- government proactively facilitating the transition to more actively managed local networks and Distributed System Operators.

The Commission will review these indicators in light of the government's response to recommendations on power in the National Infrastructure Assessment.

Data sources and publications

- Elexon (2019), Elexon Insights: Interconnector flows in and out of Great Britain
- National Grid (2016), Final Auction Results T-4 Capacity Market Auction for 2020/21.

Recommendations	Indicator of progress	Assessment at AMR 2020
<p>1: Government should pursue additional interconnectors with other European countries where the benefits are most significant.</p> <p>Interconnection investment decisions should continue to sit primarily with the private sector but there is a role for government-led diplomacy to unlock those markets that can offer potentially large benefits to UK consumers. The government should therefore focus its efforts on exploring increased interconnection to markets with abundant sources of flexible low carbon electricity, such as Norway and Iceland.</p>	<p>Increased capacity of interconnectors deployed from 4GW, which was the level of deployment at the time Smart Power report was published.</p>	<p>Capacity has increased to 5GW.</p>
<p>2: The UK should become a world leader in electricity storage systems. Two steps are required:</p> <p>a. DECC and Ofgem should review the regulatory and legal status of storage and remove outdated barriers to enable storage to compete fairly with generation across the various interlinked electricity markets. The reforms should be proposed by Spring 2017 and implemented as soon as possible thereafter.</p> <p>b. Network owners should be incentivised by Ofgem to use storage (and other sources of flexibility) to improve the capacity and resilience of their networks as part of a more actively managed system.</p>	<p>Increased capacity of storage deployed in the electricity Capacity Market from 2.7GW.</p>	<p>Capacity has increased to 3.2 GW of storage supported through the Capacity Market for delivery in 2020/21.</p>
<p>3: The UK should make full use of demand flexibility by improving regulation, informing the public of its benefits it can provide and piloting business models.</p> <p>a. Ofgem should start an immediate review of the regulations and commercial arrangements surrounding demand flexibility with a focus on making participation easier and clarifying the role of aggregators; this should be complete by Spring 2017.</p> <p>b. DECC should make future changes to the capacity market to reduce the costs and barriers to entry for demand flexibility.</p>	<p>Increased capacity of demand flexibility deployed in the Capacity Market.</p>	<p>Capacity has increased to 1.4 GW of demand flexibility supported through the Capacity Market for delivery in 2020/21.</p>

Recommendation	Indicator of progress	Assessment at AMR 2020
<p>4: The System Operator must create new markets that will allow open competition for the services it procures and ensure it keeps pace with the network it oversees.</p> <p>b) Ofgem should consider how it encourages the System Operator to develop new markets to provide ancillary services which allow new technologies to participate more easily. The long-term goal must be for a more strategic and transparent approach to the procurement of ancillary services and more cost reflective charging.</p>	National Grid Electricity System Operator to deliver the actions set out in their roadmaps.	Progress has been made, including standardisation of Firm Frequency Response procurements and the Launch of Phase 1 and 2 of the Frequency Response Auction trials, but further work is needed to deliver on actions set out in the roadmaps.
<p>5: Enabling the transition to more actively managed local networks should be a government priority. By Spring 2017 DECC and Ofgem should consult and set out how and under what timeframe this transition should best take place.</p>	Government to proactively facilitate the transition to more actively managed local networks and Distributed System Operators.	Progress has been made towards transitioning to Distribution System Operators, but government needs to set a deadline for this transition to be completed.
<p>6: Where upgrades to our networks are needed, Ofgem should continue its work in encouraging network companies to make long term strategic decisions.</p> <p>Whilst this does increase the risk of stranded assets, the Commission believes that if there is a potential net gain to future consumers then this approach may be justified. If network owners are not best placed to manage this risk, they should work with third parties to help facilitate these investments.</p>	This recommendation has been superseded by the Commission's study on regulation, <i>Strategic Investment and Public Confidence</i> . The Commission will no longer monitor progress against this recommendation once government responds to the study.	

Transport for a World City

The study focused on London's transport system, particularly reviewing strategic options and identifying priorities for future investment in large scale transport improvements – on road, rail and underground – with a focus on Crossrail 2. The Commission's central finding was that, subject to the recommendations within the report, Crossrail 2 should be taken forward as a priority.

Overall progress has been limited as government has not yet confirmed that Crossrail 2 will be built. As this is still forthcoming, the immediate indicators of progress are the development of a plan, agreeing funding arrangements, and putting governance arrangements in place to deliver Crossrail 2.

The indicators of progress for the Annual Monitoring Report 2020 are:

- development of a **plan**:
 - publication of the final London plan, setting out how Crossrail 2 will support and be integrated with planning and development strategies
 - the publication of the Independent Affordability Review, and details of the updated route and costs for Crossrail 2
 - government approval for the revised business case
 - publication of a timetable for gaining consent for the scheme
- **funding** arrangements:
 - release of development funding in 2019 to continue work on the business case
 - a funding deal agreed between the Greater London Authority (GLA), Transport for London (TfL) and government
- agreement over **governance** arrangements between the GLA, TfL and government departments to begin work on delivery options for housing.

Data sources and publications

- Mayor of London (2019) Intend to Publish London Plan 2019.

Recommendation	Indicator of progress	Assessment at AMR 2020
<p>1: Crossrail 2 to be taken forward as a priority, aiming to open in 2033.</p>	<p>Government confirmation that Crossrail 2 will be built and agreement on a funding deal.</p>	<p>Government was expected to make an announcement on Crossrail 2 in the 2019 Comprehensive Spending Review, which was postponed until 2020. Even with a 2020 announcement, the opening is likely to be delayed until at least the late 2030s.</p>
<p>2: Crossrail 2 should be at the heart of the new London Plan, alongside existing commitments to upgrades and other pieces of new infrastructure. Crossrail 2 should not, subject to affordability, prevent the development of other high value schemes, particularly where alternative funding mechanisms are available.</p> <ul style="list-style-type: none"> • London must continue to plan strategically for the period 2030-2050 through the next iteration of the London Plan. Crossrail 2 should be at the heart of this strategy and TfL's wider programme of smaller scale interventions on the national rail, road, Underground and cycling networks in London should be integrated with it to complement and enhance its benefits. • The London Plan should also include a detailed examination of the scope to deliver other strategic projects, such as further east London river crossings and the Bakerloo line extension, through alternative financing mechanisms. This should build on the precedents from the Silvertown Crossing and Northern line extension to Battersea/ Nine Elms. 	<p>Publication of a final London plan, setting out how Crossrail 2 will support and be integrated with planning and development strategies.</p>	<p>Detail on how Crossrail 2 could be integrated into wider planning and development plans was included in the latest draft of the London Plan. The final version of the plan is due to be published in the first quarter of 2020.</p>
<p>3: Sufficient development funds should be released for TfL and DfT to submit a revised business case for Crossrail 2 by March 2017 and aim to introduce a hybrid bill by autumn 2019. The revised business case should include developed plans on costs, funding, housing and stations. TfL estimates the overall development cost at c.£160m, to which TfL should be expected to make a reasonable contribution.</p>	<p>Development funding released to continue work.</p>	<p>Development funding was released at the September 2019 Spending Round. The Commission is content that this has been implemented and will no longer monitor this recommendation.</p>

Recommendation	Indicator of progress	Assessment at AMR 2020
<p>4: In developing the business case, it is crucial that TfL and DfT identify clear proposals to maximise its benefits and increase deliverability. The costs of Crossrail 2 are high and therefore every opportunity should be taken to improve its affordability.</p> <ul style="list-style-type: none"> The updated case should include detailed options to reduce and phase the costs of the scheme. The most promising option identified to enhance affordability would be to delay the construction of the north-western branch to New Southgate. This could reduce the costs of the initial scheme in the 2020s by around £4 Billion. More work should also be done on the costs and benefits of individual central London stations. If construction of the north-western branch is delayed, this would also provide the opportunity to consider the case for an eastern branch from Hackney as an alternative. 	<p>Publication of the Independent Affordability Review alongside the updated costs and route.</p>	<p>The Independent Affordability Review was expected to be published alongside announcement on Crossrail 2 in the postponed Comprehensive Spending Review, so has not yet been published.</p> <p>The revised business case has been submitted to government but the key details on the updated route and costs have not been published.</p>
	<p>Government approval for the revised business case.</p>	<p>The latest business case has been submitted to government but has not yet been formally signed off.</p>
<p>5: A 'London deal for Crossrail 2' funding agreement, through which London contributes more than half the costs of the scheme and which includes substantial measures to realise the full housing benefits, should be agreed ahead of hybrid Bill submission.</p> <ul style="list-style-type: none"> It is vital that a funding package for Crossrail 2 is developed which strikes a fair balance between the contributions made by London taxpayers and businesses and by central government. This should build on the work already undertaken by TfL, which indicated that around half the cost of the project could be funded from London sources. The government should work with TfL and GLA to explore new funding options, which could include consideration of further devolution. However, even without such devolution, HM Treasury should be able to recoup significant receipts from the added Gross Value Added (GVA) benefits and the rising value of property in London. A London deal for Crossrail 2 will need to cover both the funding of the project and the planning measures required to deliver Crossrail 2's benefits. 	<p>Funding deal agreed between GLA, TfL and government.</p>	<p>No real progress towards a deal, especially as the implication of Elizabeth Line cost overruns has not been resolved.</p>

Recommendation	Indicator of progress	Assessment at AMR 2020
<p>6: TfL and DfT in conjunction with other government departments and relevant bodies, should use the next stage of development to set out a clear, transformative plan to turn the proposed 200,000 homes into a reality.</p> <ul style="list-style-type: none"> Strong measures to maximise the new housing enabled by the scheme should be included in the 'London deal for Crossrail 2' –this could include the establishment of one or more development corporations to lead the master planning and delivery of new housing and urban realm provision, and revised planning guidance for the whole route. These measures should be considered as a potential model for improving housing delivery more widely. For housing provision to be a success across the whole route, the London deal for Crossrail 2 will need to have buy-in from the GLA and London boroughs along the route as well as counties and boroughs outside of London which benefit from the new line. All parties will need to ensure the housing unlocked by Crossrail 2 is sustainable and meets the needs of Londoners and those in commuter regions around London. 	<p>Agreement over governance arrangements between the Greater London Authority, Transport for London and government departments to begin work on delivery options for housing.</p>	<p>There are not yet formal governance arrangements in place.</p>
<p>7: The opportunity should be taken to maximise private sector involvement in the development and funding of stations and their surrounding areas. TfL and DfT should leverage private sector capital and expertise to develop selected Crossrail 2 stations, including both the stations themselves and the surrounding land. Development could also be supported by land purchase powers and the ability to assemble sites.</p>	<p>Implementation of this recommendation requires other recommendations to be progressed first, so the Commission has not identified an indicator or assessed progress for the <i>Annual Monitoring Report 2020</i>.</p>	
<p>8: Following the submission of a revised business case and agreement on the conditions above, the aim should be for a hybrid Bill to be submitted by autumn 2019 – the first step towards the railway opening in 2033. As a result:</p> <ul style="list-style-type: none"> submission of a Bill in 2019 would allow significant progress to be made on the passage of a Bill before the end of this Parliament completion of the project in 2033 would allow the project to open in time for the planned arrival of HS2 phase 2 at Euston. 	<p>Timetable for gaining consent for the scheme published.</p>	<p>Plans for gaining consent for the project have not yet been confirmed by government, so the autumn 2019 target has been missed. Unlike other major projects, Crossrail 2 was not included in the December 2019 Queen's Speech.</p>

Connected Future

This study focused on what the UK needs to do to become a world leader in 5G deployment, and to ensure that the UK can take early advantage of the potential applications of 5G services. The Commission's central finding was that mobile connectivity had become a necessity. The market has driven great advances since the advent of the mobile phone but government must now play an active role to ensure that basic services are available wherever we live, work and travel, and our roads, railways and city centres must be made 5G ready as quickly as possible.

Indicators of progress for the *Annual Monitoring Report 2020* have not been set or assessed, because progress against these recommendations have been the subject of a separate in-depth review, *Connected Future: getting back on track*, published in February 2020.

Data sources and publications

- **Roads:** mobile coverage data for voice and data is included in Ofcom's Connected Nations report (coverage of motorways for 4G mobile services, in-car and outside the vehicle).
- **Rail:** when Ofcom publishes the full data on mobile signal strength on railway, the Commission expects that this will become a way of monitoring progress. However, a quantitative assessment of mobile connectivity on the railway is currently not possible given the recent release of data from Ofcom. In the next Annual Monitoring Report, the Commission intends to use this data and government action against the priority actions identified by the Commission in *Connected Future: getting back on track* to assess progress on mobile connectivity on the railway.

Recommendation	Assessment at AMR 2020
<p>2: Our motorways must have mobile telecommunication networks fit for the future. It is vital that our motorways are able to meet both the long term operational needs of connected vehicles and the connectivity needs of the passengers. This will necessitate the timely installation of an open and accessible mobile telecommunication and backhaul network that is fit for the future.</p> <p>The government should set out its plans for how to deliver this by the end of 2017. As part of this work consideration should be given to who is best placed to install, manage, fund and own the network, noting the potential for private sector funding</p> <p>Ensuring that best use is made of the existing infrastructure, such as masts, poles, ducts power supplies and the fibre network alongside our motorways, so that it can be used to support the backhaul of mobile data will be essential.</p> <p>Ultimately, the government should ensure that the necessary infrastructure is in place on motorways by 2025 at the latest if it wants to offer a reasonable level of connectivity on a timescale consistent with the deployment of 5G networks.</p> <p>Ofcom should set out how a regulatory regime would support these different operating models.</p>	<p>The Commission's original recommendation only covers motorways. According to Ofcom's latest Connected Nations report (September 2019), there is near-universal coverage from at least one operator on motorways for both voice and 4G data. Within vehicles, 62% of motorways and A roads have 4G data coverage from all four operators. Outside the vehicle, 88% of motorways and A roads have good 4G data coverage from all operators.</p> <p>Ongoing monitoring will be required to assess the 5G readiness of the network.</p>

Recommendation	Assessment at AMR 2020
<p>3: Rail passengers should have high capacity wireless connectivity. This should be achieved through a delivery model that utilises trackside infrastructure to provide an open and accessible mobile telecommunication and backhaul network that is fit for the future.</p> <p>The government should set out its plans for how to deliver this by the end of 2017. As part of this work, consideration should be given to who is best placed to install, manage, fund and own the network, noting the potential for private sector funding.</p> <p>Ensuring that best use is made of the existing infrastructure, such as masts, poles, ducts power supplies and the fibre network alongside our railways so that it can be used to support the backhaul of mobile data will be essential.</p> <p>Ultimately, the government should ensure that the necessary infrastructure is in place on the main rail and key commuter routes by 2025 at the latest if it wants to offer a reasonable level of connectivity on a timescale consistent with the deployment of 5G networks.</p> <p>Ofcom should set out how a regulatory regime would support these different operating models.</p>	<p>The government has not set out any clear plans for delivering passenger connectivity on the railway. The Commission’s in-depth review of progress against these recommendations has set out priority actions for government to make progress delivering passenger connectivity on the railway.</p>

Recommendation	Assessment at AMR 2020
<p>6: By the end of 2017 Ofcom and government must review the existing regulatory regime to ensure that it supports the sharing of telecoms infrastructure. This will be particularly important for areas of the country where competition driven markets have struggled to provide the necessary mobile infrastructure.</p>	<p>These recommendations relate to changes to the regulatory system for spectrum and infrastructure, which Ofcom are already taking forward. The Commission will no longer monitor progress against these recommendations.</p>
<p>7: Ofcom and government must ensure they keep pace with the rapid evolution of the mobile communications market, and that the regulatory regime is fit for purpose. By the end of 2017 Ofcom and government must review the regulatory regime to ensure that spectrum allocation and regulatory decisions support a growth model in a world where technology developments enable greater shared access and interoperability. Government and Ofcom should review how unlicensed, lightly licensed spectrum, spectrum sharing, and similar approaches can be utilised for higher frequencies to maximise access to the radio spectrum. Spectrum decisions should where possible enable:</p> <ul style="list-style-type: none"> • community or small provider solutions to meet the needs of local areas if they remain unserved or poorly served. • niche entrants or sub-national players to access the higher frequency spectrum anticipated for 5G. Allocation of nationwide spectrum licenses to a small number of operators could leave large areas of the UK fallow. • businesses, universities and others to access spectrum where they need to within their factories or buildings, including already licensed spectrum if there are no interference risks. This will unlock multiple wireless service provider options, including self-provision, spurring the innovation in industrial internet of things, wireless automation and robotics. 	

Partnering for Prosperity

This study focused on how to maximise the potential of the Cambridge – Milton Keynes – Oxford corridor as a single, knowledge-intensive cluster that competes on a global stage, protecting the area's high quality environment, and securing the homes and jobs that the area needs. In this study, the Commission identified opportunities to create well-designed, well-connected new communities and deliver one million new homes and jobs in the area by 2050, while respecting the natural environment and without making changes to existing Green Belt protections. Doing so would help create vibrant new towns, including the first new towns in the UK for 50 years.

In time, the Commission will measure housing supply and the delivery of significant east west transport infrastructure to judge progress against the recommendations in the study. However, the immediate indicators of progress for the Annual Monitoring Report 2020 are for government to have a clear approach to developing plans integrating transport and housing for the arc, including a **spatial vision, governance** arrangements, a plan for supporting **new settlements** and **increased house building**, and providing transport links:

- government should publish a **spatial vision** for the arc, alongside a clear method of pursuing high quality design and net gain
- government should clarify **governance** arrangements for the arc, including by:
 - agreeing and publishing a sub-regional governance structure
 - appointing an Independent Chair and Ministerial champion
- government should plan for **new settlements** and **increased housebuilding** in the arc, including by:
 - identifying sites for new/expanded settlements, and the number of houses within the proposed sites
 - agreeing the Milton Keynes Deal
 - granting extended flexibilities to local authorities that agree to a significant uplift in housing growth
- government should plan to provide **transport links** across the arc that are integrated with plans for housing, including by:
 - publishing the preferred route for the central section East West Rail, from Bedford to Cambridge, incorporating proposals for significant housing developments
 - completing of the consultation on route options for the Expressway
 - delivering passenger rail services between Oxford and Cowley
 - completing preparatory works and applying for planning permission for Cambridge South.
- Local planning and transport authorities should also submit joint statutory strategic plans.

Data sources and publications

- Commission analysis of Ministry of Housing Communities and Local Government (2019) Table 253: permanent dwellings started and completed, by tenure and district.
- HM Government (2020), Progress for Oxford-Cambridge Arc as government announces preferred East West Rail central section
- Ministry of Housing Communities and Local Government (2019), The Oxford-Cambridge Arc: Government ambition and joint declaration between Government and local partners
- The Community Infrastructure Levy (Amendment) (England) (No. 2) Regulations 2019
- Ministry of Housing, Communities & Local Government (2018) Housing Land Supply in Oxfordshire: Written statement - HCWS955.

Recommendation	Indicator of progress	Assessment at AMR 2020
<p>1a: Government should progress work on East West Rail, the Expressway and new settlements through a single co-ordinated delivery programme, with cross-government ministerial commitment and oversight. The aim of this programme should be to unlock opportunities for transformational housing growth through the creation of well-connected new communities.</p> <p>As part of this programme government should commit:</p> <ul style="list-style-type: none"> • £1bn to deliver the infrastructure necessary for a high quality and resilient rail commuter service between Bicester and Bedford, accelerating delivery of this section of East West Rail to a target date of 2023 • to accelerate work on the development of the new East West Rail line between Bedford and Cambridge, and commit to open the line by 2030 	<p>A preferred route for the central section East West Rail, from Bedford to Cambridge, incorporating proposals for significant housing developments.</p>	<p>The preferred route for the central section of East West Rail was published on 30 January 2020. Though several potential new railway stations are identified in the preferred route, it is not clear that these incorporate proposals for significant housing developments.</p> <p>On 4 February 2020 the Secretary of State for Transport approved the Transport & Works Act Order application for work to begin delivering the next phase of the western section of East West Rail, between Bicester, Bedford, Aylesbury and Milton Keynes.</p>

Recommendation	Indicator of progress	Assessment at AMR 2020
<ul style="list-style-type: none"> to deliver the ‘missing link’ of the Oxford-Cambridge Expressway, accelerating development work to deliver a clearly defined and agreed route by 2025, enabling construction to begin as part of the next Road Investment Strategy (RIS2) and be complete by 2030. 	A complete consultation on route options for the Expressway.	A planned consultation on the route options for the Expressway was delayed due to the purdah period preceding the 2019 election and there is now uncertainty about the continuation of the Expressway.
<p>1c: Government should work with the private sector and the relevant local authorities to agree funding packages and progress schemes to support housing and employment growth now. These should include:</p> <ul style="list-style-type: none"> essential works required to enable passenger services between Oxford and Cowley no later than 2019 	Passenger rail services operating between Oxford and Cowley.	No passenger services for passenger services are operating yet between Oxford and Cowley.
<ul style="list-style-type: none"> the acceleration of East West Rail phase 3 works around south Cambridge to enable the delivery of a Cambridge South station in 2022 as part of Control Period 6. Substantial private sector and local contributions, reflecting the benefits that these parties gain, will be required to enable the delivery of these schemes. 	Preparatory works completed and application for planning permission for Cambridge South.	A public consultation on early design options had been planned for winter 2019/20. There has been no visible progress on preparatory works or planning permission. The Network Rail website states that the “ <i>preferred option will be presented to the Department for Transport and our funding partners by spring 2021 to inform the business case before a decision is taken whether to progress with the project or otherwise.</i> ”

Recommendation	Indicator of progress	Assessment at AMR 2020
<p>2a: Government and local authorities should work together, through a robust and transparent process, to designate locations for new and expanded settlements by 2020. This should involve:</p> <ul style="list-style-type: none"> • commissioning formal studies to identify and assess options for new settlements required, and potential locations for these settlements • consultation with communities, statutory agencies, infrastructure providers, wider stakeholders and public examination of proposed sites; and formal designation of sites and the publication of such assessments as legally required. <p>The Commission is optimistic that government and local authorities will reach agreement on the scale and location of new settlements in the national interest. However, if agreement cannot ultimately be reached, the Secretary of State should designate these new settlements.</p>	<p>Identification of sites for new/expanded settlements, and the number of houses proposed within the identified sites.</p>	<p>No sites have yet been identified for new settlements.</p>

Recommendation	Indicator of progress	Assessment at AMR 2020
<p>2b: Government should:</p> <ul style="list-style-type: none"> • work with local authorities to establish appropriate delivery vehicles for new and expanded settlements across the arc, considering the role that can be played by locally accountable Development Corporations, Mayoral Development Corporations, the Homes and Communities Agency and Urban Development Corporations • establish New Town Development Corporations to deliver larger new and expanded settlements. In so doing, it should: <ul style="list-style-type: none"> – work with local authorities to define and agree the objectives, membership and reporting arrangements for new development corporations – provide a clear remit to support the economic success of large new settlements as centres of employment, and assist the development corporation by using wider policy levers to support local economic growth – explore the full range of options for funding development corporations’ programme of land acquisitions, including providing public funding with a view to unlocking substantial private investment, and balancing considerations of short-term affordability and long-term value for money. 		

Recommendation	Indicator of progress	Assessment at AMR 2020
<p>3: Government should work with local authorities to:</p> <ul style="list-style-type: none"> establish arrangements for the long-term stewardship of valued community assets in each new or expanded settlement, placing responsibility and resources in the hands of the community – learning from both the Parks Trust in Milton Keynes and the Letchworth Garden City Heritage Foundation ensure that strategic infrastructure, including new elements of East West Rail and the Oxford-Cambridge Expressway, are planned and developed to achieve net gains in biodiversity and natural capital across the arc. 	<p>A clear method of pursuing high quality design and net gain across the arc.</p>	<p>No method of pursuing high quality design and net gain across the arc has been published, though government has publicly committed to:</p> <ul style="list-style-type: none"> identify opportunities to explore biodiversity net gain develop a local natural capital approach in the Arc; embed sustainability in place-making and establish strong, effective partnerships with local bodies.
<p>4: Government and local authorities should implement measures to increase certainty on the delivery of growth enabling infrastructure.</p> <ul style="list-style-type: none"> Following agreement of these long-term transport plans, government should develop deals, bespoke to this region, with local authorities in Oxfordshire and the central section of the arc. These deals should extend powers over bus franchising, the introduction of smart ticketing, and give greater long-term certainty over future funding which authorities can use to fund, and unlock finance for, city-regional infrastructure improvements. Powers and resources should be devolved no later than April 2020. 	<p>Agree the Milton Keynes Deal</p>	<p>The Milton Keynes Deal has not been agreed, after a number of false starts. It is unclear whether it will continue to be pursued by either government or Milton Keynes Council.</p>
<p>5: Government should, through bespoke deals with local areas, make changes to the operation and application of CIL and s106 agreements across the arc that will:</p> <ul style="list-style-type: none"> give groups of local authorities, working together through appropriate governance structures, the power to levy a city regional CIL remove restrictions on the pooling of section 106 revenues and on the forward funding of infrastructure against future receipts. These changes should be agreed by 2020. 	<p>Restrictions on pooling section 106 revenues were lifted in September 2019. The Commission will no longer monitor this recommendation.</p>	

Recommendation	Indicator of progress	Assessment at AMR 2020
<p>6: Government should consider the need for agreements extending flexibilities in the application of five-year land supply requirements. These agreements should only be considered in cases where local authorities agree deals to accommodate significantly higher levels of housing growth. Flexibilities should:</p> <ul style="list-style-type: none"> • help ensure that local areas are not exposed to increased risk of speculative development as a result of their commitment to additional growth; and • be kept under review and made subject to local areas demonstrating progress in the delivery of major housing growth. <p>In all cases, agreement must preserve the requirement for local authorities to maintain a supply of land sufficient to enable house building at the rate that would have been required in the absence of any deal to support additional housing growth.</p>	<p>Number of authorities that have requested extended flexibilities, having also agreed to a significant uplift in housing growth, and the number of these extended flexibilities granted by government</p>	<p>The Commission is not aware of any authorities that have requested extended flexibilities having also agreed to a significant uplift in housing growth, and no additional flexibilities have been granted by government since the Oxfordshire Housing Deal in November 2017.</p>
<p>7: Government should work with local authorities across the arc to secure agreement that:</p> <ul style="list-style-type: none"> • representatives of each of the arc's defined sub-regions will work together at the arc-wide level, and with government, to develop an ambitious spatial vision covering the whole arc area up to 2050, identifying locations for growth and investment and enabling infrastructure requirements. This work should be completed no later than summer 2019. This vision should be supported by a set of arc-wide economic plans and an arc-wide plan for strategic infrastructure 	<p>A published spatial vision for the arc.</p>	<p>No approach to developing a spatial vision has been made publicly available.</p>

Recommendation	Indicator of progress	Assessment at AMR 2020
<ul style="list-style-type: none"> local planning and transport authorities will work together, in defined sub-regions, to prepare statutory strategic spatial plans and submit these for inspection by April 2020. These should be underpinned by a clear investment strategy and a phased delivery plan and shaped by the requirements of a robust integrated appraisal framework. Local Enterprise Partnerships (LEPs) and utilities providers should be included in the development of these strategic spatial plans. local authorities and LEPs should work collectively and seek to agree a definition for sub-regional planning areas by April 2018. If agreement cannot be reached by this date, the Secretary of State for Communities and Local Government should define the sub-regions based on consideration of the best areas for joined-up economic, transport and land-use planning. 	<p>Number of joint statutory strategic spatial plans submitted for inspection by local planning and transport authorities.</p>	<p>Government has supported unitarization in Buckinghamshire; secured commitment from local planning authorities in Oxfordshire to work together on a joint statutory spatial plan, through a Housing and Growth Deal; and a spatial framework is being developed by the Cambridge and Peterborough Combined Authority.</p> <p>There are no signs that other sub-areas are working together to prepare statutory strategic spatial plans for submission by April 2020.</p>

Recommendation	Indicator of progress	Assessment at AMR 2020
<p>8: Government should work with local authorities to put in place robust sub regional and arc-wide governance arrangements.</p> <p>This will include:</p> <ul style="list-style-type: none"> reconstituting the Oxfordshire Growth Board as a planning joint committee by April 2018, ensuring it is empowered to take decisions on the development, adoption and delivery of a strategic statutory spatial plan establishing growth board arrangements for defined planning areas in the central section of the arc by April 2018, ensuring these are constituted as planning joint committees and empowered to take decisions on the development, adoption and delivery of a strategic statutory spatial plan(s) supporting the continued development of new and existing growth boards, with a view to their being constituted as statutory combined authorities, or mayoral combined authorities, as soon as possible and no later than 2022 	<p>Develop and agree a clear sub-regional governance structure for the arc.</p>	<p>There has been no agreement or publication of a sub-regional governance structure for the arc, though there is greater clarity of cross-arc arrangements in section 3 of the ambition and joint declaration document.</p>
<ul style="list-style-type: none"> working with representatives of the Cambridgeshire and Peterborough Combined Authority, Oxfordshire Growth Board and other growth board(s) across the arc to establish an arc-wide 'Strategic Partnership Board' by Summer 2018. This should include recruiting an independent chair to convene the board and provide a clear link to government and agreeing this appointment with local partners. 	<p>Independent Chair and Ministerial champion appointed for the arc</p>	<p>A recruitment process for independent Chair was run in early 2019, but no candidate was identified.</p>

Data for the Public Good

This study focused on how technology can improve infrastructure productivity. The Commission found that new technologies like artificial intelligence and machine learning could help cut delays and disruptions across the UK's infrastructure networks. But these benefits will only be fully realised if steps are taken to improve the quality, consistency, and availability of data, with companies and agencies securely sharing the data they have on how well their infrastructure operates.

Key indicators of progress for the Annual Monitoring Report 2020 are:

- funding committed for the Centre for Digital Built Britain to continue with the National Digital Twin Programme
- use cases for the Centre for Digital Built Britain-led digital twin pilot projects identified

The Commission is not formally monitoring progress on the fourth recommendation from the Data for the Public Good report as it was not endorsed by government.

Data sources and publications

- University of Cambridge, Centre for Digital Built Britain (2019), National Digital Twin Programme
- Centre for Digital Built Britain (2019), Roadmap for delivering the information management framework for the built environment
- Institution of Civil Engineers, Infrastructure Client Group, Mott MacDonald (2019), Ripe for transformation, ready for change? Project 13 Digital Transformation Workstream: Infrastructure industry benchmarking report
- Infrastructure Client Group (2019), Common challenges, shared response: the smart infrastructure index report 2019
- UK Regulators Network (2019), Infrastructure Data Sharing

Recommendation	Indicator of progress	Assessment at AMR 2020
<p>1: The government should task the Centre for Digital Built Britain with the establishment of a digital framework for infrastructure data, drawing together key organisations and existing initiatives both large scale (BIM) and smaller scale.</p> <p>a. a Digital Framework Task Group for infrastructure data should be established with a high-profile chair who can act as a national champion for this agenda</p> <p>b. Centre for Digital Built Britain should set out a roadmap to a digital framework to develop standards and formats for collating and sharing data</p> <p>c. key organisations which should be involved in the Task Group and in developing the framework include the Alan Turing Institute, Infrastructure Client Group, Construction Leadership Council, Infrastructure and Projects Authority, Cambridge Centre for Smart Infrastructure and Construction, Project 13, Office for National Statistics, Ordnance Survey, Open Data Institute and the recently announced Geospatial Commission and Centre for Data Ethics and Innovation. Wider consultation input should also be sought from the digital twin working group referenced in section 5.</p> <p>d. on standards development, in order to understand the existing standards landscape thoroughly at both a national and supranational level and to ensure agility, the Centre for Digital Built Britain should consult extensively with industry on current behaviours and future requirements for how different infrastructure sectors and sub-sectors use data. The Centre for Digital Built Britian may wish to commission an external standards organisation to conduct some of this work on their behalf.</p>	<p>Funding committed for Centre for Digital Built Britain to continue with the National Digital Twin Programme</p> <p>Use cases for the Centre for Digital Built Britain-led digital twin pilot projects identified</p>	<p>Government has not yet committed funding for Centre for Digital Built Britain to continue with the National Digital Twin Programme.</p> <p>Elsewhere, significant progress has been made on this recommendation with much of the recommendation either implemented or in progress.</p> <p>Identification of use cases is subject to funding</p>

Recommendation	Indicator of progress	Assessment at AMR 2020
<p>e. the Infrastructure and Projects Authority and the Infrastructure Client Group should be engaged with closely when designing final data standards and performance measures. The Infrastructure Client Group amongst others will also be important to consult in respect of appropriate safeguards for commercial confidentiality, with the aim of keeping these to a minimum level wherever possible.</p> <p>f. there should also be close collaboration with the Centre for the Protection of National Infrastructure and the National Cyber Security Centre on security requirements and levels of access and to develop standards for security, consistent with the objectives of the framework and an agreed approach to risk management.</p> <p>g. in order to support effective implementation, the Centre for Digital Built Britain should also lead a scoping exercise for a framework to assess industry progress in adopting and using the framework and to measure the level of innovation achieved by industry.</p> <p>h. the Centre for Digital Built Britain should complete these actions and provide a public report on progress by 1 September 2018, setting out their recommendations for next steps. The Commission would assess this as part of its wider role in monitoring progress against its recommendations.</p>		
<p>2: The Infrastructure Client Group (ICG) and the Digital Framework Task Group Chair should lead industry engagement in the framework and cultivate a shift towards minimum levels of commercial confidentiality.</p> <p>a. ICG should report to CDBB on current industry compliance with minimum levels of commercial confidentiality agreed with CDBB in recommendation 1.</p> <p>b. ICG should work collaboratively with industry and the Digital Framework Task Group to identify opportunities to make data available and reduce the unnecessary use of commercial confidentiality (e.g. through reviewing and revising existing digital contracts), and should set out an agreed plan with milestones towards achieving the proposed shift.</p> <p>c. ICG should report on progress in reducing the application of commercial confidentiality to infrastructure data by December 2018.</p>		<p>The Infrastructure Client Group published a report on the Project 13 Digital Transformation Workstream in 2018, covering the readiness of the infrastructure industry for transformational change, including the need to incentivise sharing information to deliver value for end users. This was followed by an update in 2019. The Commission is content that this recommendation has been completed and will no longer be monitoring it.</p>

Recommendation	Indicator of progress	Assessment at AMR 2020
<p>3: The Digital Framework Task Group (see recommendation 1) should work with the UK Regulators Network and relevant government departments to review and, where possible, strengthen the role of economic regulators in improving the quality and openness of infrastructure data. This should include:</p> <ul style="list-style-type: none"> a. participation by the UK Regulators Network in the formulation of the digital framework set up by CDBB to ensure that it is effectively aligned with regulatory work on innovation and data b. assessment of the potential role of regulators and of possible barriers within current regulatory frameworks regarding: <ul style="list-style-type: none"> – ensuring compliance by regulated network operators and utilities with the national framework and adherence to data collection standards and formats – sharing of data to inform better understanding of asset performance and user experience – sharing of data across infrastructure sectors and the value chain to enable greater innovation in the development of new technologies and data management focused on better asset management and increased productivity c. support for CDBB’s engagement with network operators and utilities around the provision of data of verified quality for the development of a national infrastructure digital twin over the long term d. identification of relevant areas for further trials or studies to enable regulators, and regulated industries, to understand and demonstrate how monitoring technologies and data can support cost-effective maintenance decisions and proactive asset management, working with relevant research organisations. 		<p>The UK Regulators Network published a report on infrastructure data sharing currently taking place across the transport, water, energy and telecoms sectors, the role of the regulators and potential barriers inhibiting the progress of sharing data; the report made a number of recommendations to regulators and other organisations to support data sharing.</p> <p>The Commission is content that this recommendation has been completed and will no longer monitor progress against it. However, the UK Regulators Network should continue to work with the Digital Framework Task Group.</p>

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