

Top 40 update

1.1 As outlined in Chapter 16, since 2011 the government has set out its 'Top 40 priority infrastructure investments', to support delivery of its objectives in each sector. This allows the government to focus on the delivery of those investments which either make the most significant contribution towards achieving a particular objective or carry the most risk should they fail, both strategically and in value for money terms.

1.2 Given the scale of the government's infrastructure commitments, the Top 40 is necessarily diverse and spans both the public and private sectors, and includes projects both currently in construction and some which are still in the scoping stages, with delivery milestones stretching beyond 2020.

1.3 Priority investments are grouped by sector and are not listed in order of importance.


1.4 Whilst some individual projects are large or significant enough to be included within the Top 40 in their own right, in many cases the priority investment will be a wider programme, with key projects from within that programme identified for closer scrutiny.


1.5 The following section provides a comprehensive update of delivery progress for the current Top 40, including key projects and programmes. Each priority investment is outlined, including:


- description and rationale for selection
- current status
- funding
- value^[1] (of key projects and programmes)
- start / end dates for construction
- key progress since the National Infrastructure Plan 2013 and future milestones


^[1] Values are based on combined capital expenditure costs of key projects and programmes in the infrastructure pipeline, where known, except in the case of the Intercity Express Programme where the full programme costs of rolling stock contracts are included.


Road priority infrastructure investments:

1. Accelerated Roads	Status: Planning & consents / in construction	Value: Up to £560m	Funding: Public
	Description and Rationale: These pilots were announced in November 2012 and they are demonstration projects designed to halve the time it takes to deliver major road schemes.		
	Key Projects: <ul style="list-style-type: none"> • M3 Junctions 2 to 4A • M6 Junctions 10A to 13 • M1 Junctions 28 to 31 • A160/A180 Immingham 	Construction: Started Started Started 2015	Start Finish 2016-17 2015-16 2015-16 2016-17
Progress since NIP 2013 and Future Milestones: <ul style="list-style-type: none"> • M1, M3 and M6 projects have all started construction in the past year. • Statutory processes for the A160/A180 Immingham scheme are on target to complete by the end of this Parliament, with construction expected to start in summer 2015 and be complete by autumn 2016. • Lessons learned from the accelerated roads projects will be rolled out across the wider roads programme. 			

2. Strategic Road Network Capacity	Status: Planning & consents / in construction	Value: Up to £749m*	Funding: Public
	Description and Rationale: This programme is a critical element of the government's approach to increasing road capacity and connectivity and includes both improvements to existing roads and new road schemes.		
	Key Projects: <ul style="list-style-type: none"> • M1/M6 Junction 19 Improvement • A556 Knutsford to Bowden • A453 Widening • A5-M1 Link Road • A2 Bean and Ebbsfleet 	Construction: Started Started Started Started TBC	Start Finish 2016 2016-17 2015-16 2017-18 TBC TBC
Progress since NIP 2013 and Future Milestones: <ul style="list-style-type: none"> • With the M1/M6 Junction 19 Improvement starting construction in January, advanced works now underway on the A5-M1 Link Road and work on the A556 Knutsford to Bowden scheme having started in November, all 5 of the key projects identified in NIP 2013 are now underway. • The combined A2 scheme has been added as a key project given its capital value and links to housing regeneration at Ebbsfleet. • The A453 Widening scheme is due to complete next and should be open for traffic by the end of this Parliament. • The Road Investment Strategy 1 (RIS1) identifies over 100 further schemes across England to start construction by 2020-21. <p>*Figure does not include A2 Bean & Ebbsfleet.</p>			


3. Smart Motorways	Status: Active programme	Value: Up to £1.2bn	Funding: Public							
	Description and Rationale: The Smart Motorway programme increases capacity and tackles congestion on some of our busiest existing motorways by opening up the hard shoulder and using new technology to keep traffic moving.									
	<table border="1"> <thead> <tr> <th data-bbox="611 347 1018 383">Key Projects:</th> <th data-bbox="1026 347 1158 383">Construction:</th> <th data-bbox="1166 347 1318 383">Start</th> <th data-bbox="1326 347 1479 383">Finish</th> </tr> </thead> <tbody> <tr> <td data-bbox="611 385 1018 573"> <ul style="list-style-type: none"> Manchester Smart Motorways M1 Junctions 39 to 42 M4 Junctions 3 to 12 </td> <td data-bbox="1026 385 1158 573"></td> <td data-bbox="1166 385 1318 573"> Started Started TBC </td> <td data-bbox="1326 385 1479 573"> 2016-17 2015-16 TBC </td> </tr> </tbody> </table>	Key Projects:	Construction:	Start	Finish	<ul style="list-style-type: none"> Manchester Smart Motorways M1 Junctions 39 to 42 M4 Junctions 3 to 12 		Started Started TBC	2016-17 2015-16 TBC	
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<p>Progress since NIP 2013 and Future Milestones:</p> <ul style="list-style-type: none"> Two key projects completed in 2014 (M25 Junctions 5 to 6/7 and M25 Junctions 23 to 27). Other Smart Motorway projects at the M4/M5 and M6 in Birmingham have also completed. Start of construction on M1 Junctions 39 to 42 and the Manchester Smart Motorways scheme A Development Consent Order (DCO) application is due to be submitted in 2015 for M4 J3 to 12 scheme. RIS1 announces plans to add Smart Motorway lanes with uninterrupted connectivity between London, Birmingham, Manchester and Yorkshire. 										

4. A14	Status: Planning & consents	Value: Up to £1.5bn	Funding: Public
	<p>Description and Rationale: The A14 is a vital link to the East of England and freight route to the Port of Felixstowe. This project will improve the stretch from Cambridge to Huntingdon.</p> <p>This is a significant project which will support regional connectivity, and is expected to drive growth. Major developments, such as the planned new 10,000 home village at Northstowe, the Alconbury Enterprise Zone, and expansion on the northern and eastern fringes of Cambridge, all depend on an improved A14.</p>		
	Construction Start:	2016	Finish:
<p>Progress since NIP 2013 and Future Milestones:</p> <ul style="list-style-type: none"> Over 1,400 responses were received during the pre-application consultation that took place between April and June this year. The Highways Agency is continuing to meet with local authorities to ensure views are considered during scheme development. A DCO application is due to be submitted in late 2014. Examination of the DCO is expected by summer 2015, with a Secretary of State decision expected by early 2016. The government will take forward development of Northstowe, to support accelerated delivery of up to 10,000 homes. 			

5. Lower Thames Crossing	Status: Scoping	Value: TBC	Funding: Public	
	Description and Rationale: A new road-based crossing in the Lower Thames area recognising the strategic importance of the existing Dartford-Thurrock crossing and that the congestion problems currently experienced have serious implications for businesses and the national economy. This project will reduce congestion and increase capacity and connectivity in the South East.			
	Construction Start:	TBC	Finish:	TBC


Progress since NIP 2013 and Future Milestones:

- Following a consultation in 2013, the government response has now announced that Option B has been dropped.
- Route options to develop and assess the two remaining crossing locations (Options A and C) is progressing well, and is expected to lead to public consultation on a proposed solution by early 2016.
- This will allow assessment of the effect of the new remote payment system, 'Dart Charge', which was launched in November to improve driving conditions at the existing Dartford-Thurrock Crossing.
- Opening of a new crossing is currently estimated to be 2025, if publicly funded.


6. A303 / A30 / A358 Corridor	Status: Scoping	Value: £2.1bn	Funding: Public	
	Description and Rationale: Dualling the entire length of the A303, including a new 1.8 mile tunnel under Stonehenge. The A303/A30/A358 corridor is a vital connection between the South West and London and the South East, but there are still over 35 miles of single carriageway. These sections act as bottlenecks for users of the route resulting in congestion, increased accident risk and the separation of Stonehenge from other Scheduled Monuments, limiting enjoyment of the wider site.			
	Construction Start:	TBC	Finish:	TBC


Progress since NIP 2013 and Future Milestones:


- Feasibility study work was undertaken by DfT throughout 2014
- RIS1 announces the intention to upgrade all remaining sections of the A303 between the M3 and the A358 to dual carriageway standard, together with a dualled link from the M5 at Taunton to the A303, as part of a long-term commitment to create a new expressway to the South West. The process will begin with 3 major improvements, as part of a total package of commitments worth £2bn:
- **A303 Amesbury to Berwick Down dualling** – construction of a tunnel at least 1.8 miles long as the road passes Stonehenge and a bypass for Winterbourne Stoke to link the existing dual carriageway section around Amesbury with the dual carriageway at Berwick Down.
- **A303 between Sparkford and Ilchester** – dualling of the 3 mile single carriageway section.
- **A358 Taunton to Southfields**– creating a dual carriageway link from the M5 at Taunton to the A303.


7. A1 (North East)	Status: In construction	Value: £1.1bn	Funding: Public	
	Description and Rationale: Further improvement and maintenance of the A1 – an essential link both to and within the North East. Supporting the strategic objective of a vastly improved road connection from London all the way to the North East. These changes will ensure that for the first time there will be dual carriageway from London to Ellingham – 33 miles north of Newcastle.			
	Construction Start:	TBC	Finish:	TBC
Progress since NIP 2013 and Future Milestones: <ul style="list-style-type: none"> • Feasibility study work was undertaken by DfT throughout 2014. • The A1 Leeming to Barton improvement began construction from March. The upgrade will replace the existing dual carriageway with a new three lane motorway, provide a new local access road alongside the new motorway and provide access to the Strategic Road Network. • The A1 Coal House to Metro Centre project started main construction works in August. The road will be widened to three lanes in both directions and the Western Bypass will be improved. • RIS1 announces £290m to dual the A1 from Morpeth to Ellingham and provide upgrades north of Ellingham. It also announces an investment package worth around £350m for A1 Newcastle-Gateshead Western Bypass to tackle current congestion and address the forecast impacts of traffic growth from planned development. 				

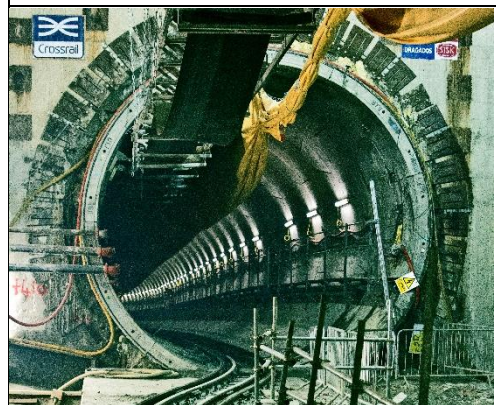
Rail priority infrastructure investments:

8. Intercity Express Programme	Status: In construction	Value: £5.7bn	Funding: Public / Private	
	Description and Rationale: The Intercity Express Programme will provide the infrastructure and rolling stock changes needed to support growth and improvements on some of Britain’s busiest intercity routes, replacing the current fleet on the Great Western and East Coast Main Lines with new electric and bi-mode trains. This is the largest programme of rolling stock enhancement currently underway, and will improve capacity, provide quicker, more reliable and greener services for thousands of passengers, and deliver flexibility for the future.			
	Construction Start:	Started	Finish:	2020
Progress since NIP 2013 and Future Milestones: <ul style="list-style-type: none"> • In April, the Department for Transport and Agility Trains (with its main shareholders Hitachi and John Laing) reached financial close for the fleet of Class 800 series on the East Coast Main Line. • Hitachi unveiled the first train in Japan in November which will be shipped to the UK for test operations in the first half of 2015. • 110 trains will be manufactured at a new facility currently under construction in Newton Aycliffe. • Trains destined for the Great Western Main Line will be introduced in December 2017. • The East Coast Main Line will see the first new trains go into passenger service in 2018. • Hitachi will finish delivery of all of the trains for the Great Western by 2018 and for the East Coast by 2020. 				

9. HS2	Status: Scoping	Value: £50bn	Funding: Public	
	<p>Description and Rationale: High Speed Two (HS2) is the government's key strategic investment in the national transport network over the medium to long term. It will transform the UK's rail infrastructure, increasing capacity and connectivity.</p> <p>HS2 will link 8 of Britain's 10 largest cities, serving one in five of the UK population; it will also be an engine for economic growth, generating jobs and helping to rebalance the economy between north and south.</p>			
	Construction Start:	2017	Finish:	2033
<p>Progress since NIP 2013 and Future Milestones:</p>				
<ul style="list-style-type: none"> • In January 2014, Sir David Higgins was appointed Non-Executive Chair of High Speed Two (HS2) Ltd. • His HS2 Plus report was published in March and proposed accelerating Phase 2 to 2030 and extending Phase 1 to Crewe. • The HS2 Growth Taskforce report and government response was also published in March, to maximise growth potential of scheme. • The High Speed 2 Hybrid Bill passed second reading in April with a substantial majority of support. The bill is currently at the petitioning phase and is now expected to receive Royal Assent in 2016. • An improved compensation and assistance package was announced in April for property owners along Phase 1 of the route between London and Birmingham. • A consultation on HS2 property proposals was announced in July for two new cash payment schemes to help property owners affected by Phase 1 of HS2: the 'alternative cash offer' and the 'homeowner payment' schemes. • Also in July it was announced that the new HS2 Ltd engineering headquarters are to be located in Birmingham, creating 1,500 jobs in the area. • Simon Kirby took up his post as CEO of HS2 in September. • Birmingham City Council has also now set up the Birmingham Curzon Urban Regeneration Company, which will lead redevelopment in the heart of the city centre, including redeveloping over 140ha of land, providing 600,000sqm of new employment floorspace and space for 2,000 homes, creating 14,000 jobs, and contributing up to £1.3bn a year to the local economy. • In September it was announced that a new High Speed Rail college will be located in Birmingham and Doncaster. It will provide specialist vocational training to the next generation of engineers working on the High Speed 2 (HS2) project and beyond. The operating model and skills offer is expected by summer 2015 and will open by 2017, when construction of HS2 begins. • In October, Sir David Higgins set out his vision for HS2 in his "Rebalancing Britain: from HS2 towards a national transport strategy" report. • Residents on the section of the HS2 Phase 2 route from North of Birmingham to Crewe are being consulted on plans to protect land from conflicting development; the Department for Transport announced the consultation on 4 November, which closes on 6 January 2015. The resulting safeguarding directions are expected to be published in spring 2015. • Grants to support communities and businesses near HS2 have been announced and are due to be rolled out when construction starts in 2017 and will be awarded until the end of HS2's first year of operation in 2026. • HS2 Growth Strategies for Phase 1 places are expected by spring 2015. • HS2 Ltd held two successful supply chain conferences in October where they shared their outline procurement strategy with the supply chain. , A final version is to be published in 2015. Construction on Phase 1 will begin in 2017, with the line due to open in 2026. 				


10. European Rail Traffic Management System (ERTMS)	Status: Active programme	Value: £192m	Funding: Public / Private	
	Description and Rationale: Programme to replace traditional railway signals with an in-cab systems in every train cab, reducing the costs of maintaining the railway, improving performance and enhancing safety. Initial implementation will be on the Thameslink core, Great Western and East Coast Main Lines.			
	Construction Start:	Active	Finish:	2020
Progress since NIP 2013 and Future Milestones: <ul style="list-style-type: none"> • Testing of the European Train Control System (ETCS) cab signalling component began in 2012. • ERTMS will be rolled out on part of the Great Western (ETCS being installed from Paddington to Heathrow in 2017 to support Crossrail, from Paddington to Bristol in 2019) and overlaid on the south of the East Coast Main Line (ERTMS overlaid between Kings Cross to Finsbury Park 2018, and then Finsbury Park to Peterborough in 2020). • Installing ERTMS across the country as signalling becomes life-expired will save an estimated 40% over conventional systems. 				

11. Strategic Rail Freight	Status: Active programme	Value: £253m	Funding: Public / Private	
	Description and Rationale: This supports the objective of developing an integrated transport network, by enabling freight activity that would otherwise be undertaken by road, and supporting the connectivity of our international gateways.			
	Key Projects:	Construction:	Start	Finish
<ul style="list-style-type: none"> • Felixstowe to Nuneaton • Strategic Rail Freight Interchanges 			Started Ongoing	2017 Ongoing
Progress since NIP 2013 and Future Milestones: <ul style="list-style-type: none"> • A new 1.2km Ipswich chord opened in March, easing a major bottleneck on the Felixstowe to Nuneaton route. • The North Doncaster Chord, a £45m railway flyover at Shaftholme, officially opened in June. The Chord will carry around 30 freight services above the East Coast Main Line every day. • In July, approval was given for the DIRFTIII Strategic Rail Freight Exchange extension at Daventry. Once complete the project is expected to provide employment for up to 9,000 people. • In November, Network Rail agreed a deal to transfer ownership of over 100 key leasehold freight sites from 3 major freight operators. The deal will make Britain's freight sites more readily available to the growing number of rail freight operators and end users, increasing competition and supporting growth. 				

12. Crossrail	Status: In Construction	Value: £14.5bn	Funding: Public / Private	
	Description and Rationale: A new 118 kilometre high-capacity rail line running through central London from Reading and Heathrow in the West to Shenfield and Abbey Wood in the East. This is the biggest construction project in Europe and is one of the largest single infrastructure investments undertaken in the UK. It will increase London's rail capacity by 10% - the largest increase since World War 2, and support the delivery of over 57,000 new homes and 3.25m sqm of commercial space.			
	Construction Start:	Started	Finish:	2019


Progress since NIP 2013 and Future Milestones:


- In February, the contract to provide the supply, delivery and maintenance of 66 new trains was awarded to Bombardier, with vehicles to be manufactured in Derby. Bombardier has also won a contract to design and construct an 8-rail track depot for the Crossrail fleet at Old Oak Common to accommodate 33 trains.
- In March it was announced the route will also now be extended serve Twyford and Reading.
- In July, TfL announced its intention to award the contract to operate Crossrail to MTR from May 2015. The £1.4bn contract will be for eight years with an option to extend to 10 years.
- The vast majority of Crossrail tunnelling is now complete, and construction work on flagship new stations in Central London and the Docklands has passed the halfway mark.

13. Thameslink	Status: In Construction	Value: £6.5bn	Funding: Public / Private	
	Description and Rationale: Thameslink is on one of Europe's busiest stretches of railway (north to south through Central London). The programme involves providing new rolling stock and more frequent services, connecting more stations outside of London to the route and regenerating the area around key stations. This will increase train capacity providing scope for future growth. By 2018 tens of thousands of passengers daily will benefit from improved journeys, better connections and better stations.			
	Construction Start:	Started	Finish:	2018


Progress since NIP 2013 and Future Milestones:



- New platforms were brought into use in both March and September as part of the London Bridge station reconstruction. The next platforms (10 and 11) are planned for completion in January 2015.
- Since September, a new combined Thameslink, Southern, & Great Northern (TSGN) franchise has been operated by to Govia Thameslink Railway Ltd. The South Central franchise will be incorporated in July 2015.
- The first of 115 high capacity trains are due to enter service on the Brighton Mainline in 2016. New stabling facilities are on track with Brighton complete and works advanced at Cricklewood and Peterborough.
- Good progress is also being made on the Canal Tunnels which will link St Pancras to the East Coast Main Line.

14. Rail Investment Strategy	Status: Various	Value: £5.9bn	Funding: Public / Private
	<p>Description and Rationale: Major programmes of investment to improve capacity and connectivity along key routes of the rail network. Routes selected are those with significant capital investment in enhancements during CP5 and incorporate previous Top 40 priorities of Northern Connectivity, Line Capacity Improvements and Electrification.</p> <p>Key Projects:</p> <ul style="list-style-type: none"> • North of England (including Northern Hub) • Great Western Programme • South West Route Capacity • Midland Main Line • East-West Rail Phase 1 / Electric Spine • East Coast Main Line 		
<p>For full details of delivery dates for key projects and subsidiary elements please see the Network Rail CP5 delivery plan available at: www.networkrail.co.uk/publications/delivery-plans/control-period-5/cp5-delivery-plan/</p>			
<p>Progress since NIP 2013 and Future Milestones:</p> <ul style="list-style-type: none"> • North of England (including Northern Hub): Work on the Huyton-Roby 4-tracking project started in 2013 and is on schedule for completion by the end of 2017. • Network Rail submitted a Transport Works Act Order for the Ordsall Chord in 2013. If permission is granted, work is due to start in late 2014 / early 2015 and be complete by December 2016. • In May, a new fleet of electric trains started running from Manchester to Scotland and the first 4-car Class 319 electric trains will operate between Liverpool to Manchester via Newton le Willows and Wigan from early 2015. A fully electrified route between Preston and Blackpool to connect the area to the West Coast Main Line, is due to complete by February 2017. • Great Western Programme: Electrification works have started on the Great Western Line, with sections from London to Oxford, Newbury, Bristol and Cardiff all due to be electrified. • Network Rail has committed £33m to the 'Filton Four Tracks' project to redouble the lines between Bristol Temple Meads and Bristol Parkway stations from December. • In November the UK government agreed a funding package with the Welsh government to electrify the Valley Lines. The UK government will also cover the full costs of electrifying the Great Western Main Line to Swansea. • South West Route Capacity: Siemens is to build 150 carriages for Waterloo suburban routes, to be purchased by Angel Trains and leased to the franchise company from delivery, starting in 2017. • Following franchise negotiations two more services, from Woking and Basingstoke, are due to start in May 2018 on the South Western Main Line. There will also be four additional peak services between Hounslow and Waterloo from May 2018 as a result of a new turnback facility to be built at Hounslow. • Midland Main Line: Electrification of the line is targeted to reach Corby at the end of 2017, with Nottingham and Derby to follow at the end of 2019, and Sheffield at the end of 2020. • Work to reconstruct three bridges in Bedfordshire and Northamptonshire started in September. • East-West Rail and Electric Spine: Phase 1 of East-West Rail (the Western Section) involves re-opening and upgrading the rail link between Oxford, Bletchley, Milton Keynes and Aylesbury and core services are due to start in 2019. This requires upgrading and doubling track between Oxford and Bicester which is due to be delivered by spring 2016. The government will consider the outputs of the Network Rail study into the East-West Rail central section (Bedford to Cambridge) as part of the planning for Control Period 6 (2019-2024) • East Coast Main Line: North Doncaster Chord, a £45m flyover at Shaftholme, officially opened in June. The Chord will carry around 30 freight services above the East Coast Main Line every day. • The Hitchin Flyover, a £47m scheme to remove a major bottleneck on the line, allows First Capital Connect services travelling between London and Cambridge to travel above the East Coast Main Line. The increased capacity will allow for the Intercity Express trains to be introduced on the East Coast Main Line from 2018 onwards. 			


15. Major Stations	Status: Various	Value: £734m	Funding: Public/Private					
	Description and Rationale: A significant investment programme rebuilding key stations to allow them to continue to provide a quality service, with greater capacity, and an enhanced passenger experience.							
	Key Projects:	Construction:	Start					
	<ul style="list-style-type: none"> • Birmingham New Street • Manchester Victoria • Bristol Temple Meads 		<table border="1"> <tr> <td>Started</td> <td>2015</td> </tr> <tr> <td>Started</td> <td>2015</td> </tr> <tr> <td>2017</td> <td>2018</td> </tr> </table>	Started	2015	Started	2015	2017
Started	2015							
Started	2015							
2017	2018							
Progress since NIP 2013 and Future Milestones:								
<ul style="list-style-type: none"> • The £43m upgrade of Peterborough Station (a NIP13 key project) was completed in January. • The £900m redevelopment of Reading station (also a NIP13 key project) is now complete and was officially opened by Her Majesty The Queen in July. Associated works to improve track layout around the station, including a new flyover, will finish in 2015. • A masterplan for the upgrade of Bristol Temple Meads station is currently being developed. • Completion of external works on Manchester Victoria buildings is expected this winter, with the planned upgrade of the Metrolink stop at the station due to be complete in early 2015. • As the climax of a 5-year redevelopment programme, a new concourse, passenger facilities and atrium at Birmingham New Street are due to open in September 2015, more than doubling station capacity. 								


International Gateways priority infrastructure investments:


16. Airport Infrastructure Improvements	Status: Active programme	Value: £4.2bn	Funding: Private			
	Description and Rationale: The government recognises the importance of private sector investment in airports in order to increase and optimise existing capacity and maintain the UK's international and domestic connectivity.					
	Key Projects:	Construction:	Start			
	<ul style="list-style-type: none"> • Heathrow Q6 • Gatwick Q6 		<table border="1"> <tr> <td>Started</td> <td>2019</td> </tr> <tr> <td>Started</td> <td>2021</td> </tr> </table>	Started	2019	Started
Started	2019					
Started	2021					
Progress since NIP 2013 and Future Milestones:						
<ul style="list-style-type: none"> • In June, Heathrow's new £2.5bn Terminal 2 was opened by Her Majesty The Queen, part of an £11bn programme of capital investment in the fifth quinquennium regulatory period, including 14 new aircraft stands, nine of which can accommodate A380s. In 2016, capacity will increase to 16 stands. • Birmingham Airport's £40m runway extension to provide flights to more long-haul destinations became operational in July. • Resurfacing of the 2.5 mile northern runway at Heathrow took place between March and October. • Both Gatwick and Heathrow have now begun new capital investment programmes worth a combined £4.2bn as part of the sixth quinquennium regulatory period as set by the Civil Aviation Authority based on forecasts, including the cost of financing capital investment. • The Airports Commission will publish its final report with recommendations for airport capacity in the South East in May 2015. 						


17. Port Capacity	Status: Various	Value: £2.5bn	Funding: Private	
	<p>Description and Rationale: A number of private sector led developments to improve and increase the UK's container port capacity, supporting freight transport and the renewables industry.</p> <p>There is a compelling case for sustainable development to provide substantial additional capacity over the next 20-30 years, facilitating a competitive and efficient port industry to handle the UK's freight needs.</p>			
	Construction Start:	Ongoing	Finish:	Ongoing
<p>Progress since NIP 2013 and Future Milestones:</p> <ul style="list-style-type: none"> • The official opening of Southampton's £100m new berth, designed to handle the largest and deepest vessels in the world, took place in March. • Development of the Port of Liverpool container terminal (Liverpool 2) is currently underway and will connect via barge to a number of port centric logistics hubs along the Manchester Ship Canal, resulting in the development of the UK's first "green logistics hub". • The Port of Felixstowe has received consent from the Marine Management Organisation for the extension of its container handling facility (Berths 8&9). Work will commence shortly and the new facility is scheduled to be operational in 2015. • Fresh port capacity forecasts have been commissioned by DfT, due to be published in spring 2015. 				
18. Airport / Port Connectivity	Status: Scoping / planning & consents	Value: £230m	Funding: Public / Private	
	<p>Description and Rationale: This priority seeks to support an integrated transport network, by providing improved connectivity and surface access to international gateways.</p>			
	Key Projects:	Construction:	Start	Finish
<ul style="list-style-type: none"> • A6 to Manchester Airport Relief Road • M42 Junction 6 • A5086 to Port of Liverpool 			2015 TBC TBC	2017 TBC TBC
<p>Progress since NIP 2013 and Future Milestones:</p> <ul style="list-style-type: none"> • Subject to the confirmation of the Compulsory Purchase & Side Road Orders, construction of the A6 to Manchester Airport Relief Road scheme, is expected to start in early 2015 • RIS1 announces a comprehensive upgrade to the A5036 to improve traffic conditions on the main link between the Port of Liverpool and the motorway network. This scheme was identified as a central element of the Liverpool Local Growth Deal. • RIS1 also announces a major upgrade of the M42 Junction 6 near Birmingham airport, allowing better movement of traffic on and off the A45, supporting access to the airport and preparing capacity for the new HS2 station. • A Network Rail feasibility study on improving Southern Rail Access to Heathrow is due in 2015, whilst proposals for a new rail station at Gatwick and improved Western Rail Access to Heathrow are also in development. 				

Local Transport priority infrastructure investments:


19. Transport for London Major Schemes	Status: Various	Value: £4.8bn	Funding: Public / Private																			
	Description and Rationale: Reflecting the specific funding support that the government provides to Transport for London, this category captures major upgrades to capacity, connectivity and service within the capital.																					
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• Sub-Surface Line tube upgrade	Started	2018																				
• Northern Line upgrade	Started	2020																				
• Bank Station	2016	2021																				
• Victoria & Jubilee Lines (Phase 2)	Started	2020																				
Progress since NIP 2013 and Future Milestones: <ul style="list-style-type: none"> • Phase 1 of the Northern Line upgrade to deliver a 20% increase in capacity, will be complete by the end of 2014. Work has included the installation of a new signalling system and control centre. • A fleet of new air-conditioned walk-through trains have been introduced on the Circle and Hammersmith & City lines and are now being introduced on the District line. The entire Metropolitan line fleet is now made up of these trains. • TfL are proposing a substantial capacity upgrade at Bank station from 2016 and in September applied for a Transport & Works Act Order. A public inquiry is likely to be held in the spring with a decision expected by the end of 2015. Subject to approval, start of works is expected in 2016 with completion in 2021 to deliver a new entrance and escalators and more room for Northern Line passengers at Bank and Monument. • A train every 100 seconds (36 per hour) planned at peak times on the Jubilee and Victoria Lines by 2020. 																						


20. Northern Line Extension	Status: Consents approved	Value: £1bn	Funding: Public
	Description and Rationale: Extension of the Northern Line tube service to Battersea forms part of wider plans to regenerate the Vauxhall, Nine Elms and Battersea area. This project will make a major contribution to transport connectivity and capacity and has considerable strategic significance for the region in terms of the wider investment, including a £5 billion redevelopment of Battersea Power Station.		
	Construction Start:	2015	Finish:
Progress since NIP 2013 and Future Milestones: <ul style="list-style-type: none"> • This project was supported through a £750m stand-by facility underpinned by the Infrastructure (Financial Assistance) Act 2012 in January. • In September, TfL awarded a contract worth approximately £500m to build the Northern Line Extension to Ferrovial Agroman Laing O'Rourke. The six year contract covers main construction works. • Following a public inquiry, in November, the Secretary of State for Transport gave the go-ahead for plans to extend the Northern Line to Battersea. The extension will help regenerate the Vauxhall, Nine Elms and Battersea areas, supporting 24,000 new jobs and over 18,000 new homes. • Construction is expected to start in spring 2015, with tunnelling commencing in 2016. TfL hope to open stations at Nine Elms and Battersea by 2020. 			


21. Local Transport Major Schemes	Status:	Value:	Funding:
Various	£1.6bn	Public	
	Description and Rationale: A significant investment programme to improve local roads that are not part of the Strategic Road Network, and provide new forms of public transport to increase capacity and connectivity and tackle congestion.		
	Key Projects: <ul style="list-style-type: none"> • Heysham – M6 Link Road • Nottingham NET2 • Leeds New Generation Transportation • Norwich NDR • Sunderland Strategic Corridor • Kingskerswell Bypass (A380) • Croxley Rail Link • Midland Metro 	Construction: Started Started 2017 2015 2015 Started 2015 Started	Start 2016 2015 2020 2017 2017 2015 2018 2015
Progress since NIP 2013 and Future Milestones:			
<ul style="list-style-type: none"> • M6-Heysham Link Road: The £111m project started construction in February. When finished, it will complete the connection from the M6 at J34 to the Morecambe Bypass, improving access to the Port of Heysham and the surrounding area. It is expected to open to the public in summer 2016, although smaller elements will be open sooner. A Development Consent Order (DCO) for the Link Road was announced in October on a proposed realignment of the M6 Junction 34 northbound slip road. The proposed change would deliver a saving of £1.5m to the scheme. The consultation period for the proposed change is scheduled to end on 5 December with a decision by the Secretary of State for Transport to follow shortly afterwards. • Nottingham Express Transit (NET2): an extension to the South and Southwest of the city is expected to open in spring 2015 and will more than double the size of the existing line, with 17.5km of new track and 28 new stops. Construction work is nearing completion ahead of the start of a full testing and commissioning phase. • Leeds New Generation Transport: A public inquiry on the scheme closed in October. The inquiry Inspector is expected to publish his findings in May 2015. • Norwich Northern Distributor Road: A planning application has been made and subject to the completion of statutory and procurement issues, construction is expected to commence in August 2015. A six-month examination period has now ended and a panel of inspectors has three months to make a recommendation after which the Secretary of State will have three months to consider this and make a final decision or award an extension. • Sunderland Strategic Corridor: Sunderland City Council issued a notice for design and construction of the New Wear Bridge Crossing in March and the start of works is expected in March 2015 with completion due in 2017. • Kingskerswell By-pass (A380): Construction is currently underway, with the new road scheduled to be complete by December 2015. • Croxley Rail Link: is the proposed extension of the London Underground Metropolitan Line from Croxley. The project was awarded £50m funding as part of the Hertfordshire LEP growth deal in July. • Midland Metro: The first of a £40m fleet of new trams for the West Midlands began service in September as part of a major expansion. By early 2015 every tram on the system will be new. The Urbos 3 trams will boost overall capacity by 40%, easing overcrowding, as part of an extended network through Birmingham City Centre linking Snow Hill with a redeveloped New Street Station. 			


22. Mersey Gateway Bridge	Status: In construction	Value: £600m	Funding: Public / Private	
	Description and Rationale: A new six lane toll bridge over River Mersey between Runcorn and Widnes, this is a large and complex project with a significant element of private sector funding. As well as improving capacity and connectivity it has considerable strategic significance for the region, and is expected to generate over 4,000 new jobs and to support sustained growth at Liverpool Ports and Liverpool John Lennon Airport.			
	Construction Start:	Started	Finish:	2017
Progress since NIP 2013 and Future Milestones: <ul style="list-style-type: none"> • Halton Borough Council and the Merseylink Consortium announced procurement savings of £250m when reaching financial close on the project on 10 March. • Bridge-builder Merseylink expects to recruit around 25 apprentices to work on the project. • Construction of the new crossing started in May and main bridge works started over the summer. • In July, it was announced the bridge would be free to use for all Halton residents with a 100% discount scheme. • The new bridge will open in autumn 2017. The existing Silver Jubilee Bridge will be closed for refurbishment and scheduled to re-open in spring / summer 2018. 				


Energy priority infrastructure investments:

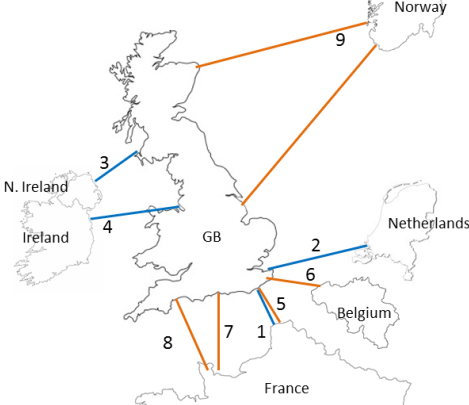
23. Electricity Generation – Nuclear	Status: Scoping / planning & consents	Value: £45.7bn	Funding: Private	
	Description and Rationale: Nuclear is vital for our energy security and the government wants it to be part of the energy mix in the future alongside renewables, gas and clean coal (supported by Carbon Capture and Storage technology).			
	Key Projects: <ul style="list-style-type: none"> • Hinkley Point C • Wylfa Newydd • Moorside 	Construction:	Start	Finish
Progress since NIP 2013 and Future Milestones: <ul style="list-style-type: none"> • In January, the government set out plans for a new nuclear college, to be jointly funded by industry. • Over £200m investment by Toshiba and GDF Suez was announced by the government in May, in an agreement to build a new nuclear power station at Moorside in West Cumbria. The plans include three reactors at the Moorside site, next to Sellafield, which are expected deliver 3.4GW of new nuclear capacity. HM Treasury has reached a cooperation agreement with Toshiba, GDF Suez and NuGen with the aim of issuing a statement of intent to provide a guarantee to assist the financing of a new nuclear power station at Moorside, subject to due diligence and ministerial approval. • In October the European Commission announced it has approved the Hinkley Point C State Aid case. • The advanced boiling water reactor which Hitachi and Horizon have proposed for Wylfa Newydd is expected to have completed the Generic Design Assessment process in 2017 • The government anticipates significant deployment of new nuclear power through the 2020s with NNBG GenCo, Horizon and NuGen setting out plans to develop around 16GW of new capacity. 				


24. Electricity Generation – Gas (to 2020-21)	Status: In construction	Value: £2.6bn	Funding: Private	
	Description and Rationale: Gas Combined Cycle Gas Turbine (CCGT) power stations. Significant investment in gas plant is needed, in part to replace older coal, gas and nuclear plant as it retires off the system, but also to act as backup for less flexible renewable generation and to ensure adequate capacity to meet peak electricity demand.			
	Construction Start:	Started	Finish:	Ongoing
Progress since NIP 2013 and Future Milestones: <ul style="list-style-type: none"> • Gas-fired power stations provided 27% of our electricity in 2013 • Around 16GW of gas plant currently has planning consent with an additional 6GW awaiting a consent decision. • One CCGT plant is currently under construction, the 860MW Carrington project. • The government is seeking to procure 48.6GW in the capacity market auction in December 2014. All capacity has to be available from October 2018. • It is anticipated that a significant element of this initial capacity may come from de-mothballed gas plant. New CCGT gas plant is expected to play an increasing role in future auctions. 				

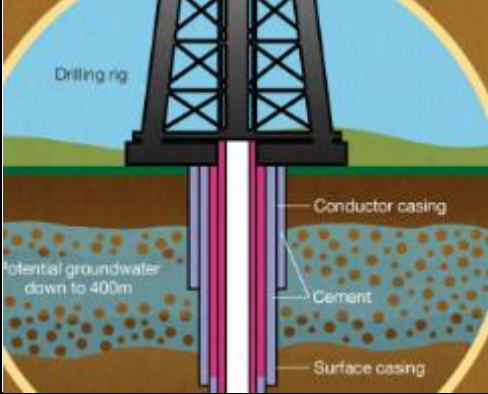
25. Electricity Generation – Wind (to 2020-21)	Status: Active Programme	Value: £17.8bn	Funding: Private	
	Description and Rationale: The UK has some of the best wind resources in Europe and both onshore and offshore wind will play a significant part in the UK's energy mix, with more than 11GW already in operation.			
	Key Projects:	Construction:	Start	Finish
<ul style="list-style-type: none"> • Onshore Wind • Offshore Wind 			Started Started	Ongoing Ongoing
Progress since NIP 2013 and Future Milestones: <ul style="list-style-type: none"> • In July, 5 offshore wind farms (Beatrice, Walney Extension, Burbo Bank, Hornsea1 and Dudgeon) were awarded Investment Contracts (early Contracts for Difference) to enable Final Investment Decisions (FID). Dudgeon became the first of these to announce FID in July. • 68MW Keadby Wind Farm, the largest onshore wind farm in England, became operational in summer 2014. • Gwynt Y Mor is nearing the end of construction. When completed it will be the second largest offshore wind farm in the world at 576MW. 				


26. Electricity Generation – Other Renewables (to 2020-21)	Status: Active programme	Value: £19.6bn	Funding: Private
	Description and Rationale: Biomass, when sourced sustainably, can provide a cost-effective, low carbon and controllable source of renewable energy. Solar PV has significant advantages; it is versatile and scalable, with deployment possible in a wide range of locations. The UK has a strong wave and tidal energy resource in the waters around its coastline and is at the forefront of nascent wave and tidal stream energy sectors.		
	Key Projects:	Construction:	Start
	<ul style="list-style-type: none"> • Biomass • Solar PV • Marine 	Started Started Started	Ongoing Ongoing Ongoing
Progress since NIP 2013 and Future Milestones: <ul style="list-style-type: none"> • In April, the government set out its guiding principles for solar deployment in its UK Solar PV Strategy: Part 2, including an ambition to install 1GW of solar PV generating capacity on the government estate by 2020. • In July, 3 biomass projects (Lynemouth, Teeside and Drax Unit 1) received Investment Contracts, to enable Final Investment Decisions. Drax has already converted two of its units to biomass. • To support the development of marine energy, the government has provided £10m of grant funding to the MeyGen project in the Pentland Firth Inner Sound which could be one of the world’s first tidal arrays. • The government will also start closer negotiations with Tidal Lagoon Power Ltd to establish whether a potential tidal lagoon project at Swansea Bay is affordable and value for money for consumers (without prejudice to the planning decision on the project). 			

27. Carbon Capture & Storage (CCS)	Status: Scoping	Value: £1bn	Funding: Public / Private
	Description and Rationale: CCS has a critical role to play in reducing emissions in the UK whilst allowing gas and coal to continue to participate in our future low carbon energy mix. CCS is also the only technology available to substantially reduce emissions from certain industrial processes. The government wants to see CCS deployed at scale in the 2020s, competing on cost with other low-carbon technologies.		
	Key Projects:	Construction:	Start
	<ul style="list-style-type: none"> • Peterhead CCS Project • White Rose CCS Project 	TBC TBC	TBC TBC
Progress since NIP 2013 and Future Milestones: <ul style="list-style-type: none"> • The UK has now positioned itself as a world leader in this innovative sector and is the only country in Europe with two commercial scale CCS projects in development, at Peterhead in Scotland, and White Rose, in Yorkshire. Both projects have now been awarded multi-million pound contracts for detailed design and planning, known as a FEED study. • The government has also announced £60m for new low-carbon innovation to support CCS technologies that show significant potential to reduce the cost of low-carbon generation in the UK. • In August, the government published a scoping document setting out its intention for continuous engagement with the CCS industry and seeking views on a possible Phase 2 of CCS deployment. 			


28. Electricity Interconnection	Status: Active programme	Value: £3.7bn	Funding: Private
	<p>Description and Rationale: Electricity interconnection is the physical linking of electricity transmission systems across borders. It is the means by which cross-border trade in electricity can take place, which impacts on competition, prices, energy security and the integration of renewable energy sources.</p> <p>Great Britain currently has 4GW of interconnection capacity. The government is actively pursuing a significant increase in electricity interconnection to support security of supply.</p>		
Construction Start:		Started	Finish: Ongoing
<p>Progress since NIP 2013 and Future Milestones:</p> <ul style="list-style-type: none"> • In December 2013, the government set out support for an increase in electricity interconnection, to improve our energy security and lower electricity bills, and its views on steps needed to achieve this. • In August, Ofgem put in place a new regulated route for near-term interconnector investment (the 'cap and floor' regime). In September it proposed that this route would also be available in the longer term. • Five interconnector projects have already been deemed eligible by Ofgem to be assessed for cap and floor regulation: FAB link to France, Greenlink to Ireland, IFA2 to France, NSN to Norway, and Viking link to Denmark. A second window for applications is expected in 2015. • The government will ensure that interconnectors can participate in the 2015 capacity auction. It will estimate the eligible capacity of each interconnector on a case by case basis. Interconnectors of all types will have access to one year contracts. • Three projects (Nemo, Eleclink and NSN) are due to make Final Investment Decisions in 2015. 			


29. Energy Transmission & Distribution	Status: In construction	Value: £1.8bn	Funding: Private
	<p>Description and Rationale: New investment in electricity transmission and distribution networks is required to accommodate new generation and replace ageing assets. This will help ensure that new generation can connect in a timely and cost effective manner and maintain the reliability of the networks to keep the lights on.</p>		
Key Projects:		Construction:	Start Finish
<ul style="list-style-type: none"> • Western HVDC Link • Beaulieu-Denny 400kv Line • London Power Tunnels 			Started 2016 Started 2015 Started 2019
<p>Progress since NIP 2013 and Future Milestones:</p> <ul style="list-style-type: none"> • RIIO-T1 (electricity transmission) and RIIO-GD1 (Gas Distribution) 8-year regulated periods have already been agreed and set out what companies are expected to deliver to support effective and efficient delivery for energy consumers over the 8 years from 2013 to 2021. • The final determination for the RIIO-ED1 8-year price control period is due in December 2014. This will run from April 2015 to March 2023. • 10 offshore transmission licences have now been granted by Ofgem, bringing the amount of investment realised by the Government's innovative, competitive regime to £1.7bn. • The London Power Tunnels project is progressing well. Earlier this year work began to install the high voltage cables which will transport electricity through the tunnels once operational. The first section of tunnel is due to go live in late 2015 with the project due to be fully complete and operational in 2019. 			


30. Oil & Gas Production	Status: Scoping	Value: TBC	Funding: Private
	Description and Rationale: Domestically produced oil and gas remain an essential part of the UK's energy mix and reduce our dependence on imported fossil fuels. The government believes that shale gas has the potential to provide the UK with greater energy security, growth and jobs. It is encouraging safe and environmentally sound exploration to determine this potential.		
Key Projects:		Construction:	Start
<ul style="list-style-type: none"> Shale Gas 		Scoping	TBC
Progress since NIP 2013 and Future Milestones: <ul style="list-style-type: none"> In November, the government announced the first national UK onshore oil & gas college, to be headquartered in Blackpool and linked to colleges in Chester, Redcar and Cleveland, Glasgow and Portsmouth. There are about a dozen companies actively considering exploratory drilling but we expect no hydraulic fracturing before 2015. Cuadrilla has applied for planning permission at two Lancashire sites, including hydraulic fracturing; the planning decision is expected early next year. In November, Ineos announced it is to spend up to £640m in shale gas exploration in the UK. 			


31. Smart Meters	Status: Active programme	Value: £6.2bn	Funding: Private
	Description and Rationale: Replacement of over 53 million existing gas and electricity meters with Smart Meters; the next generation of gas and electricity meters that can offer a range of intelligent functions. Smart Meters will help consumers benefit from real-time information, allowing them to manage their energy use more effectively, saving money and reducing emissions. The programme is a key element of the government's strategy to increase energy efficiency and manage demand.		
Construction Start:		Started	Finish: 2020
Progress since NIP 2013 and Future Milestones: <ul style="list-style-type: none"> Around half a Smart Meters have already been installed by energy companies in domestic sites, with a similar figure of smart and advanced meters now installed in small non-domestic sites. The full rollout of the programme by energy companies will begin in late 2015. 			

Communications priority infrastructure investments:


32. Superfast Broadband	Status: Active programme	Value: £1.7bn	Funding: Public / Private
	Description and Rationale: The programme aims to target the provision of superfast broadband to 95% of premises in the UK by December 2017. The Superfast Broadband programme is the key programme to deliver a transformation in broadband access, to ensure that the benefits of improved broadband reach rural areas beyond the limits of where it is commercially viable to install.		
Construction Start:		Active	Finish: 2017
Progress since NIP 2013 and Future Milestones: <ul style="list-style-type: none"> • £250m extra funding was announced by the government in June 2013, in addition to the £1.2bn already invested by central and local government, to support rollout in 47 geographical areas. • Over 1.5m premises have already been passed at a current rate of 40,000 per week. BDUK should reach 2m premises passed by beginning of February 2015. • 31 of 44 local bodies from Phase 1 have published searchable 7-digit postcode maps and BDUK is working closely with remaining local bodies to ensure most projects have published by end of 2014. • Five Phase 2 contracts have been signed and BDUK estimate an additional four by the end of 2014. • In March, an Invitation to Tender was launched for pilot projects for Phase 3 of the programme to explore how to extend coverage to the final 5% in mainly remote areas. Winning bids were awarded in June and total £8.2m of the £10m fund. 			


33. Super-Connected Cities	Status: Active programme	Value: £150m	Funding: Public
	Description and Rationale: 22 Super-Connected cities will benefit from faster and better broadband for small businesses. In addition, cities will deploy wireless coverage to city centres and inside public buildings. This is the government's key programme for improving service quality and supporting digital connectivity and business innovation in its major urban areas.		
Construction Start:		Active	Finish: 2015
Progress since NIP 2013 and Future Milestones: <ul style="list-style-type: none"> • A Connection Voucher Scheme to support small business connections is open in all 22 Cities. • Over 5,000 vouchers had been delivered by mid November 2014, with around 10,000 expected to have been delivered by March 2015. • Wi-Fi hotspots are now contracted with suppliers to deliver in over 1,000 buildings by March 2015. • 13 other digital projects to go live by March 2015, with 60% already complete. • The government will provide up to £40m to extend the SME connection voucher scheme to March 2016 and to more cities. Vouchers will be available on a first come, first served basis. 			

34. Mobile Infrastructure Project	Status: Active programme	Value: £150m	Funding: Public
	Description and Rationale: The Mobile Infrastructure Project aims to provide mobile coverage to areas of the UK that have not been covered by the commercial sector by building new mobile masts. The MIP will improve the coverage of mobile voice and basic data services in some of the most remote parts of the UK.		
	Construction Start:	Active	Finish: 2016
Progress since NIP 2013 and Future Milestones: <ul style="list-style-type: none"> • Masts in Devon and North Yorkshire are now operating – North Yorkshire went live in June 2014 and Devon at the end of August 2014. • The MIP is a unique model for extending mobile coverage to areas where it will have significant social benefits, and is delivering where the commercial sector alone will not. To ensure benefits of the programme are maximised, it has been extended to 2016. 			


35. 4G Rollout	Status: Active programme	Value: £3bn	Funding: Private
	Description and Rationale: Commercial rollout of 4G mobile service by the 4 main mobile network providers (3, EE, O2, Vodafone) This will provide faster and more reliable mobile internet access to laptops, smartphones and other mobile devices. Wider benefits of 4G services are expected to be worth £20bn to the UK economy in the next 10 years.		
	Construction Start:	Active	Finish: 2017
Progress since NIP 2013 and Future Milestones: <ul style="list-style-type: none"> • In 2013, Ofcom auctioned 250MHz of spectrum and awarded licences in the 800MHz and 2.6GHz bands to enable the commercial rollout of 4G services. • EE is investing £1.5bn over 3 years to rollout superfast 4G mobile services aiming to reach 90% of the UK population by the end of 2014 and cover 99% of the population in the next 2 years. 4G from 3 is available in selected sites in 30 towns and cities, with plans to reach 50 cities and many more towns by the end of 2014 and to cover 98% of the population by the end of 2015. 4G from O2 is available in 232 UK towns and cities. 4G from Vodafone is available in over 260 towns and cities. • In total 4G is already available in over 300 large towns and cities throughout the UK. 			

Water priority infrastructure investments:

36. Water Supply & Sewerage (AMP6)	Status: Scoping	Value: £22bn	Funding: Private
	Description and Rationale: Private water companies combined have an estimated £22 billion of expenditure which would traditionally have been reported as capital expenditure across the UK as part of the Asset Management Period from 2015-20 (AMP6). This programme of infrastructure investments is crucial to making safe, clean water and sewerage services available to households, at an affordable price.		
Construction Start:		2015	Finish: 2020
Progress since NIP 2013 and Future Milestones: <ul style="list-style-type: none"> • Ofwat has published draft price controls for water and sewerage companies in England and Wales for AMP6, which includes a substantial investment programme worth almost £2,000 for every household in England and Wales. • The draft decisions mean average bills for water and wastewater customers would fall by around 5% in real terms between 2015 and 2020 and will lead to better levels of service for customers. • Ofwat will publish its final determinations in December 2014, with AMP6 starting from April 2015. 			

37. Thames Tideway Tunnel	Status: Planning & consents	Value: £4.2bn	Funding: Private
	Description and Rationale: A 25km sewer to protect the River Thames from increasing levels of untreated sewerage entering the river (an average 20 million tonnes of untreated sewage a year will be flushed into the river if the Tunnel is not built). This project is crucial to ensuring the River Thames meets the standards that is expected of an iconic river in Europe's largest capital city and attracts people, businesses and investment to London in the future.		
Construction Start:		2016	Finish: 2023
Progress since NIP 2013 and Future Milestones: <ul style="list-style-type: none"> • The project has been split geographically into 3 main construction contracts, with a total value of around £1.6bn. The ITT for the West contract (£300m – £500m) was sent out in December 2013, East (£500m – £800m) in January, and Central (£600m – £950m) in April. • An OJEU notice calling for an infrastructure provider (IP) to finance the project was issued on 14 June. The successful bidder for the IP will be announced in summer 2015, and the successful bidders for the main works contracts will also be confirmed. • The IP will take on the contractual agreements with the construction companies, with preliminary works beginning in 2016, and tunnelling starting in 2017. • The Secretaries of State for CLG and Defra issued the Development Consent Order on 12 September 			


Flood Defence priority infrastructure investments:


38. Flood and Coastal Erosion Risk Management	Status: Active programme	Value: Over £700m	Funding: Public / Private
	Description and Rationale: The FCERM programme is the investment to support meeting the challenging targets the government has set to reduce the potential damage from flooding and coastal erosion, where it is economic and affordable to do so.		
	Key Projects:	Construction:	Start
<ul style="list-style-type: none"> • Lincshore • Thames Estuary Phase 1 • River Thames (Datchet - Teddington) • Boston Barrage/Barrier Works • Rossall Coastal Defence Improvement • Oxford – Western Conveyance 		2014-15 2015-16 2019-20 2017-18 Started 2018-19	2016-17 TBC 2023-24 2019-20 2016-17 2022-23

Progress since NIP 2013 and Future Milestones:

- The government has now published its 6-year programme of investment in flood defences, allocating the £2.3bn capital funding provided at the 2013 Spending Round. Key projects include:
- **Lincshore:** This scheme covers beaches from Mablethorpe to Skegness and maintains protection against a 1 in 200 chance in any 1 year of tidal flood (0.5%) for 30,000 properties and 35,000 hectares of land.
- **Thames Estuary Phase 1:** The Thames Estuary Asset Management Programme (TEAM2100) is the first 10-year programme of asset management work to protect London and the Thames Estuary from tidal flooding. The programme will reduce the risk of flooding for 1.25m people across Kent, Essex and London including £200bn worth of property, UK Government, major infrastructure and businesses. By packaging work and developing an integrated, co-located team with its partner CH2M Hill, the Environment Agency is aiming for 20% efficiencies over the period.
- **River Thames (Datchet to Teddington):** This will reduce flood risk in communities near Heathrow, including Datchet, Wraysbury, Egham, Staines, Chertsey and Shepperton. The scheme consists of large-scale engineering to construct new flood channels as well as improvements to three Thames weirs. The Environment Agency (EA) is working in partnership with local authorities in the area to develop the scheme. The scheme has all the funding needed for development and preconstruction works.
- **Boston Barrage/Barrier Works:** The east coast tidal surge in December 2013 flooded over 800 properties and businesses and approximately 500 acres of agricultural land. The Boston Barrier scheme has been accelerated and the EA is working closely with local authorities and key stakeholder groups. Construction is scheduled to start in summer 2017 and the completed scheme will protect over 20,000 residential properties and 1,000 businesses and support the economic regeneration of the area.
- **Rossall Coastal Defence Improvement:** Sections of the sea wall along this length of coastline are experiencing significant deterioration and undermining of the aprons. Works will replace existing seawalls in line with the recommendations of the Wyre Urban Core Flood Risk Management Strategy. The scheme will reduce the risk to over 14,000 homes and businesses Rossall and Anchorholme and reduce flooding of local roads, tramway network and a major sewerage pumping station.
- **Oxford – Western Conveyance:** Following the winter floods in 2014, the EA is investigating flood reduction measures including a new channel to the West of Oxford to allow water to pass through and around the town more efficiently, reducing the risk of flood water entering homes and businesses and disrupting transport links. Allocations to this project in the six-year programme, together with local contributions, mean that funding needed for pre-construction works is now available. The scheme is being developed in partnership with Oxford City Council, Oxfordshire County Council, the Local Enterprise Partnership and other infrastructure providers in the area e.g. Network Rail and Thames Water.

Science & Research priority infrastructure investments:

39. Science Majors	Status: Various	Value: £1.2bn	Funding: Public / Private							
	Description and Rationale: Significant capital investments which deliver world-leading research facilities and key large-scale projects, to help ensure that the UK is a world leader in research, technology development and innovation.									
	Key Projects:	Construction:	<table border="1"> <thead> <tr> <th data-bbox="1161 432 1321 477">Start</th> <th data-bbox="1329 432 1479 477">Finish</th> </tr> </thead> <tbody> <tr> <td data-bbox="1161 488 1321 555">Started 2016</td> <td data-bbox="1329 488 1479 555">2016</td> </tr> <tr> <td data-bbox="1161 566 1321 633">Started</td> <td data-bbox="1329 566 1479 633">2017</td> </tr> <tr> <td data-bbox="1161 645 1321 712">Started</td> <td data-bbox="1329 645 1479 712">2017</td> </tr> </tbody> </table>	Start	Finish	Started 2016	2016	Started	2017	Started
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<p>Progress since NIP 2013 and Future Milestones:</p> <ul style="list-style-type: none"> • Diamond Phase III will create an extra 10 advanced beamlines by 2017, bringing the total to 32. • Work on the Francis Crick Institute, a joint venture between the UK's largest biomedical research and academic institutions, is well underway and is scheduled for completion in autumn 2015, with full occupation by 2016. • In April the government announced more than £200m for a new UK polar flagship. The new research ship will deliver the next generation of UK world-leading marine science in the Antarctic and the Arctic. • The Pirbright Institute Development Phase 2 will include new laboratories, to accommodate 90 scientists working on viruses that do not require high containment. 										

40. Science & Innovation Catapults	Status: Active programme	Value: £93m	Funding: Public / Private					
	Description and Rationale: Catapults are a network of physical centres where the very best of the UK's businesses, scientists and engineers work side by side on late-stage research and development - transforming high potential ideas into new products and services to generate economic growth.							
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Started	2017							
Started	2015							
<p>Progress since NIP 2013 and Future Milestones:</p> <ul style="list-style-type: none"> • The Offshore Renewable Energy Catapult in Glasgow, officially opened in March. • The National Composites Centre (High Value Manufacturing Catapult) expansion key project in Bristol formally opened in October . • A new £55m Cell Therapy Manufacturing Centre (Cell Therapy Catapult) was announced at Budget 2014. A decision on the location is expected by late 2014. • The £38m National Biologics Manufacturing Centre (High Value Manufacturing Catapult) in Darlington is part of the government's Strategy for Life Science. Construction started in April. • The Hermann Hauser review into the catapult network was published in November. • The Connected Digital Economy Catapult is to establish centres in Sunderland, Brighton and Bradford by March 2015. • Two new Catapults (Energy Systems and Precision Medicine) will be up and running in 2015. 								