

## 5.8 GWM 1.2.2 Additional Off-Peak Bristol – Paddington via Box

### 5.8.1 Specification

In this option the existing 2tph pattern between Bristol TM and Paddington via Box is augmented to 3tph using the existing Bristol paths at the London end and providing a 20 minute even interval service through Bath:

0905 Bristol–Paddington (0900 runs 5 mins later with Didcot call removed) and hourly until 1705.

0925 Bristol–Paddington (0930 runs 5 mins earlier then Didcot call added) and hourly until 1735

0945 Bristol-Paddington (arrive 1115) new train calling Bath, Chippenham, Reading only

0900 Paddington – Bristol calls Didcot and thence 5 mins later (Bristol arr 1045) & at same mins past each hour until 1500

0930 Paddington – Bristol ceases to call at Didcot & Swindon thence 10 mins earlier (Bristol TM arr 1105) & at same mins past until 1530

0942 Paddington – Bristol new train calling at Reading, Swindon, Chippenham, Bath only. Bristol TM arr 1122. Operates at the same minutes past each hour until 1542.

The rolling stock costs will be two additional (2+8) HST diagrams which equates to two extra sets leased.

### 5.8.2 Qualitative Criteria: Deliverability and Performance

No material adverse train performance impact is likely overall from these off-peak trains. No significant deliverability issues have been identified.

### 5.8.3 Qualitative Criteria: Other

The option would make a modest positive impact on rail's contribution to the market.

### 5.8.4 Financial and Economic Appraisal

Costs (£kPV)	73,254
Total Revenue (£kPV)	10,848
User Benefits (£kPV)	18,090
Non- user Benefits (£kPV)	3,572
Net financial effect (£kPV)	-62,406
Net economic effect (£kPV)	-40,745
<b>Benefits : cost Ratio</b>	0.4
<b>NPV / K</b>	-0.65
Subsidy / passenger mile (£)	1.35
Subsidy / passenger journey (£)	86.43

- Substantially worse in financial terms
- Substantially worse in economic terms.
- Substantial negative impact on affordability

Both the financial and net economic impact of this scheme are substantially negative (-£63 million and -£41 million respectively). This service pattern introduces a significant cost increment through the requirement of two additional HST units. The additional revenues and user benefits resulting from the scheme do not counter this high level of cost. This scheme would have a severe impact on affordability.

#### **5.8.5 Recommendation**

**Reject.**

## 5.9 GWM 1.2.3 Bristol – Oxford

### 5.9.1 Specification

For reference purposes, the following table records the previous Bristol – Oxford service that was in operation in 1999/2000.

Sept 99											
Oxford	0657	0816	0945	1040	1140	1240	1410	1521	1710	1758	1850
Didcot	0719	0830	1002	1057	1157	1256	1425	1540	-	1818	1904
Swindon	0741	0852	1026	1118	1219	1317	1448	1605	1748	1847	1927
Chippenham	0800	0907	1041	1135	1235	1334	1505	1618	1804	1903	1942
Bath	0815	0928	1053	1147	1252	1347	1517	1635	1817	1916	1955
Bristol TM	0835	0945	1111	1205	1313	1407	1536	1655	1836	1939	2012
Bristol TM	0715	0858	0958	1128	1228	1328	1428	1549	1729	1850	1948
Bath	0729	0913	1013	1141	1241	1341	1440	1604	1741	1904	2000
Chippenham	0744	0926	1026	1154	1254	1354	1455	1618	1757	1917	2019
Swindon	0759	0942	1042	1211	1309	1410	1510	1634	1814	1933	2036
Didcot	-	1010	1104	1232	1335	1436	1533	1656	1835	1955	-
Oxford	0840	1027	1127	1254	1358	1459	1558	1717	1854	2011	2110

The following is our proposed new service proposal to test 7 trains each way:

Oxford		0705	0905	1105	1305	1505	1705	1905
Didcot a		0719	0919	1119	1319	1519	1719	1919
Didcot d		0722	0922	1122	1322	1522	1722	1922
Swindon		0745	0945	1145	1345	1535	1735	1935
Chippenham		0800	1000	1200	1400	1600	1800	2000
Bath		0812	1012	1212	1412	1612	1812	2012
Bristol TM		0829	1029	1229	1429	1629	1829	2029
	SPM							SPM
Bristol TM	0649	0849	1049	1249	1449	1649	1849	
Bath	0702	0902	1102	1302	1502	1702	1902	
Chippenham	0715	0915	1115	1315	1515	1715	1915	
Swindon	0730	0930	1130	1330	1530	1730	1930	
Didcot a	0752	0952	1152	1352	1552	1752	1952	
Didcot d	0755	0955	1155	1355	1555	1755	1955	
Oxford	0808	1008	1208	1408	1608	1808	2008	

The resource assumption is that 2 additional two-car class 165 diagrams will be required.

The following trains would no longer call at Didcot in consequence:

0630 Paddington – Bristol TM, 0830 Paddington – Bristol TM, 1030 Paddington – Bristol TM - Paignton, 1230 Paddington - Bristol, 1430 Paddington – Bristol TM  
These trains would reach Swindon 5 minutes earlier and be retimed to call at Swindon and at stations west of Swindon 5 minutes earlier.

The following trains would no longer call at Didcot in consequence:

0830 Bristol TM - Paddington, 1030 Bristol TM - Paddington, 1230 Bristol TM - Paddington, 1430 Bristol TM - Paddington and 1830 Bristol TM - Paddington  
These trains would depart Bristol TM 5 minutes later and be retimed to call at stations to Swindon (inclusive) 5 minutes later, thence as shown at Reading and Paddington.

### 5.9.2 Qualitative Criteria: Deliverability and Performance

It is possible that re-introducing a Bristol – Oxford service onto the main line may have some adverse train performance impact on existing services, albeit these trains themselves may achieve better punctuality than the intercity London services and therefore help to pull average punctuality up. Additional platform capacity has been introduced at Bristol Temple Meads and at Swindon. No significant deliverability issues have been identified.

### 5.9.3 Qualitative Criteria: Other

The option would make a positive impact on rail's contribution to the market by providing through journey opportunities.

### 5.9.4 Financial and Economic Appraisal

Costs (£kPV)	19,674
Total Revenue (£kPV)	4,318
User Benefits (£kPV)	11,446
Non- user Benefits (£kPV)	1,919
Net financial effect (£kPV)	-15,356
Net economic effect (£kPV)	-1,991
<b>Benefits : cost Ratio</b>	0.9
<b>NPV / K</b>	-0.13
Subsidy / passenger mile (£)	0.59
Subsidy / passenger journey (£)	21.99

- Substantially worse in financial terms
- Significantly worse in economic terms

Although the cost of this service provision is high as two additional two-car class 165 diagrams will be required there is only a slight worsening in the overall net economic position as passengers between Bristol and Oxford no longer incur interchange penalties. Overall there is neither a financial or economic case for this scheme.

### 5.9.5 Recommendation

**Reject.**

## 5.10 GWM 1.2.4 Bristol – Oxford Within Marginal Time of existing Resources

### 5.10.1 Specification

The following revised six trains timetable can be resourced within the existing class 165 fleet through a recast of the diagrams in the morning peak. This releases a class 165 at Oxford on arrival from Worcester at 0810. The two evening diagrams are resourced by the two pre-existing diagrams that have morning peak work only.

Diagram	1	2	1	2	1	2
Oxford	0805	1005	1205	1405	1605	1805
Didcot a	0819	1019	1219	1419	1619	1819
Didcot d	0822	1022	1222	1422	1622	1822
Swindon	0845	1045	1245	1445	1645	1845
Chippenham	0900	1100	1300	1500	1700	1900
Bath	0912	1112	1312	1512	1712	1912
Bristol TM	0929	1129	1329	1529	1729	1929
	1	2	1	2	1	2
Bristol TM	0949	1149	1349	1549	1749	1949
Bath	1002	1202	1402	1602	1802	2002
Chippenham	1015	1215	1415	1615	1815	2015
Swindon	1030	1230	1430	1630	1830	2030
Didcot a	1052	1252	1452	1652	1852	2052
Didcot d	1055	1255	1455	1655	1855	2055
Oxford	1108	1308	1508	1708	1908	2108

No additional rolling stock resources are required.

The following trains would no longer call at Didcot in consequence:

0730 Paddington – Bristol TM - Penzance, 0930 Paddington – Weston-Super-Mare, 1130 Paddington – Bristol TM - Paignton, 1330 Paddington – Bristol TM, 1530 Paddington – Bristol TM. These trains would reach Swindon 5 minutes earlier and be retimed to call at Swindon and at stations west of Swindon 5 minutes earlier.

The following trains would also no longer call at Didcot in consequence:

0930 Cheltenham - Paddington, 1130 Cheltenham - Paddington, 1330 Cheltenham – Paddington, 1530 Cheltenham – Paddington, 1730 Cheltenham – Paddington. These trains would depart Cheltenham 5 minutes later and be retimed to call at stations to Swindon (inclusive) 5 minutes later, thence as shown at Reading and Paddington.

### 5.10.2 Qualitative Criteria: Deliverability and Performance

The timetable that we have compiled is illustrative at this stage and some further adjustment will be required to achieve full compatibility with the December 2004 timetable. These issues should be resolvable and a timetable similar to that shown able to be implemented.

Performance of the service group would be at risk from the implementation of this timetable as one extra train each alternate hour would operate over the critical sections between Bristol and Bath and Swindon and Didcot. Ideally the trains would occupy the opposite hour to the Cheltenham service between Didcot and Swindon but this would entail extended layovers at Bristol TM (80 mins versus 20 mins).

It is possible therefore that re-introducing a Bristol – Oxford service onto the main line may have some adverse train performance impact on existing services, albeit these trains themselves may achieve better punctuality than the intercity London services and therefore help to pull average punctuality up. Additional platform capacity has been introduced at Bristol Temple Meads and at Swindon. No significant deliverability issues have been identified.

