

# WEST MIDLANDS RAILWAY

## A BRAND FOR BIRMINGHAM

THE MIDLANDS ENGINE IS GATHERING SPEED, REPORTS **JAMES ABBOTT**

**T**rains in the West Midlands are soon to appear in a purple and orange livery, marking out a new identity for the area. It is all part of an assertive strategy on the part of the region, keen to make the 'Midlands Engine' as high profile as the Northern Powerhouse.

This is the first time the Department for Transport has mandated the use of a brand: the West Midlands Railway branding will be applied to local services in the new franchise set to take over from the current London Midland operation in October 2017, for which Abellio (with East Japan Railway Co and Mitsui) and incumbent Govia are competing.

The Invitation to Tender (p10, October issue) promises some exciting service improvements, including two direct peak Walsall to London trains. These will come as part of major improvements in the area in December 2018. The timetable change then is planned to include:

- A doubling in the off-peak frequency on the Birmingham to Shrewsbury line, from one to two services per hour.
- An extension of one of the two Birmingham - Wolverhampton stopping services each hour to Crewe via Stoke-on-Trent. This will fill a gap left by diversion of London Midland's Euston to Crewe semi-fasts, which currently run via

Stoke but from December 2018 will be routed direct down the West Coast main line from Stafford to Crewe.

- Improvement of evening services after 19.00.

Other developments due over the next couple of years include electrification to Bromsgrove and on the Chase line between Walsall and Rugeley, along with opening of Kenilworth station as part of the NUCKLE project (see page 58).

Further improvements are due to come in subsequent timetable changes, with substantial alterations pencilled in for December 2021. Sunday services will be one

of the chief beneficiaries at that timetable change, with a regular hourly Sunday service planned for the Birmingham to Shrewsbury line, taking over from the current stopping service operated by Arriva Trains Wales.

### ROLLING STOCK

With the dramatic complete replacement of the rolling stock fleet on the Anglia franchise, observers wait with interest to see what the bidders put forward for the West Midlands one. With money so cheap, new trains are likely to feature strongly: the DfT is expecting some extra capacity to be provided, but existing fleets will also be closely examined.

The Class 323s used on the busy CrossCity line will come into focus. Bidders have been asked to suggest alternative seating arrangements to the current '3+2' layout; narrow door widths are a more intractable problem. London Midland currently operates 26 units; another 17 are used on the south side of Manchester and are due to come off lease in 2018, when owner Porterbrook has made clear its aspiration to concentrate the fleet in the West Midlands.

An influx of EMUs would permit frequency improvements on the newly-electrified Chase line, although whether the bidders will retain an opening for the more than 20-year old '323s', which would need modification to keep to the new mobility rules due in 2020, remains to be seen. One factor in their favour is their fleetness of foot: the rapid acceleration of the units is legendary (recently-built units cannot keep up), making the Hunslet-built trains a favourite for the demanding CrossCity schedules.

Concentrating small fleets in one depot makes a lot of sense from a maintenance point of view: another type suggested for this treatment is Class 172. Again, the bulk of the fleet is already in the Midlands, with 27 units operating out of Tyseley. London Overground has eight for the Gospel Oak to Barking route: these are due to be replaced by EMUs next year after wiring of the route. Chiltern has four, but they have an operating constraint on this franchise: the design of the bogie precludes the fitting of tripcocks, so they are barred from the Amersham line and restricted to Gerrards Cross services.

The Class 350 electric units are another case in point. London Midland has the lion's share of the fleet (77 units), but the 10 units of sub-class 350/4 are operated by TransPennine Express on the Manchester to Scotland route. With these set to be replaced by new trains, all the Class 350s might be concentrated in the West Midlands franchise.

One definite change is that London Midland's fleet of 3x2-car Class 150 DMUs is set to move to Northern under plans for that franchise. In the short term at least, these will be replaced by six single-car Class 153s from Great Western Railway.

### STATIONS

Stations will be an area of focus in the new franchise. While train operators and Network



Class 323 workhorse: this member of the class is at University, a heavily-used station on the CrossCity route close to further education and medical facilities that is proposed for remodelling to assist with crowd control. **JOHN WHITEHOUSE**

Rail have a duty to ensure the condition of stations does not deteriorate, 'nobody looks at their strategic value to the community' says Malcolm Holmes, West Midlands Rail's Acting Programme Director. 'Our proposal is to establish station alliances between WMR, the operator and NR - and private sector third parties where appropriate. The partners could then co-operate on promoting their usefulness as community hubs.'

A pioneering case will be Wolverhampton, where responsibility for the station is to move from long distance operator Virgin West Coast to the West Midlands franchisee. This reflects the part the station will play as part of a developing local transport multi-modal hub, where WMR believes that the close proximity of the bus station and the coming extension of the Midland Metro tram network to the rail station make it an opportunity too good to be missed.

### ELECTRIFICATION

A new station opened at Bromsgrove on 12 July 2016. This will form the southern terminus of the CrossCity line when electrification is extended here from Barnt Green over the notorious Lickey incline, which is due to be completed by December 2017. Provided this schedule is kept, the May 2018 timetable change will see three CrossCity trains per hour extended from Longbridge to terminate in a dedicated platform at Bromsgrove.

The other three out of the six hourly CrossCity trains terminate at Redditch. Service was stepped up here in December 2014 following redoubling of part of the Redditch branch around Alvechurch.

At the northern end of the route, two trains an hour turn round at Four Oaks, two at Lichfield City and two at Lichfield Trent Valley.

While masts are going up on the southern edge of the conurbation to serve Bromsgrove, another electrification project is proceeding on the opposite side of Birmingham. Wiring

of the Chase line from Walsall to Rugeley is in-fill electrification of the sort seen in the 1980s: not only will it allow upgrading of the local service, it will also give another electrified alternative route for occasions when the West Coast main line is blocked by engineering work. A further bonus is that gauge enhancement undertaken as part of the electrification work enhances the prospects for possible freight services to the Pentalver container terminal at Cannock.

The Chase line finish date is notionally December 2017, although bidders for the West Midlands franchise have been warned that it might not be completed until May 2019. At any rate, local planners have not reckoned on frequency improvements until the May 2018 timetable, when a possible influx of EMUs into the region from Manchester could take place when Northern's 17 Class 323s come off lease. Cascaded Class 321s or 319s are other possibilities for the Chase line - or indeed new trains altogether.

The aim is to double off-peak frequency from hourly to twice-hourly, with superior acceleration resulting in shorter journey times. Introduction of EMUs on the Chase line will free up four DMUs for use elsewhere in the franchise.

Further electrification in the region depends on progress elsewhere in the country. Notionally, Derby - Birmingham - Bristol would have been next in the queue after the Midland main line and the trans-Pennine route, but with wires north of Kettering now being called into doubt, the cross-country electrification seems once again to be receding over the horizon. One vaunted Midlands Engine aim is to improve links between the East and West Midlands - improving on the pedestrian 1hr 15min timings between Birmingham and Nottingham for example - but it seems it would be unwise to count on electrification to help make that happen.



Mandated brand: trains working in the West Midlands business unit area will look like this. Above: WMR logo.



Bordesley: the Camp Hill chords would link the former Midland Railway route on the high level in the foreground with the low-level ex-Great Western route to Moor Street. **JOHN WHITEHOUSE**



Moor Street: the Midlands Rail Hub project would see platform 5 brought back into use, plus a new platform 6 built on the right hand side here. **JOHN WHITEHOUSE**

After the cross-country route would come the Chiltern main line and then the Snow Hill suburban services would be converted to EMUs, but again when this might happen is anyone's guess now.

### INCREASING PATRONAGE

As in other urban areas, Birmingham has seen a dramatic increase in rail usage in recent years. Since the turn of the century, passenger journeys in the West Midlands metropolitan area have more than doubled, up from 22.8 million in 2000/01 to 53.7 million in 2015/16.

Rail's share of the peak Birmingham travel market surpassed that of buses in 2011 and

now, at over 36%, is almost level-pegging with cars. Network Rail expects employment growth in the city centre to be the dominant factor driving demand increases in the future, rather than modal transfer.

Making provision for these extra numbers on the trains is a key concern of local transport planners. Bidders for the new franchise are required to provide extra capacity equivalent to 137 vehicles by 2022, for longer trains and more frequent services. The DfT says this will provide more than 30% additional peak capacity in the West Midlands area.

To complement the extra trains, more infrastructure will soon be required. West

Midlands Combined Authority (WMCA) and its partners in the Midlands Connect consortium are pressing for the Midlands Rail Hub concept to be embraced, as this would unlock capacity in Birmingham city centre and make trains flow more freely through the area. 'The Birmingham New Street Gateway rebuilding has quadrupled the passenger circulation area in the station, but it hasn't addressed the key issue of lack of track capacity' explains Toby Rackliff, Rail Policy & Strategy Manager with Transport for the West Midlands (TfWM), a division of WMCA.

'During the rebuilding New Street station worked with one platform out of use, which showed it is not a question of platform capacity - rather, you cannot get more trains in and out of the station. The foundations of the Bullring shopping centre preclude widening the approach tunnels, so some other solution has to be found.'

### MIDLANDS RAIL HUB

That solution is the Midlands Rail Hub: an elegant project that would divert traffic away from New Street to the other central Birmingham stations at Moor Street and Snow Hill, where extra capacity can more easily be provided. The programme could provide up to 10 extra train paths per hour into central Birmingham.

The scheme requires the construction of the Bordesley chords, a suggestion long on the drawing board but which has become ever more sensible as traffic has risen. A chord line linking railway lines in the Bordesley area, where the former

Midland Railway 'Camp Hill' line from King's Norton to Water Orton crosses over the top of the ex-Great Western London to Moor Street main line, is the key to unlocking the potential of several routes in the West Midlands. Bordesley station would be closed (or relocated) to free up the required space for the chord.

Not only would there be the opportunity to introduce local services from poorly served parts of Birmingham's south western quadrant (a proposal which on its own does not quite justify major investment on the scale of Midlands Rail Hub), there would also be the chance to increase capacity on inter-regional routes. Services from Nottingham, Leicester, Worcester and Hereford could be rerouted into Moor Street, freeing up space on the approaches to New Street.

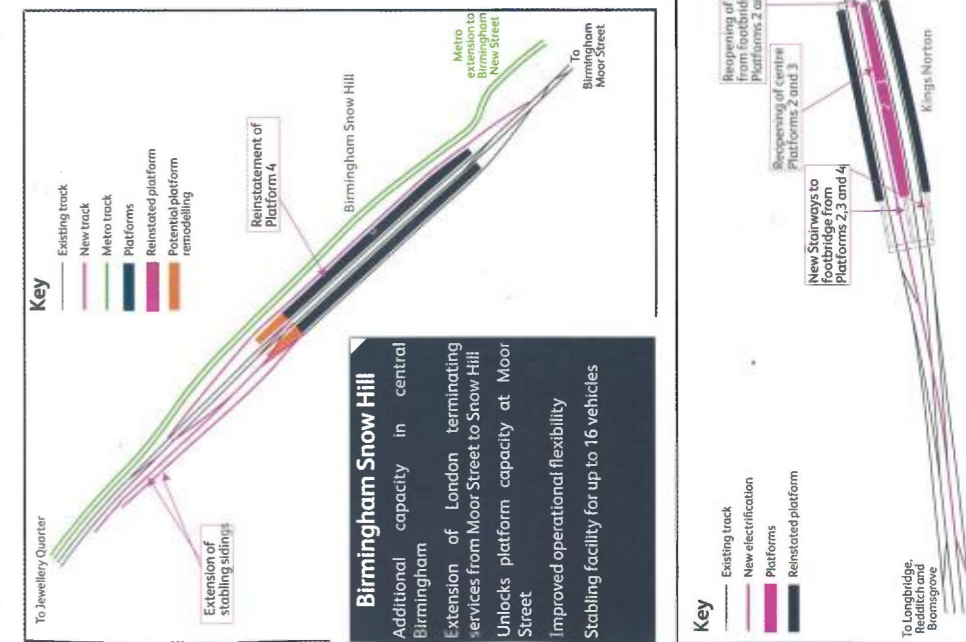
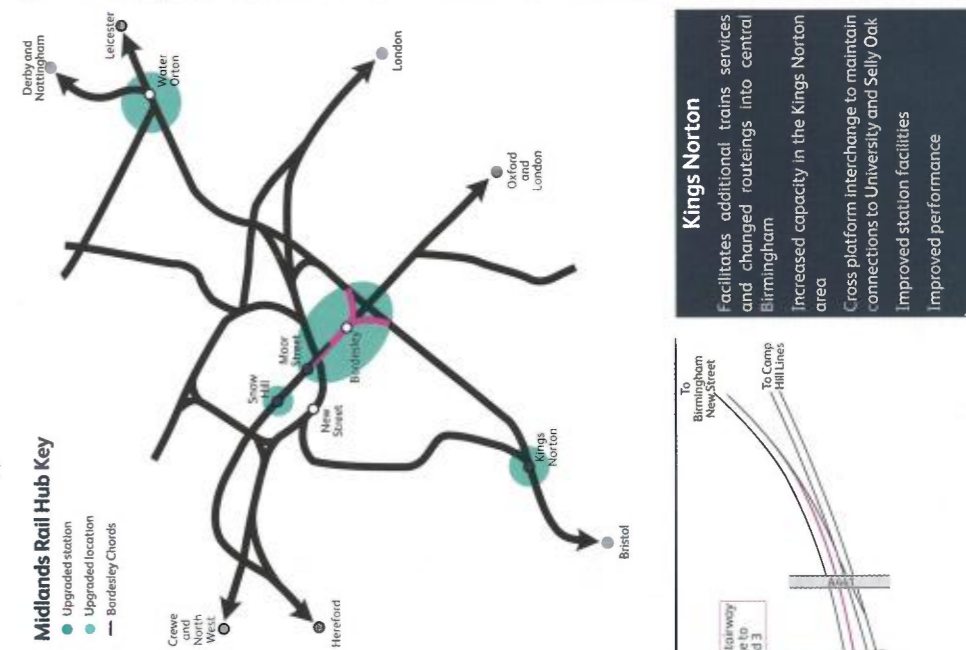
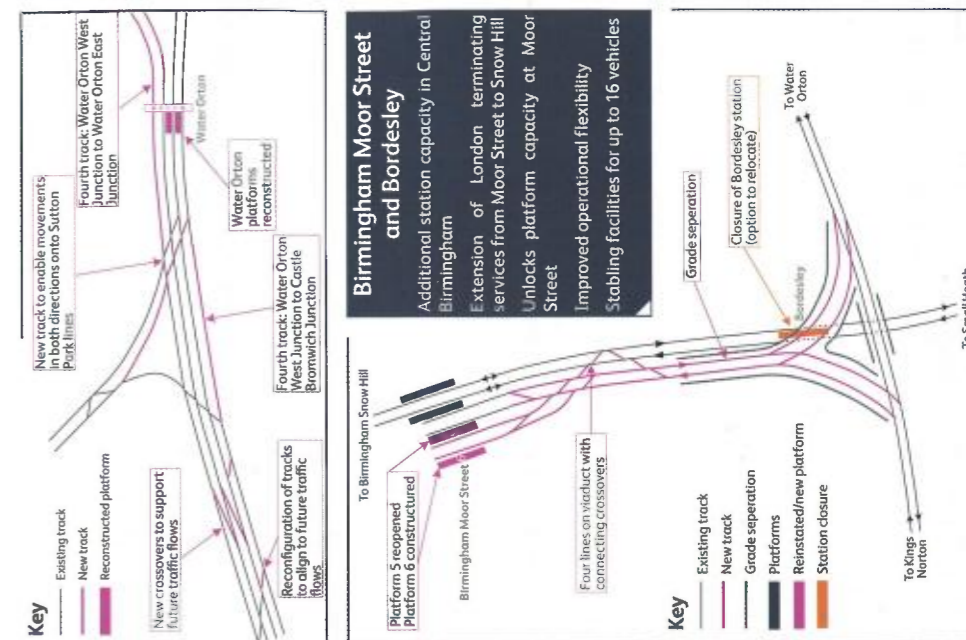
The project would use the existing lightly-used terminal platforms 3 and 4 at Moor Street, along with the disused platform 5 and a new platform 6 to be inserted on the west side of the formation. Chiltern has an aspiration to extend all its trains from London to Snow Hill, a station well placed for Birmingham's business and financial district, rather than having the fast trains from Marylebone terminate at Moor Street. Capacity constraints in the tunnel between Moor Street and Snow Hill and platform space issues at Snow Hill have precluded this so far, so the Midlands Rail Hub proposes solving this to free up the bay platforms at Moor Street for services off the Camp Hill chord.

The way this would be done is to convert the former Midland Metro terminating platform at Snow Hill, disused since the light rail line was projected into the city centre streets, into a heavy rail platform (No 4). Also needed would be additional signalling in the station area, especially in the tunnel between Snow Hill and Moor Street, and improvements to stabling sidings.

Extra capacity would be needed further out, too. The Water Orton corridor, currently a mixture of three and four tracks, would need quadrupling up to the junction where the line splits into routes to Derby and Leicester. This had originally been proposed for the resignalling that took place a few years back, but unfortunately was descope out of that project.

Also included in the Midlands Rail Hub would be improved access to the freight terminals at Kingsbury and Birch Coppice to minimise the impact of freight train movements on overall line capacity.

Total bill for this imaginative set of proposals is around £700 million. The Midlands Rail Hub is in Network Rail's draft West Midlands and Chiltern Route study, but not funded as yet. TfWM is pushing to get the Hub in the programme for Control Period 6 (2019-24), with the aim of having it in place when extra local rail capacity will be required in the West Midlands to cater for demand generated by the arrival of HS2





Snow Hill: this low-level tram platform, seen in use last year, is no longer required by Midland Metro since trams were extended over the city centre streets. The Midlands Rail Hub project would see it converted into a new through heavy rail platform 4. **JOHN WHITEHOUSE**

at Curzon Street in 2026. The interchange between New Street and Moor Street services planned as part of the Midlands Rail Hub at King's Norton (where the central platforms would be reinstated) could give useful access to HS2 from Birmingham's south-west quadrant, as Moor Street is right next door to HS2's Curzon Street station.

## HS2

HS2 will alter the landscape of Birmingham's railways, both literally and figuratively. Literally, because the Curzon Street terminus with adjacent Moor Street will be

like a Midlands version of King's Cross/St Pancras, with New Street closer than Euston is down the Euston Road in London. And figuratively, because the changing flows that will be consequent on the opening of the new high speed route will have profound implications for historic routes in the area.

'Critically, just as the canals, railways and motorways before it, HS2 will put the West Midlands at the heart of Britain's 21st century transport network' says Toby Rackliff.

Importantly, HS2 will free up capacity on the congested Coventry to New Street corridor. Birmingham has excellent

connections to the capital with today's Virgin High Frequency three trains per hour London service, but the 20-minute frequency is operationally problematic on the line through Hampton-in-Arden, as other services on the route operate on a half-hour pattern and the two do not mesh.

With much of the London traffic transferring to HS2 when it opens, demand will be such that a return to a half-hourly frequency on the historic route would be justifiable - even if perhaps a little unpalatable to the city fathers of Coventry (although planners argue that driving to Birmingham Interchange on HS2 will be a cinch).

This would allow a half-hourly pattern to be the general rule, increasing capacity overall. With a slight easing of schedule for the remaining Pendolino services, passenger train paths per hour could increase from 9 to 12 with a further two paths available for freight via Stechford. The draft Route study proposes uses for these paths (see diagram below), with the Birmingham International to New Street local service doubling in frequency to quarter-hourly and extended on towards Wolverhampton. This, coupled with new through services to Walsall, would dramatically improve links between the Black Country and Birmingham Airport.

Another winner could be the CrossCountry service running towards Oxford and Reading. Currently, track capacity constraints mean there is one train per hour on the Kenilworth route and another on the line via Solihull. The former, which goes via both Birmingham Airport and Coventry, presents the better traffic opportunities, so ideally both trains would run this way, doubling the frequency of services via this route to Oxford and the Thames Valley and restoring direct inter-city services from Coventry and Birmingham Airport to Derby, Yorkshire and North East England. The post-HS2 changes could render this feasible, but it would also require the completion of the Coventry - Leamington capacity scheme (deferred in the Hendy Review) to redouble the line between Kenilworth and Milverton Junction.

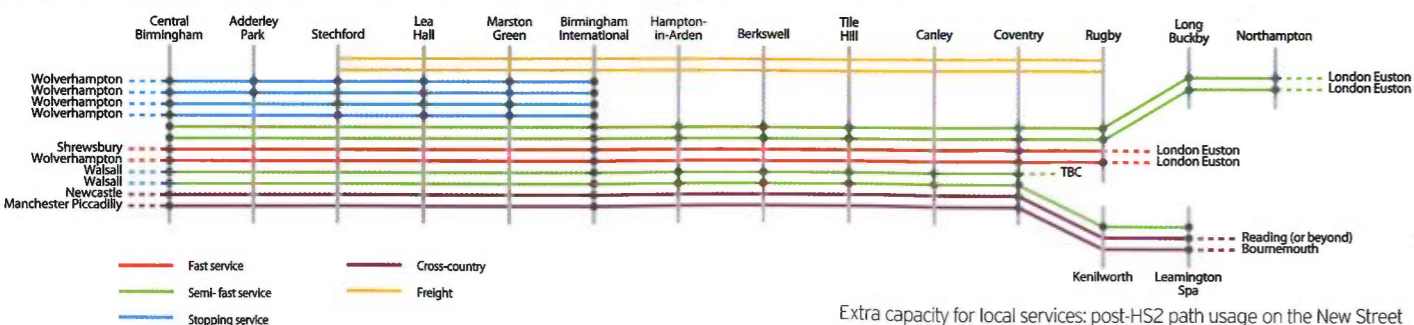
Other opportunities consequent on the opening of HS2 include a fast commuter service between Birmingham and Milton Keynes. Currently, Virgin Trains from New Street don't stop at MK in the morning peak, so that peak capacity can be maximised for the West Coast route as a whole.

## MULTIPLE OPERATORS

Services operated into central Birmingham by operator (average weekday)

Operator	No of arrivals and departures	% share
London Midland	1,197	60.9
CrossCountry	419	21.3
Virgin West Coast	152	7.7
Chiltern Railways	133	6.8
Arriva Trains Wales	66	3.4
<b>Total</b>	<b>1,967</b>	

Source: West Midlands Rail



Extra capacity for local services: post-HS2 path usage on the New Street to Birmingham International corridor proposed in the Draft Route Study.

WMCA is closely studying HS2 as it develops, with reference to impacts on the West Midlands. There was dismay when the link to HS1 was axed, as it was thought that the Birmingham - Paris route could support three through trains a day (leaving aside the synergies that might develop through, for example, a Kent to Old Oak Common service). 'There is now not even passive provision for an HS1-HS2 link in the future' sighs Mr Rackliff.

The implications of Birmingham's HS2 services to Leeds potentially running

via the Sheffield city centre station rather than Meadowhall could also be substantial: 'This could add half an hour to a Birmingham to Leeds journey'.

However, whilst questioning some of the details, the West Midlands region is fully behind HS2 as a concept, believing that the potential benefits are often underestimated by the general public. 'It'll be half an hour from Birmingham Interchange station to the Crossrail interchange at Old Oak Common' observes

Toby Rackliff. 'That means Birmingham Airport will be in London Zone 4, timewise.' Eat your heart out, Heathrow.

All this is, of course, some way off. For the present, the West Midlands is concentrating on the potential of the forthcoming franchise starting next October. This will expire in March 2026, ready for the next operator to take full advantage of the implications of the arrival of HS2 at Curzon Street in December of that year. **END**

## DEVOLUTION ADVANCES

In the past decade the West Midlands has had less influence over its local railways than it did in British Rail days, when the old Section 20 agreements were in force. The London Midland franchise is monitored by someone in Great Minster House in Westminster: how does he know what this region wants and needs? asks West Midlands Rail's Acting Programme Director Malcolm Holmes.

This is about to be remedied. West Midlands Rail (WMR) is a partnership of local authorities, including the West Midlands Combined Authority and neighbouring shire and unitary districts, that will play a role in overseeing the new franchise due to start in October 2017. WMR has collaborated with the Department for Transport over the

specification for the franchise and helped write the Invitation to Tender. Requirements include extension of wi-fi to all trains (except those on the Stourbridge branch, which at 1.3km in length and a journey time of three minutes, doesn't leave much time to log on!), plus greater use of smart ticketing.

The new operator will be required to set up two separable business units within a year, allowing the possibility of the West Midlands local network being hived off in the future. WMR will lead the franchise management for the services in the local business unit and these services will be branded in WMR colours.

The parallels with London Overground are clear. 'The evidence from London and elsewhere is that

where services are devolved, they work very well for passengers and the local economy' says Mr Holmes.

While the oversight of the local network will be a central concern, WMR will also have a relationship with other operators. 'We want to set up an alliance with train operators and Network Rail that would have an overview of all the services in the region. For example, we might want earlier services to Birmingham International for early morning flights: at the moment the timetable planners are the only people from all the TOCs and Network Rail that would come together and look at this, but they don't have any responsibility for taking a wider view of where you can get to and from in the region in the early morning.'

