

cc Mr Richard George, Chairman, Network Rail
cc Dr Andy Williams, Chair, Oxford-Cambridge Supercluster Board

Dear East-West Railway Company,

We write to raise critical connectivity concerns with the proposals that your company is currently developing for the new Bedford-Cambridge route, to complete the East-West Rail project. Unless these concerns can be resolved, the East-West Rail Company's (**EWRC**) proposals will only deliver a fraction of the project's potential economic benefits, valued at £78 billion GDP gains by 2035.

Please be assured that we are fully supportive of the ambition to restore the former LNWR 'Varsity Line' railway link between Oxford, Milton Keynes and Cambridge, and thereby create a high-tech 'supercluster' across the Oxford-Cambridge Arc. However, we believe that the focus of the official **EWRC** scheme, almost exclusively along the east-west axis of the Varsity Line, is too narrow – and as a consequence it will fail to address the wider network connectivity issues within the Oxford-Cambridge Arc that are also holding back economic growth, both regionally and nationally.

The present **EWRC** proposals embody the following critical failings:

- **Poor Interurban Links along primary East-West axis** Even along its chosen line of route, **EWRC** fails to fully interconnect all the principal communities. Without the necessary new chord at Bletchley, **EWRC** offers no direct link from Milton Keynes (population 290,000) to either Bedford or Cambridge; and it passes close by St Neots (population 33,000) without any station to provide direct links to either Cambridge, Milton Keynes or Oxford. For further details see **Appendix A1**.
- **Inadequate Integration with North-South main lines** The **EWRC** scheme fails to provide the comprehensive spur connections to the East Coast, Midland and West Coast main lines that are necessary to allow fully integrated operation between east-west and north-south routes. This represents a catastrophic missed opportunity, as it prevents any possibility of **EWRC** enabling:
 - direct links between ECML, MML and WCML communities – for instance Luton to Northampton, Stevenage to Kettering or Watford to Peterborough;
 - diversion of services between any of the north-south main lines, for instance ECML to MML, or vice versa, in the event of planned and unplanned blockages.

For further details see **Appendices A2 – A5**.

- **Excessive Community and Environmental Impact** Not only does the proposed **EWRC** routing via Bedford Midland prevent any direct MML (north) to ECML (south) link, it also requires demolition of residential property within Bedford and major landscape intrusion in the hilly topography to the north of the built-up area. **EWRC** documentation offers no substantive rationale to justify selection of this route above a more central, more direct and less impactful route along the original LNWR trackbed, with the potential for additional stations which would be accessible to a much greater proportion of Bedford's population.

For further details see **Appendix A6**.

These major deficiencies will greatly reduce the potential benefits of East-West Rail, and they will inevitably have huge adverse impacts on its business case.

We have reviewed the reports prepared by Public First to support the claim of £78 billion economic benefits, and we are particularly concerned at the comparisons being made with the 'Holland Metropole' region of the Netherlands. We believe these comparisons to be entirely spurious. Whereas the Holland Metropole region, comprising the 'Randstad' cities of Amsterdam, Den Haag, Rotterdam and Utrecht, plus Eindhoven, possesses a dense railway network in which all 5 cities are fully and directly interconnected, the official **EWRC** proposals – comprising a single new railway, poorly linked to the existing main line system – will manifestly fail to deliver equivalent comprehensive interconnectivity for the major communities of the Oxford-Cambridge Arc.

We believe that if the East-West Rail project is to deliver optimum benefits to match Holland Metropole, it must be similarly developed, not as a single uni-axial line but as a network, a system designed and optimised to a comprehensive performance specification. This will not only allow the benefits of the East-West Rail project to extend beyond its 'headline' cities to all the major communities of the Oxford-Cambridge Arc; it will also allow the major development pressures consequent upon £78 billion GDP growth to be spread much more evenly.

To demonstrate both the feasibility and the benefits of this alternative approach, we have schemed major changes to the current **EWRC** proposals in the Bedford area, as follows:

- A more direct eastward route from central Bedford, elevated as necessary above the Great Ouse floodplain, and following first the original LNWR route and then the A421 southern bypass – ***superseding the currently proposed EWRC route from Bedford to St Neots.***
- New stations at **Kempston** (allowing interchange with MML Thameslink services), at **Bedford South** (on the original LNWR Bedford St Johns site), and at **Priory Park**.
- New interchange station at **Tempsford**, with all platforms aligned north-south to allow an East-West/ECML junction i.e. full operational interchange between routes, with appropriate grade separation.
- New **St Neots East** station, located on the eastern fringe of the built-up area, approximately at the junction of A428 and B1428.
- New connection chords **C1** & **C2** at Tempsford (**W** to **S&N**), **C3** at Bedford (**E** to **N**), **C4** & **C5** at Millbrook (**E&W** to **S**) and **C6** at Bletchley (**E** to **N**), to allow full operational interchange between West Coast, Midland and East Coast main lines.
- Possible tram-train services (utilising Chord **C6** above) comprising a 'Marston Vale' metro connecting Bedford and Milton Keynes and serving existing local stations (and others?).

These proposed changes, currently supported by outline service planning and route design (to 1:10,000 scale), collectively comprise the **EW-ALT** scheme. Although significant validation work is still required, it is clear from the comparisons set out in **Appendix A** that our alternative **EW-ALT** scheme delivers a performance, either as a railway network for the Oxford-Cambridge Arc or as a uniaxial Oxford-Milton Keynes-Cambridge link, that is superior to the official **EWRC** proposals by an order of magnitude.

We believe that the clearly suboptimal performance of the official **EWRC** proposals raises crucial issues of public interest. Accordingly, we would be grateful if you could provide responses to the following Freedom of Information requests:

- Q1** Please provide details of the remit that East-West Railway Company was given by Government, to develop the **EWRC** proposals.

- Q2** Please provide details of the transport modelling that was undertaken on the **EWRC** proposals, to validate and verify the claim of £78 billion economic benefits.
- Q3** Please indicate how much greater these economic benefits might be with:
- a) Provision of a north-to-east chord at Bletchley, to enable direct Milton Keynes-Bedford-Cambridge services.
 - b) Provision of an extra 'St Neots East' station to allow the 33,000 citizens of St Neots direct access to EWR services to Cambridge, Bedford, Milton Keynes and Oxford.
 - c) Provision of other necessary chord lines to enable fully integrated operation between east-west and north-south routes.
- Q4** Please explain how the £78 billion GDP claim translates into additional annual GVA.
- Q5** Please provide full details of your assessment of reinstating the original direct LNWR route through Bedford, as an alternative to your current more circuitous proposal to route **EWRC** via Bedford Midland and through difficult topography to the north of the built-up area.
- Q6** Please provide details of any discussions that have taken place with Network Rail and/or train operators, as to the possibility of **EWRC** enabling direct cross-corridor links between currently disconnected north-south main lines (e.g. Stevenage to Kettering, Luton to Northampton, Watford to Peterborough), with connection chords provided as necessary.
- Q7** Please provide details of any discussions that have taken place with Network Rail and/or train operators, as to the possibility of **EWRC** enabling diversionary operation between East Coast, Midland and West Coast main lines.
- Q8** Please demonstrate the 'due diligence' that you have undertaken, to confirm that your **EWRC** proposals represent an optimised scheme, delivering the greatest possible connectivity and capacity gains.
- Q9** Please confirm your current proposals to rationalise the 9 existing local stations along the 'Marston Vale' line (between Bletchley and Bedford St Johns), and provide details of the studies you have undertaken into possible light rail/tram-train services along this corridor that could maintain local services to all of these stations.
- Q10** Please review the technical comparisons set out in **Appendix A**, and provide an alternative narrative if you believe any of these comparisons to be wrong, unfair or inappropriate.

We look forward to your prompt response.

Please note that we will be writing separately to the Prime Minister on this matter.

We would be happy to meet you in Milton Keynes, to discuss matters further. Please do not hesitate to contact us if you require further information.

Yours sincerely

Colin Elliff BSc CEng MICE,
Civil Engineering Principal, HSUK

APPENDIX A

KEY TECHNICAL SPECIFICATION FOR THE OXFORD – CAMBRIDGE RAIL LINK AND ASSESSMENT OF COMPETING PROPOSALS

Development of Key Technical Specification

Without any definitive and comprehensive technical specification for the East-West Rail (EWR) project, there must be a serious concern that the **EWRC** proposals under development by the East-West Rail Company will not bring about an efficient railway system, with the optimised scope and performance necessary to deliver the promised transformational benefits, valued at £78 billion GDP gains by 2035. Accordingly, a 'Key Technical Specification' should be established to address the following core issues, and determine fitness for purpose:

- 1) **Efficient Interurban Links between Principal Communities along EWR Axis**
The EWR project should provide direct links between all of the major communities along its line of route i.e. Oxford (population 165,000), Bicester (37,000), central Milton Keynes (290,000), Bedford (107,000), St Neots (33,000) & Cambridge (150,000). (Refer **Appendix A1**)
- 2) **Creation of New Cross-Corridor Direct Links between ECML, MML and WCML Communities** The EWR project offers an unrepeatable opportunity to create direct links between close-spaced communities (for instance Luton and Milton Keynes, or Stevenage and Bedford, located on adjacent main line corridors) that currently enjoy no direct rail link. The EWR project should provide the additional linking 'chord' lines to enable these new connections. (Refer **Appendix A2**)
- 3) **Overall Interurban Rail Connectivity within Oxford-Cambridge Arc** The EWR project should create a regional railway network across the Oxford-Cambridge Arc, with the ideal of achieving comprehensive direct interconnectivity between all major communities. (Refer **Appendix A3**)
- 4) **Compatibility with, and Connection to, Primary UK Intercity Network** The EWR project should optimise links between the major communities of the Oxford-Cambridge Arc (generally oriented on an east-west axis) and the primary north-south main line routes (East Coast, Midland and West Coast Main Lines) of the national intercity railway network. It should also be compatible with future high speed rail development. (Refer **Appendix A4**)
- 5) **Enabling of Diversionary Routes between East Coast, Midland & West Coast Main Lines** Provision of new linking 'chord' lines (as noted in 2) above) will also maximise the opportunity to divert services between ECML, MML and WCML, and thereby minimise main line disruption in the event of planned or unplanned blockages. (Refer **Appendix A5**)
- 6) **Minimised Community and Environmental Impact** The EWR project should aim to minimise its impact on local communities and environments, and should completely avoid the necessity to demolish residential property. (Refer **Appendix A6**)

HSUK's assessment of the official **EWRC** proposals shows poor performance against all of these criteria. This assessment is summarised on the following page, and set out in greater detail in the subsequent **Appendices A1 – A6**.

Performance Criterion		EWRC Performance	EWR-ALT Performance	Winner
1	Efficient interurban links between principal communities along EWR axis (refer Appendix A1)	EWRC lacks the necessary east-facing link from Milton Keynes, or any station at St Neots on the EWR line of route	EWR-ALT provides full interconnectivity between Oxford, Bicester, Milton Keynes, Bedford, St Neots and Cambridge	EWR-ALT
2	Creation of New Cross-Corridor Direct Links between ECML, MML & WCML Communities (refer Appendix A2)	Without the necessary spur connections to the N-S main lines, EWRC passengers making cross-corridor journeys will be forced to make multiple changes of trains	The EWR-ALT scheme includes all necessary spur connections to enable comprehensive direct cross-corridor journeys between ECML MML & WCML communities	EWR-ALT
3	Overall Interurban Rail Connectivity within Oxford-Cambridge Arc (refer Appendix A3)	With no cross-corridor direct links, EWRC 's main connectivity gains will be largely confined to its primary east-west axis. 20 direct links o/o 78 possible	EWR-ALT 's performance is hugely enhanced by its many cross-corridor direct links and improved links to Milton Keynes and St Neots. 44 direct links o/o 78 possible	EWR-ALT
4	Compatibility with, and Connection to, Primary UK Intercity Network (refer Appendix A4)	Existing network hubs (e.g. MK, Leicester and Peterborough) are poorly linked to EWRC , and no connection is proposed between EWRC and HS2 at Calvert. Milton Keynes faces likely service reductions as WCML premium intercity flows migrate to HS2	EWR-ALT is fully compatible with the existing N-S intercity main lines and also with the HSUK vision for a transformed UK intercity network, with direct links to primary HSUK hubs at Oxford, Milton Keynes, Leicester and Peterborough	EWR-ALT
5	Enabling of Diversionary Routes between ECML, MML and WCML (refer Appendix A5)	Without the necessary spur connections to the N-S main lines, EWRC cannot facilitate diversionary operations	The EWR-ALT scheme includes all necessary spur connections to enable comprehensive diversionary operations	EWR-ALT
6	Minimised Community and Environmental Impact (refer Appendix A6)	EWRC 's route via Bedford Midland will require demolition of residential property and will have serious landscape impacts to the north of the urban area	EWR-ALT 's route via the former LNWR trackbed requires no residential demolition, and has little impact on landscape. It will also deliver much greater benefits for public transport in Bedford	EWR-ALT

Table 1 : Comparison of EWRC and EWR-ALT Performance as East-West Rail Link

On the basis of the comparisons set out above, it is plain that the official **EWRC** proposals are hugely outperformed by the **EWR-ALT** scheme, and the key to this superior performance is **EWR-ALT**'s full integration with the existing north-south main lines that pass through the region.

APPENDIX A1

Efficient Interurban Links between Principal Communities along EWR axis

Refer Appendix B, Figures B03 and B04

In this assessment, Oxford, Bicester, central Milton Keynes, Bedford, St Neots and Cambridge are considered to be 'principal communities', all greater than 30,000 population. The ability of the 2 candidate schemes, to deliver direct interconnectivity between all of these communities, is charted below in Figure A1.1.

Oxford	OX				8	Direct link
Bicester		BC				No direct link
Milton Keynes			MK			Total 8
Bedford				BE		
St Neots					StN	
Cambridge						CB
	OX	BC	MK	BE	StN	CB
Direct Links	4	4	2	3	0	3

EWRC Proposals

Direct Links between EWR Principal Communities

Score: 8 out of 15 possible

Oxford	OX				15	Direct link
Bicester		BC				No direct link
Milton Keynes			MK			Total 15
Bedford				BE		
St Neots					StN	
Cambridge						CB
	OX	BC	MK	BE	StN	CB
Direct Links	5	5	5	5	5	5

EWR-ALT Scheme

Direct Links between EWR Principal Communities

Score: 15 out of 15 possible

Figure A1.1 : Comparison of Direct Interurban Links along East-West Rail Axis

The poor performance of the official **EWRC** proposals can be attributed to 2 crucial omissions:

- The lack of a north-to-east chord at Bletchley, which would allow services from Milton Keynes (and potentially other WCML communities such as Northampton, Coventry and Birmingham) to continue eastwards towards Bedford, St Neots and Cambridge.
- The lack of any **EWRC** station for St Neots, despite the new line passing along the periphery of the urban area and its 33,000 population. It should additionally be noted that an ideal location for such a station appears to exist on the eastern edge of St Neots' urban area, at the proposed interchange with the new outer bypass road.

Both these deficiencies are addressed by HSUK's **EWR-ALT** scheme, and as a result it offers comprehensive interconnectivity between all principal communities along the axis of the restored Oxford-Cambridge line.

*It should be noted that this assessment does not address issues of local connectivity either to the 9 existing stations along the existing 'Marston Vale' line between Bletchley and Bedford, or to the proposed 'Universal' leisure park facility near Stewartby. It is further noted that current **EWRC** proposals envisage a rationalisation of local station provision to circa 4 stations, thus considerably reducing local connectivity. Under the **EWR-ALT** scheme, alternative light rail/tram-train initiatives – either along the existing line or along the broader Milton Keynes-Bedford corridor – will be examined as a means of maintaining and enhancing local connectivity.*

APPENDIX A2

Creation of New Cross-Corridor Direct Links between East Coast, Midland and West Coast Main Line Communities

Refer Appendix B, Figures B03 – B08

Whilst there can be no doubt, that there is huge value in restoring the lost direct rail link between Oxford and Cambridge, it must be recognised that there is massive additional value in restoring – or in establishing for the first time – efficient rail links between other major communities in the Oxford-Cambridge Arc.

The present lack of any east-west rail link between Greater London and Northamptonshire/Rutland – a distance of 127 kilometres or 79 miles – constitutes perhaps the greatest ‘connectivity gap’ of the UK rail network. It leaves Midland Main Line (MML) communities such as Luton, Bedford and Kettering disconnected from East Coast Main Line (ECML) communities such as Stevenage, St Neots and Peterborough – and similarly, there is very poor connectivity with West Coast Main Line (WCML) communities such as Watford, Hemel Hempstead, Milton Keynes and Northampton.

The East-West Rail project presents an unrepeatable opportunity to transform connectivity within the Oxford-Cambridge Arc, with the ideal of direct links between all major communities. However, the **EWRC** scheme lacks the spur connections to the north-south main lines, to make these direct links possible; instead, passengers will typically be forced to make a 3-stage journey. Taking Stevenage to Kettering as an example, the journey would go as follows:

- 1) Stevenage to Tempsford via ECML;
- 2) Tempsford to Bedford Midland via East-West Rail;
- 3) Bedford Midland to Kettering via MML.

By contrast, **EW-ALT** provides all the connection chords necessary to enable full ‘cross-corridor’ operation between West Coast, Midland and East Coast Main Lines.

	WCML South	MML South	ECML South	
WCML North		Not possible	Not possible	WCML North
MML North	Possible, no proposal		Not possible	MML North
ECML North	Not possible	Not possible		ECML North
	WCML South	MML South	ECML South	
WCML North		Possible, Chords C5,C6	Possible, Chords C1,C6	WCML North
MML North	Possible, via ex ⁸ chord		Possible, Chords C1,C3	MML North
ECML North	Possible, Chord C2	Possible, Chords C4,C2		ECML North
	WCML South	MML South	ECML South	

Chord C1 : West to South, Tempsford
 Chord C2 : West to North, Tempsford
 Chord C3 : East to North, Bedford

Chord C4 : East to South, Millbrook
 Chord C5 : West to South, Millbrook
 Chord C6 : East to North, Bletchley

EWRC Proposals :

Feasibility of Direct Links between WCML, MML & ECML

For locations of Chords C1-C6 see Figure B04

EW-ALT Scheme :

Feasibility of Direct Links between WCML, MML & ECML

Figure A2.1 : Comparison of Cross-Corridor Direct Links between N-S Main Lines

Overall Interurban Rail Connectivity within Oxford-Cambridge Arc

This assessment considers overall connectivity between 13 major communities of the Oxford-Cambridge Arc i.e. Oxford, Bicester, Aylesbury, Watford, Milton Keynes, Northampton, Luton, Bedford, Kettering, Stevenage, St Neots, Peterborough and Cambridge. All 78 possible journeys between these 13 communities are considered, and classified and weighted as follows:

- The official **EWRC** proposals score poorly for 2 reasons:

- By contrast, **EWR-ALT** offers far superior overall connectivity within the Oxford-Cambridge Arc. It has been designed with all necessary spur connections (see **Appendix A2**) to enable full interoperability between West Coast, Midland and East Coast main lines. This will allow cross-corridor operation between WCML, MML and ECML, for instance Thameslink services running via MML to Luton and the new junction at Millbrook, and then:

- [illegible]

Direct Links Score:

Overall Connectivity Score

83 out of **234** possible

Oxford	OX
Bicester	BC
Aylesbury	AY
Watford	WD
Milton Keynes	MK
Northampton	NN
Luton	LU
Bedford	BE
Kettering	KE
Stevenage	SG
St Neots	StN
Peterborough	PE
Cambridge	CB

	Direct EWR-ALT journeys	33	3	99
Direct existing journeys	11	2	22	
1 change required	34	1	34	
2 changes required	0	0	0	155

Direct Links Score:

Overall Connectivity Score

155 out of **234** possible

8 / 19

APPENDIX A4

Compatibility with, and Connection to, Primary UK Intercity Network

Refer Appendix B, Figures B03 – B10

This assessment considers overall connectivity between the major communities of the Oxford-Cambridge Arc and the wider UK. By its very nature, East-West Rail will facilitate east-west connectivity, and it is important that it links efficiently to major hubs of the north-south main line network i.e. West Coast, Midland and East Coast Main Lines, to enable optimal connectivity from Oxford-Cambridge Arc communities to the principal cities of the Midlands, the North and Scotland.

As with the previous assessment (**Appendix A3**), Oxford, Bicester, Aylesbury, Watford, Milton Keynes, Northampton, Luton, Bedford, Kettering, Stevenage, St Neots, Peterborough and Cambridge are considered as major communities of the Oxford-Cambridge Arc. All 39 possible connections from these 13 communities to the 3 northern main lines are considered. Also considered are 13 further future journeys i.e. links from the official **EWRC** scheme to HS2, and from **EWR-ALT** to the HSUK 'exemplar alternative' national high speed network.

All journeys are classified and weighted as follows:

- Direct link to N-S main line (**2x** weighting)
- Link requiring single change of trains (**1x** weighting)
- Link requiring 2 or more changes of trains (**0x** weighting)

The results of this assessment are presented below in Figures **A4.1** and **A4.2**.

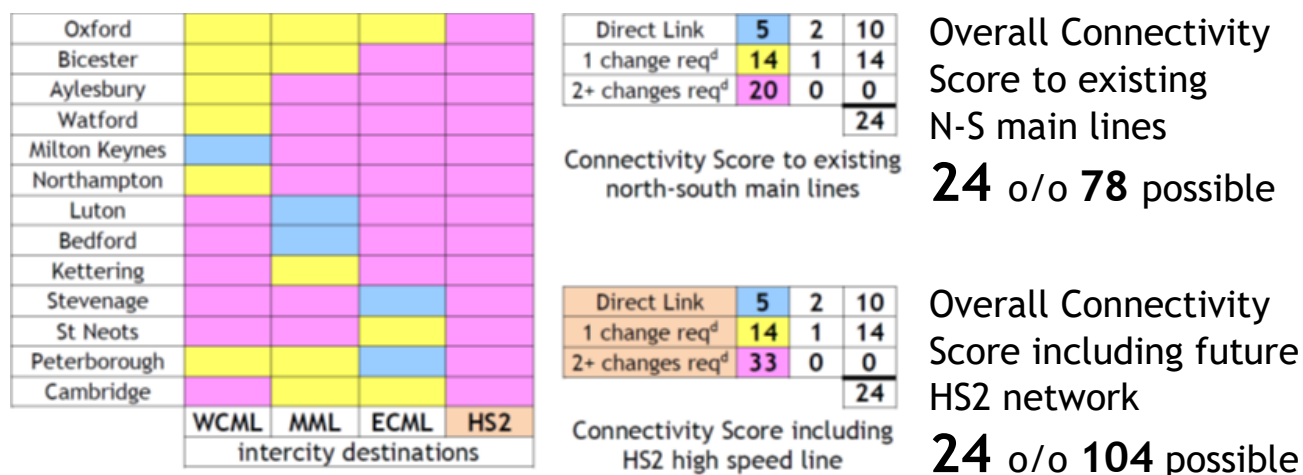


Figure A4.1 : Connectivity of Oxford-Cambridge Arc Principal Communities to UK Main Line Network, with EWRC and HS2 in place

The official **EWRC** proposals score poorly for 2 reasons:

- As with the original LNWR 'Varsity Line', **EWRC** intersects with the main line network at secondary locations such as Bletchley (WCML), Bedford (MML) or Sandy/St Neots (ECML). These are remote from the primary hubs i.e. Milton Keynes, Leicester and Peterborough, from which long-distance intercity services generally depart for Midlands, Northern and Scottish cities. Hence many journeys require 2 changes of train.
- This lack of regional to national connectivity takes an even more extreme form at Calvert (between Bicester and Bletchley), where the soon-to-be-restored Varsity Line will cross the new HS2 high speed line at right angles, with no interchange station even contemplated. Hence **EWRC** will offer no connectivity whatsoever to the UK's future high speed network.

By contrast, **EWR-ALT** offers greatly superior regional to national connectivity:

- **EWR-ALT**'s proposed 'cross-corridor' operation (as described in **Appendix A2**), with new connecting chords to WCML, MML and ECML, will hugely facilitate direct links from Oxford-Cambridge Arc communities to primary main line hubs at Milton Keynes, Bedford, Stevenage and Peterborough. Hence most journeys will only require a single change of trains.
- **EWR-ALT**'s greater integration with the existing main line network will also enable superior links to any future high speed rail system (such as the High Speed UK 'exemplar alternative' to HS2), operating to similar principles of full integration and serving existing primary hubs at Oxford, Milton Keynes, and Peterborough.

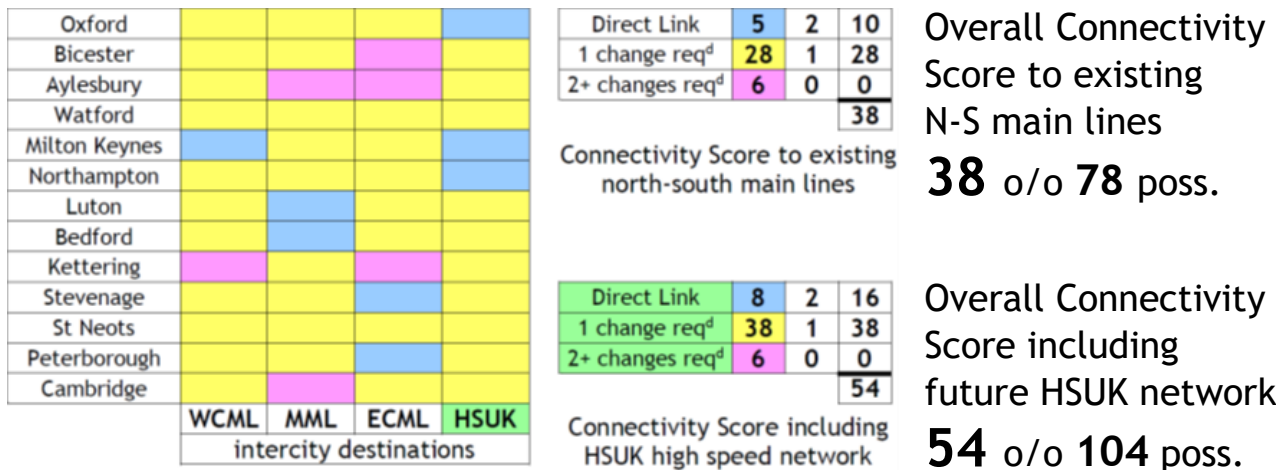


Figure A4.2 : Connectivity of Oxford-Cambridge Arc Principal Communities to UK Main Line Network, with EWR-ALT and HSUK in place

APPENDIX A5

Enabling of Diversionary Routes between ECML, MML and WCML

Refer Appendix B, Figures B03 – B08

The full interoperability that **EWR-ALT** will achieve between the adjoining WCML, MML and ECML corridors (as described in **Appendix A2**) will also greatly facilitate diversionary operations, in the event of both planned and unplanned disruption.

Currently, a blockage of the Midland Main Line at Luton – or of the East Coast Main Line at Stevenage, or of the West Coast Main Line at Watford – will completely block the main line in question, with no alternative routes out of London available. But with **EWR-ALT** in place, fully connected to all north-south main lines, it becomes possible for services to bypass the blockages.

In the case of blockages at either Stevenage or Watford, this bypass operation could take two alternative forms:

- strengthened Thameslink services running up the MML to Millbrook, and then via **EWR-ALT** and ECML to Peterborough, or via **EWR-ALT** and WCML to Milton Keynes; and at either Peterborough or Milton Keynes, passengers would change to northbound intercity services.
- ECML or WCML intercity services starting from St Pancras (rather than Kings Cross or Euston) and transferring to ECML/WCML via **EWR-ALT**.

This will hugely enhance both the resilience and the fundamental economics of the entire national network. By contrast, the limited focus of the official **EWRC** proposals upon the Oxford-Cambridge axis, with no allowance for new spur connections to the north-south main lines, will prevent any of these wider benefits from ever being realised.

APPENDIX A6

Minimised Community and Environmental Impact

Refer Appendix B, Figures B11 – B12.

Any comparison of community and environmental impact between the 2 candidate schemes should be focused upon Bedford and its close surrounding areas, where the primary points of difference exist. The routes of **EWRC** and **EWR-ALT** in central Bedford are shown in Figure **A6.2** and the routes to the east and north of Bedford are shown in Figure **A6.3**.

Comparative community and environmental impacts are listed below in Table **A6.1**.

Performance Criterion		EWRC Performance	EWR-ALT Performance	Winner
1	Demolition of Residential or Commercial Property	EWRC requires major demolition of residential property in the north of Bedford, to expand the width of the railway corridor to accommodate 2 new tracks	EWR-ALT requires no demolition of residential property, and only minor adjustments to commercial property to enable restoration of the LNWR railway corridor to the east of Bedford	EWR-ALT
2	Other Community Benefits and Impacts within Bedford	Not applicable. (It should be noted that under EWRC , Bedford will retain its 2 stations at Bedford St Johns and Bedford Midland)	Minor community impacts arising from placing EWR-ALT on viaduct through Priory Country Park are outweighed by benefits of new station at this location. Note EWR-ALT proposals for 3 additional stations at Priory Park, Bedford South & Kempston	EWR-ALT
3	Intrusion into Rural Landscapes and Impact on Communities	EWRC follows a difficult route to the north of Bedford, with earthworks up to 14m deep/high which will require landtake up to 100m wide. This will inevitably have major impact on rural communities which cannot derive direct benefit.	The EWR-ALT route closely follows the A421 Bedford bypass, and should cause no additional landscape or community impact.	EWR-ALT
4	Impact on Heritage Archaeology and Environment	No comparative study has yet been undertaken		

Table A6.1 : Comparison of Environmental and Community Impacts

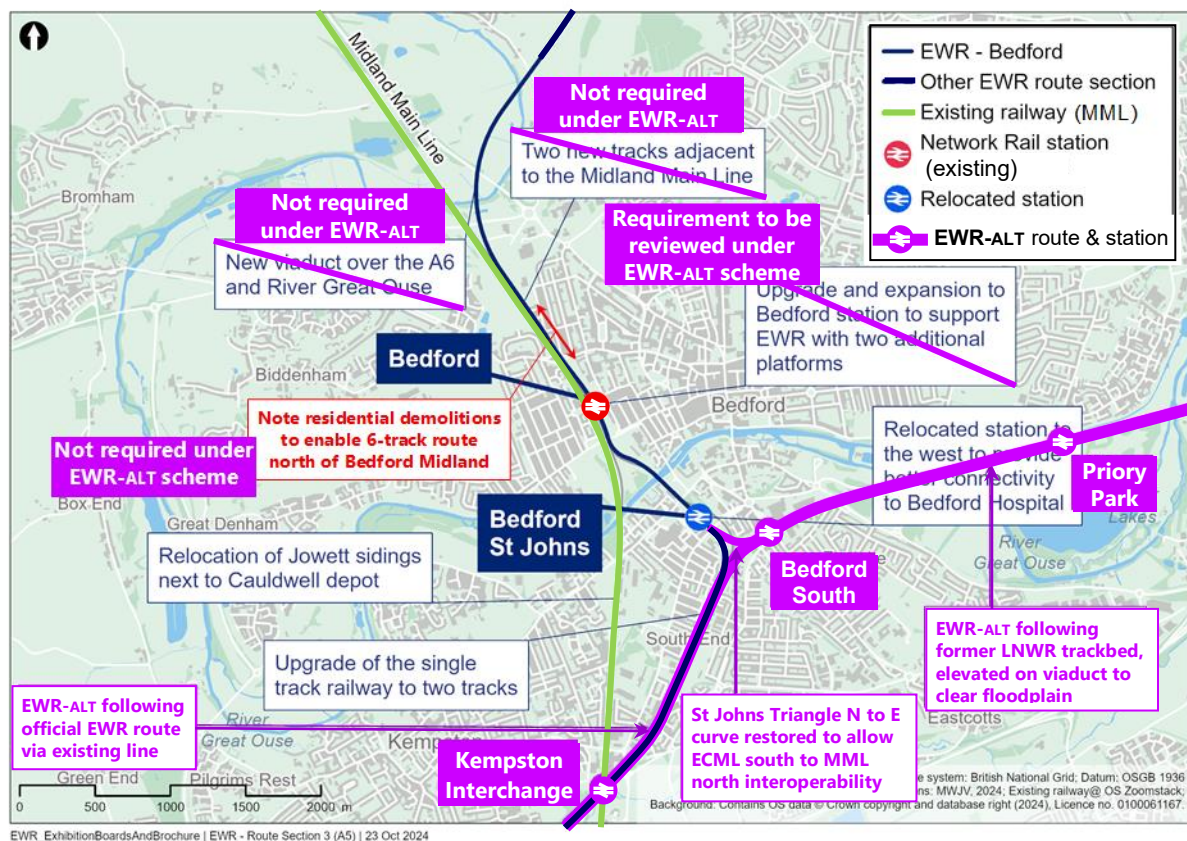


Figure A6.2 : EWR-ALT & Official EWRC Schemes in central Bedford
(Sketch developed from mapping information published 2024 on www.eastwestrail.co.uk)

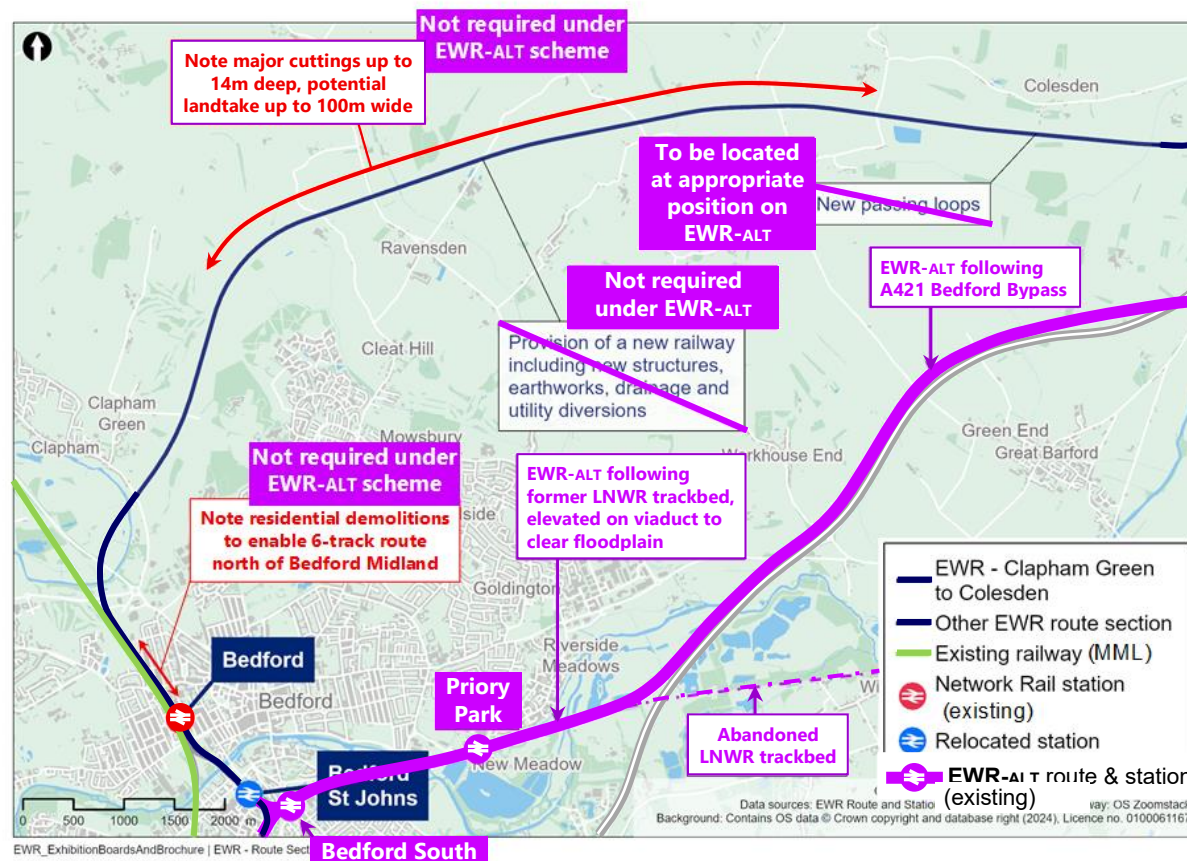


Figure A6.3 : EWR-ALT & Official EWRC Schemes to east and north of Bedford
(Sketch developed from mapping information published 2024 on www.eastwestrail.co.uk)

APPENDIX B

HSUK DIAGRAMS ILLUSTRATING:

East-West Rail Corridor & Original LNWR Varsity Line

Official Proposals of East-West Rail Company (EWRC); and

Alternative 'EWR-ALT' Proposals Developed by HSUK

Index	Description
--------------	--------------------

B01	Historic LNWR Varsity Line and Main Line Network
B02	Existing EWR Sections and Main Line Network
B03	Official EWRC Scheme juxtaposed with HS2
B04	EWR-ALT Scheme & Spurs to North-South Main Lines
B05	EWR-ALT & HSUK Proposed Infrastructure
B06	EWR-ALT Scheme juxtaposed with MML/ECML Connections
B07	EWR-ALT Scheme juxtaposed with WCML/ECML Connections
B08	EWR-ALT Scheme juxtaposed with WCML/MML Connections
B09	EWR-ALT, HSUK Full Scheme & Links to HSUK National System
B10	Network Created by EWR-ALT Scheme & HSUK National Routes

Note that Diagrams B04 – B10 do not indicate detailed EWR-ALT proposals for local stations along the 'Marston Vale' line between Bletchley and Bedford.

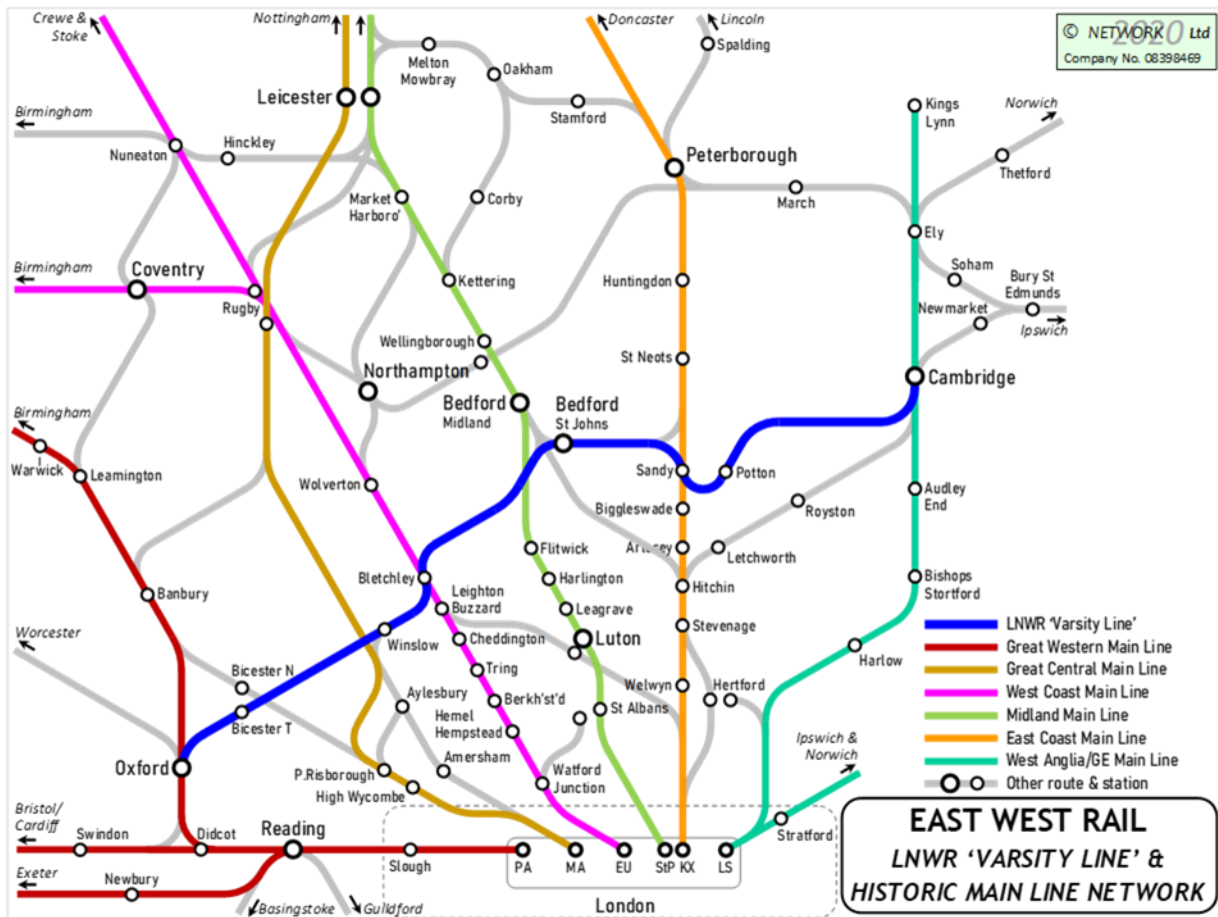


Figure B01 : LNWR 'Varsity Line' & Historic Main Line Network

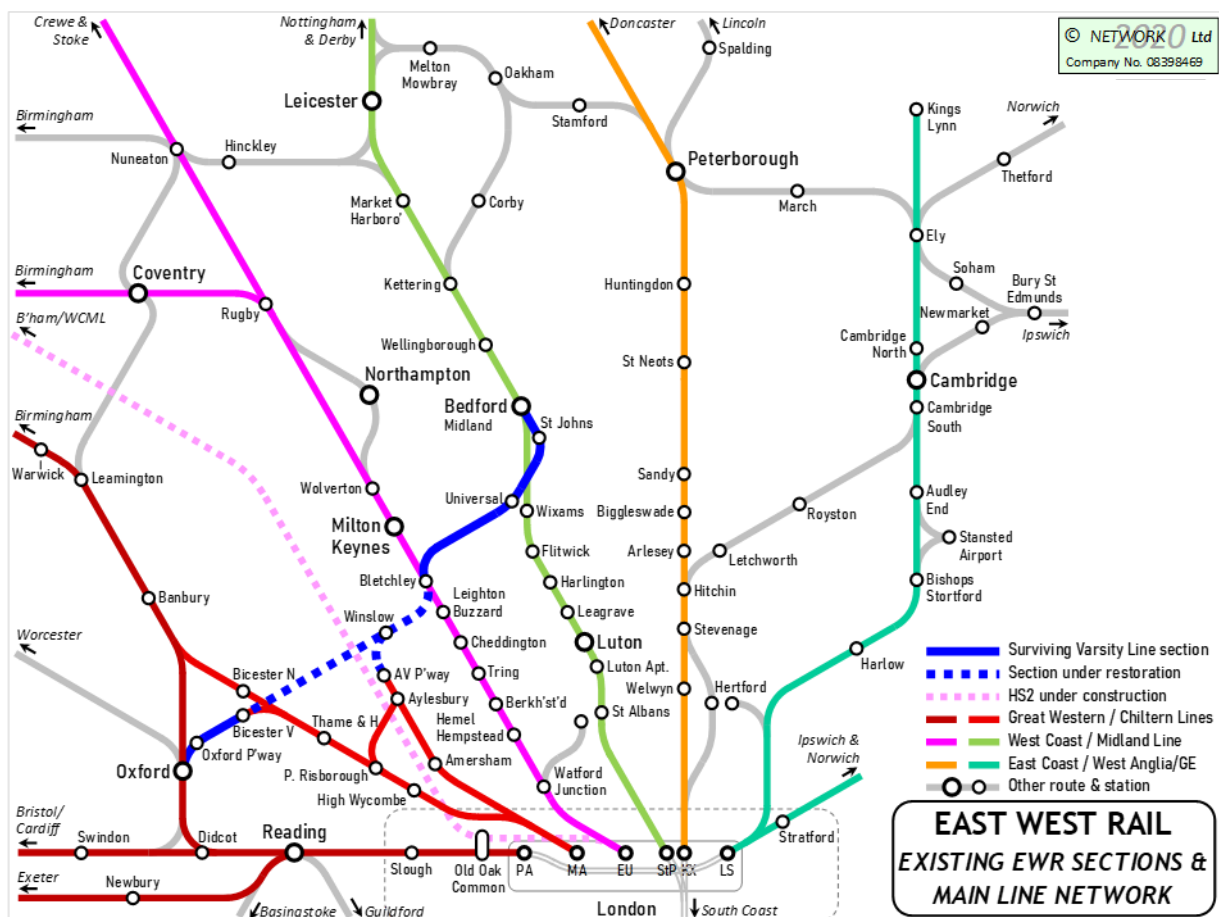


Figure B02 : Existing EWR Sections and Main Line Network

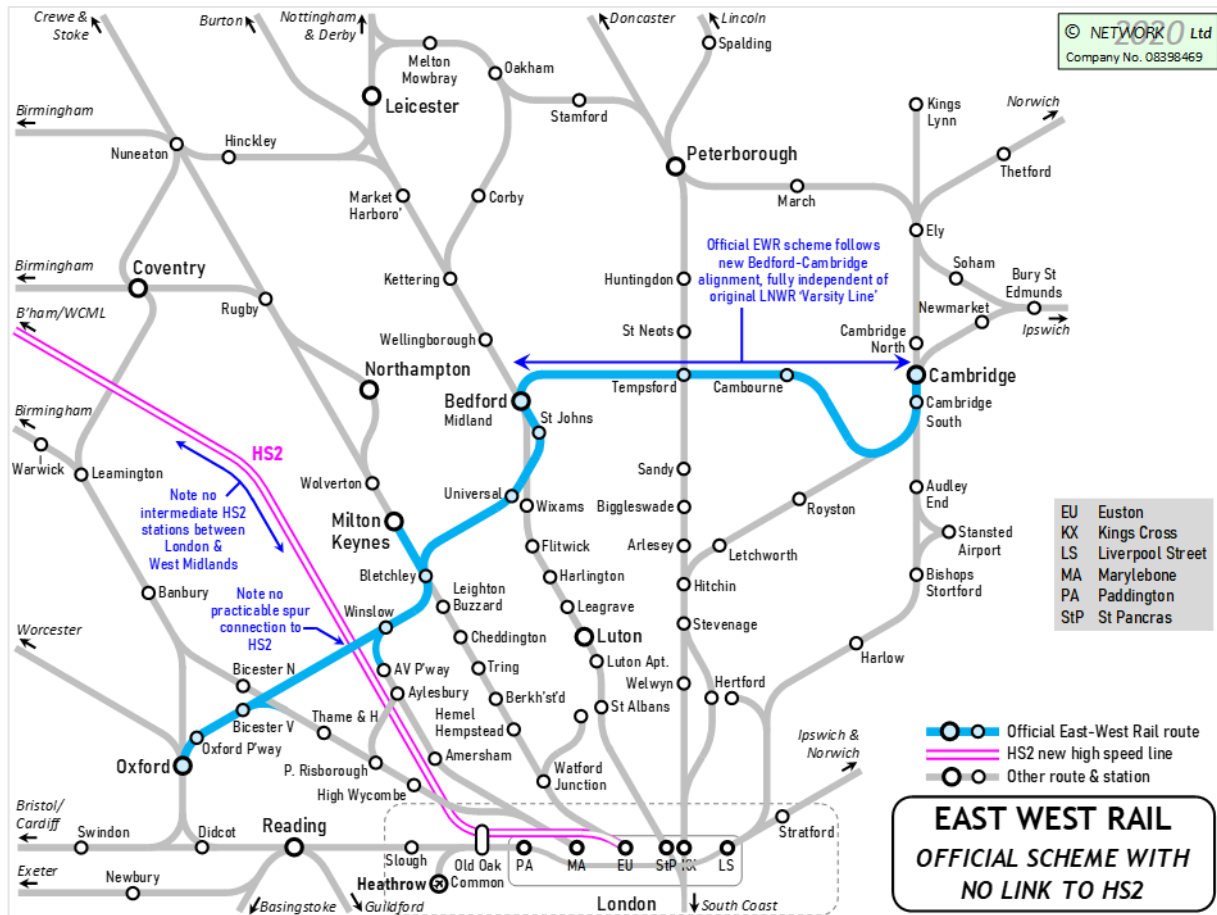


Figure B03 : Official EWRC Scheme juxtaposed with HS2

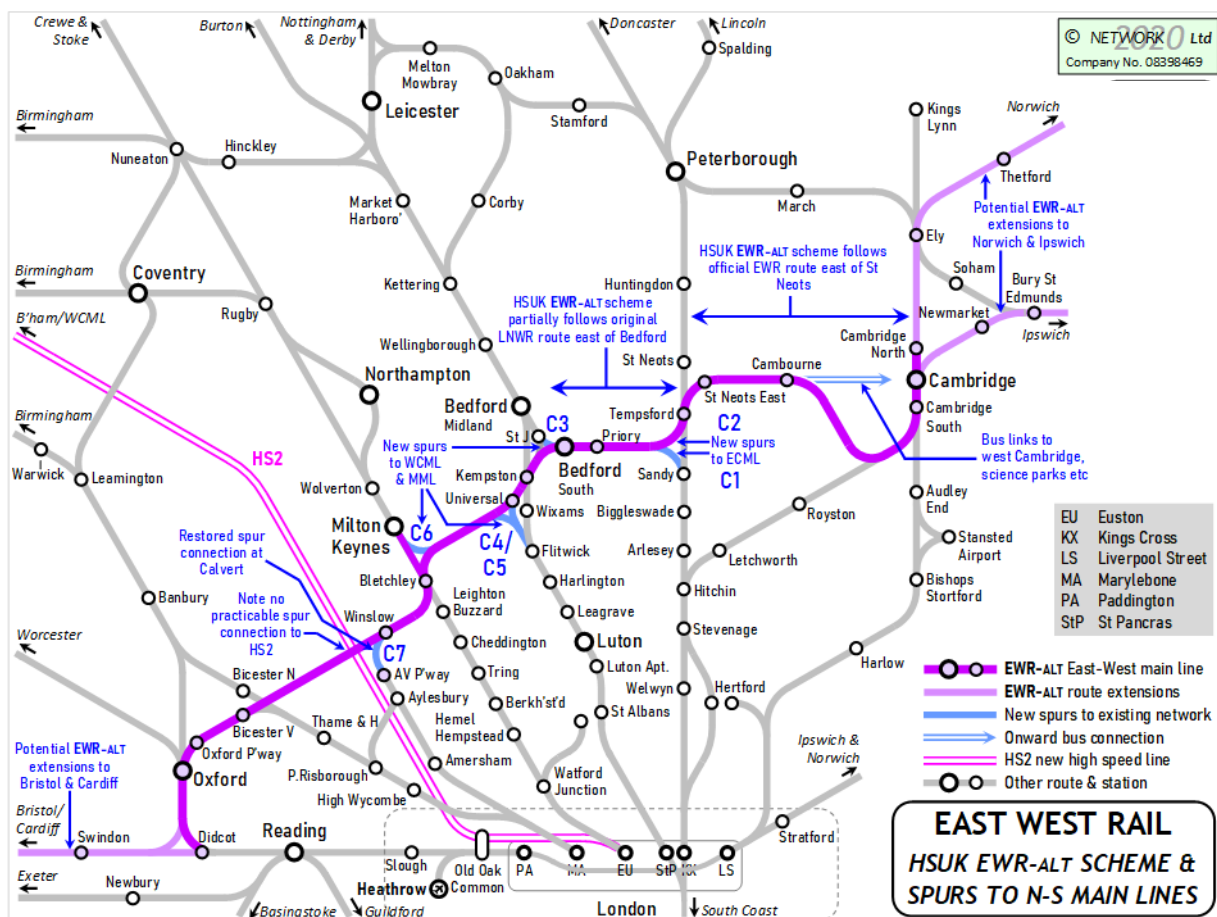


Figure B04 : EWR-ALT Scheme & Spurs to North-South Main Lines

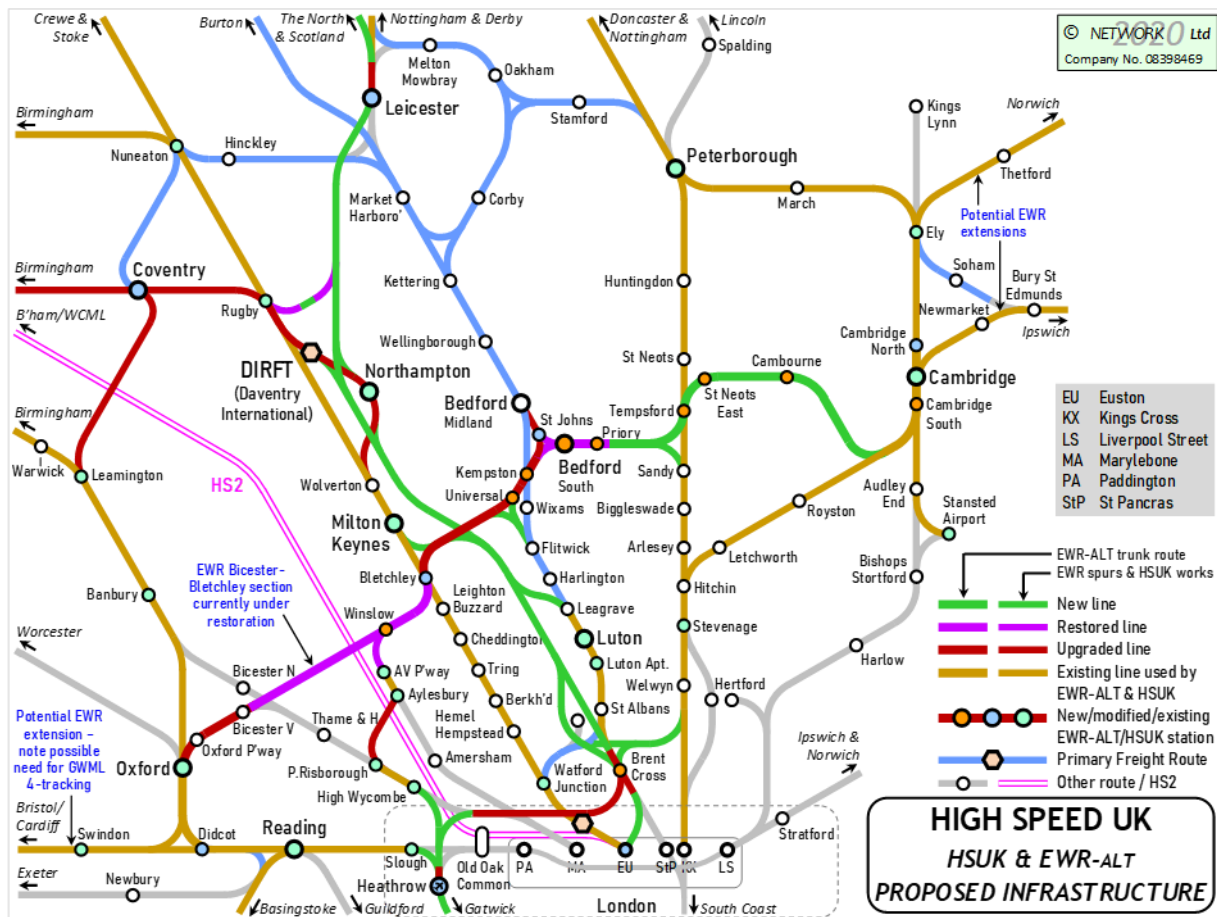


Figure B05 : EWR-ALT & HSUK Proposed Infrastructure

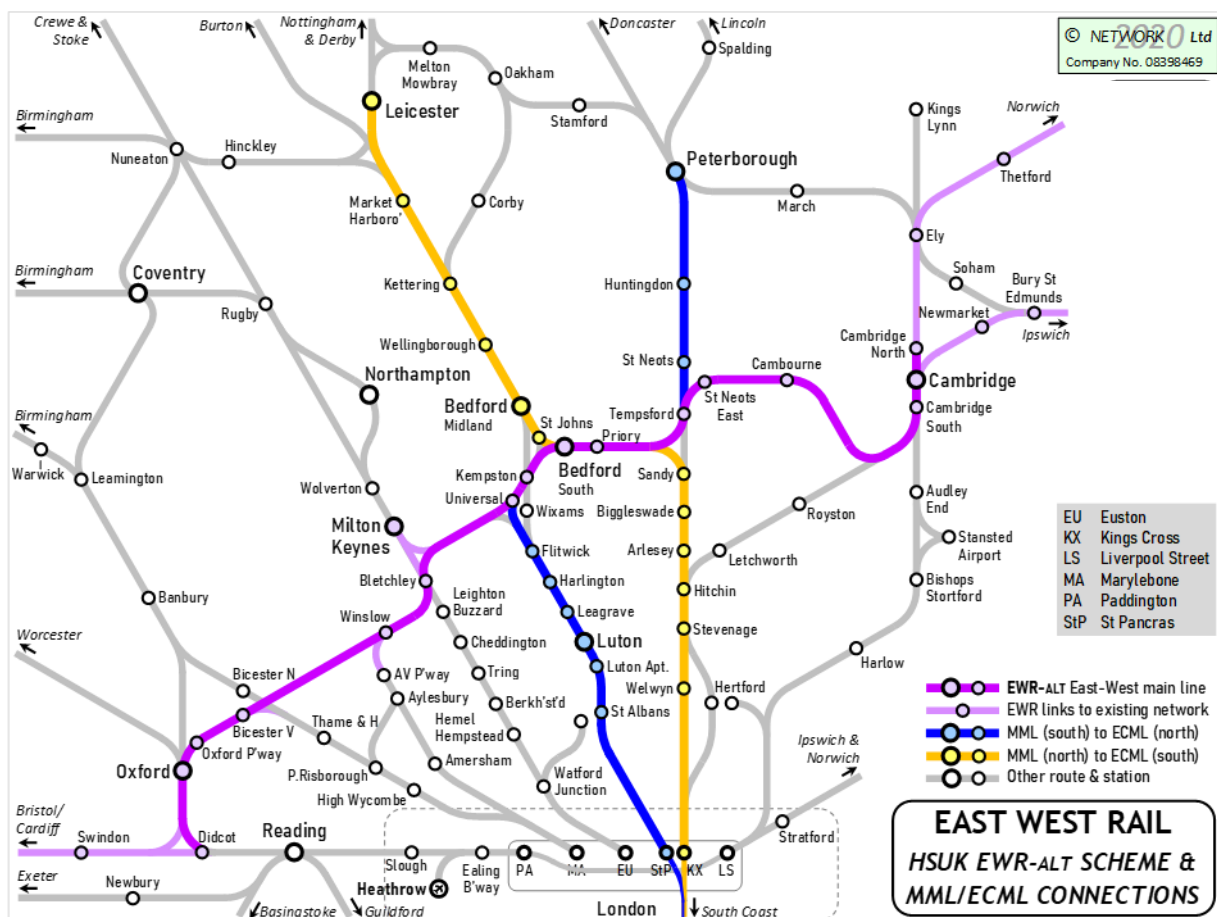


Figure B06 : EWR-ALT Scheme juxtaposed with MML/ECML Connections

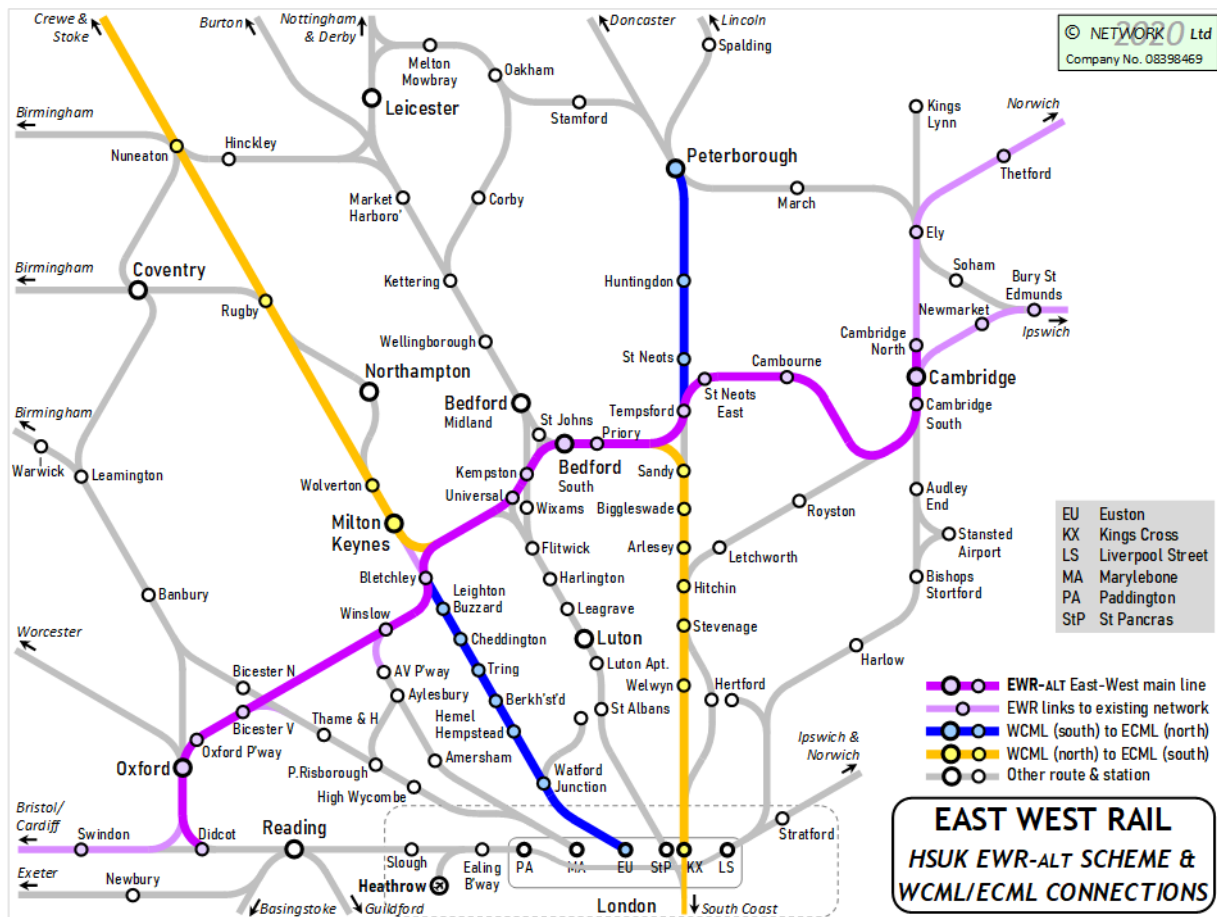


Figure B07 : EWR-ALT Scheme juxtaposed with WCML/ECML Connections

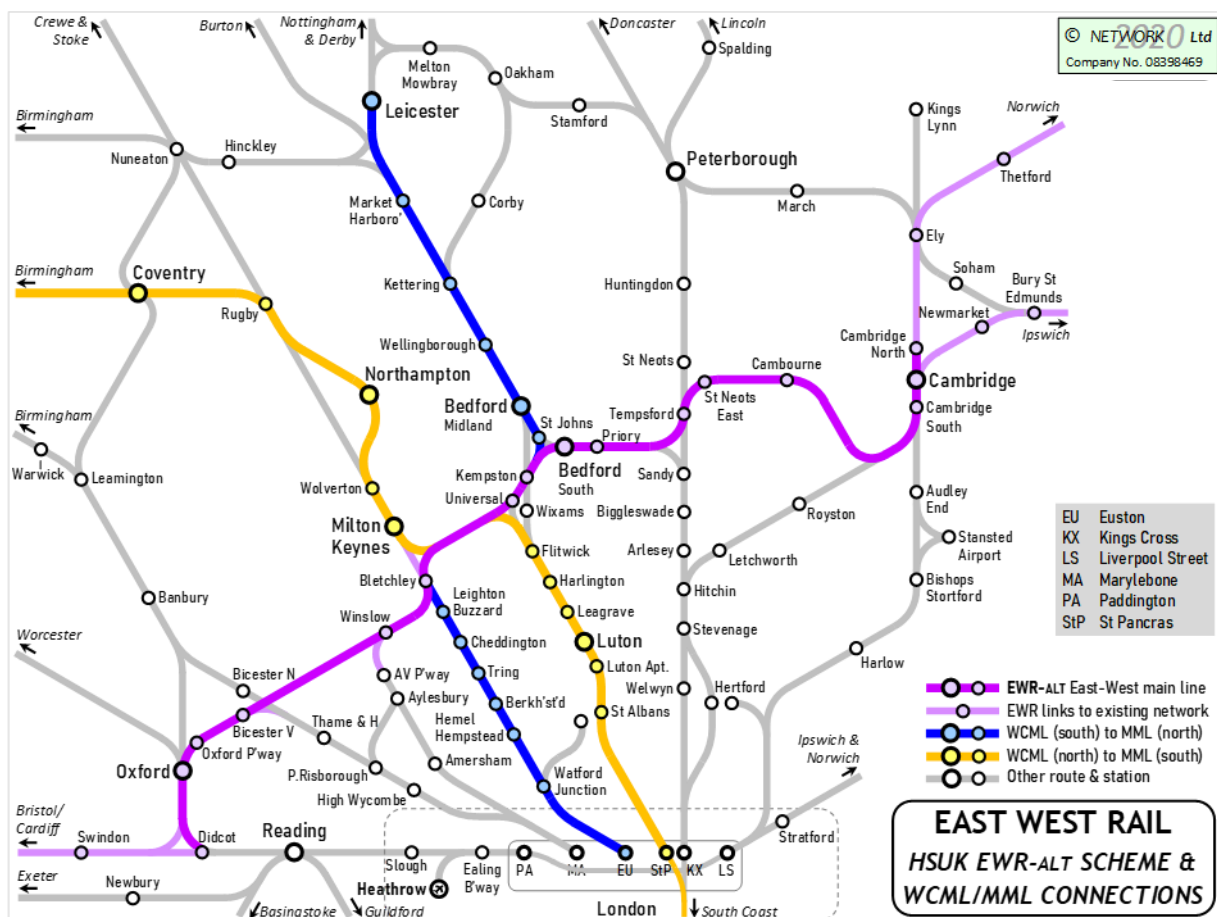


Figure B08 : EWR-ALT Scheme juxtaposed with WCML/MML Connections

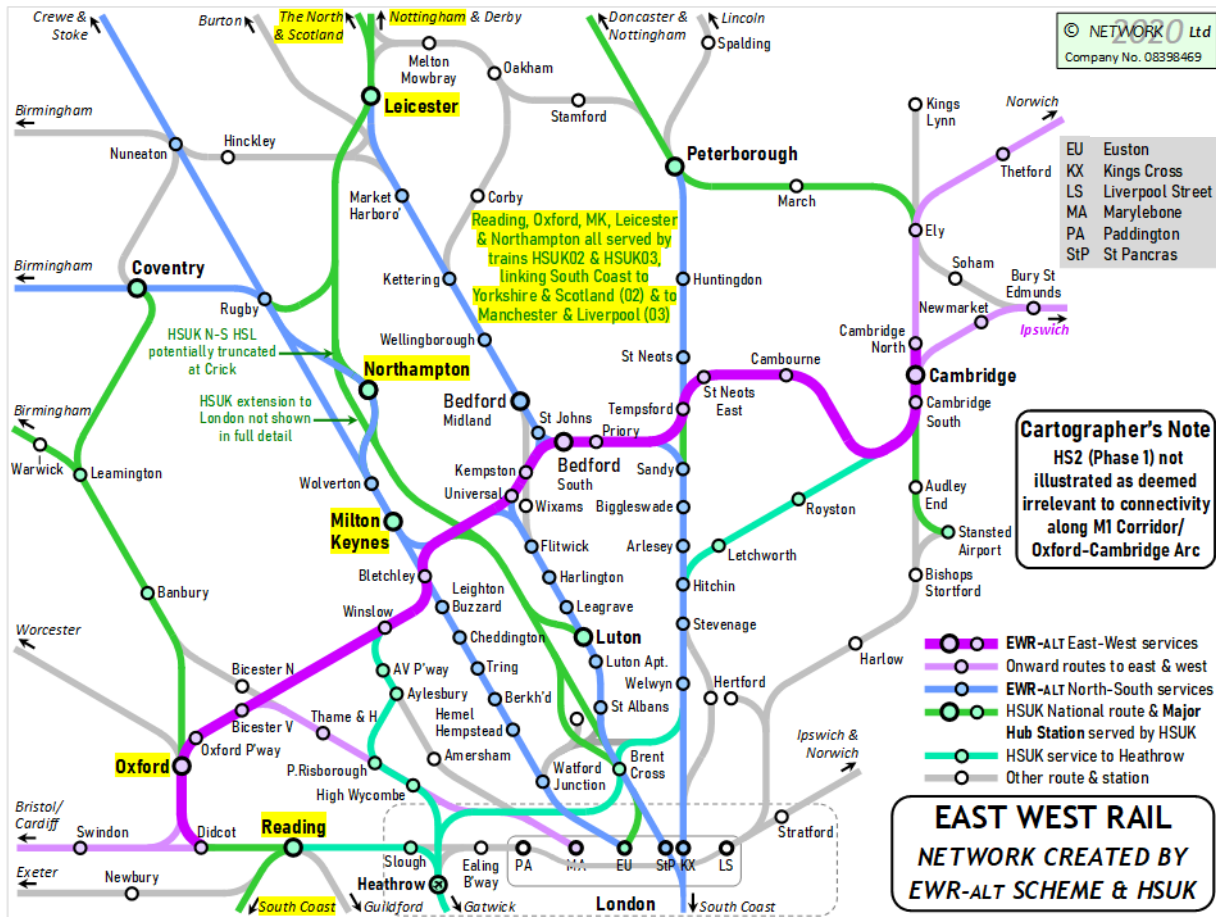


Figure B09 : EWR-ALT, HSUK Full Scheme & Links to HSUK National System

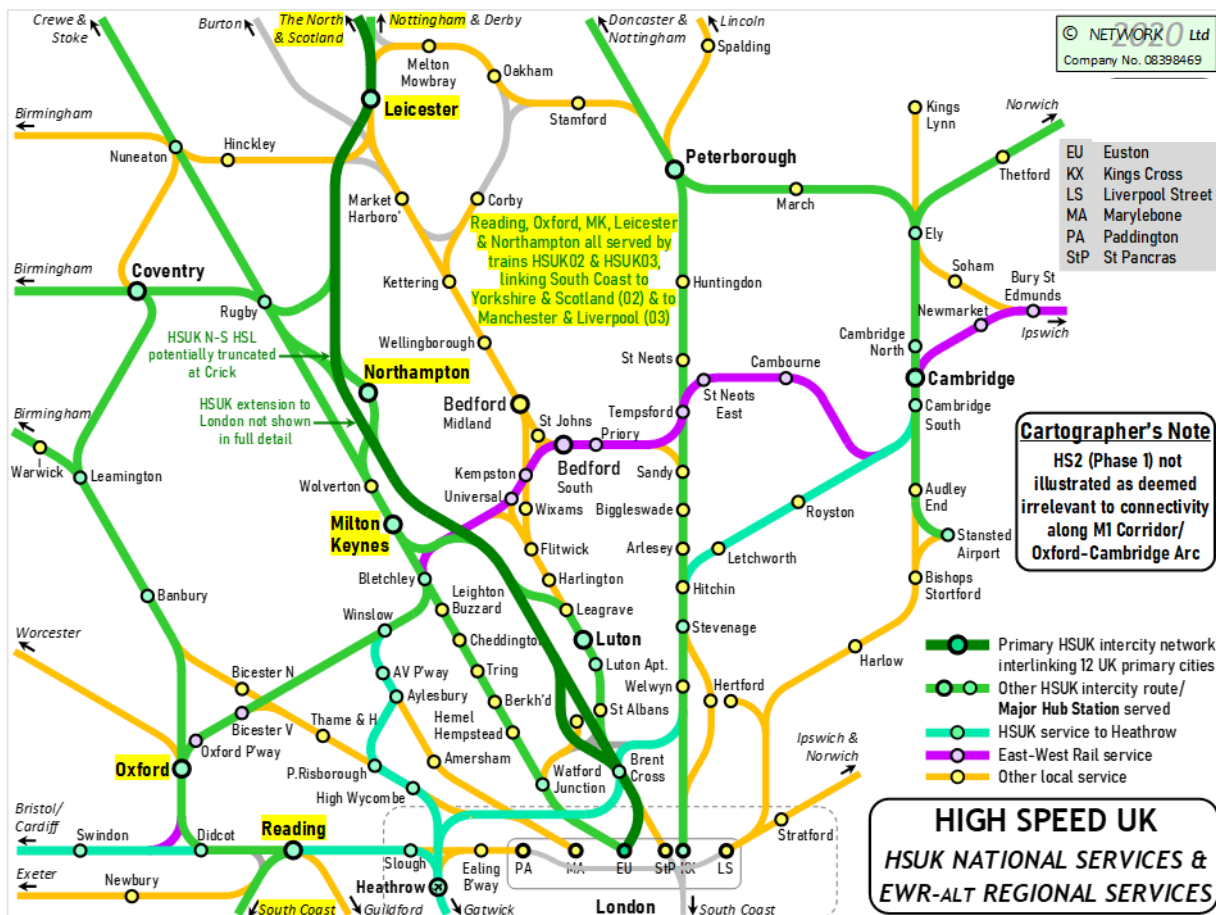


Figure B10 : Network Created by EWR-ALT Scheme & HSUK National Routes