

Email: cvltrackaccess@amey.co.uk

Our Ref: CVLVC003

Date: 8th September 2022

By email only

To: see distribution list

Dear colleague,

Core Valley Lines (CVL) Vehicle Change Notice

Transport for Wales Rail Ltd (TfW Rail) Proposed Vehicle Change: Class 231 Core Valley Lines (CVL) except Cardiff Bay – Entry into Service

This CVL Vehicle Change notice is issued in accordance with Condition F2.3.1 (c) of the CVL Network Code and constitutes a formal proposal for a CVL Vehicle Change by Seilwaith Amey Cymru /Amey Infrastructure Wales Ltd (“AIW”) on behalf of Transport for Wales Rail Ltd (“TfW Rail”) under Condition F2.

TfW Rail wishes to implement the CVL Vehicle Change described above and has, pursuant to Condition F2.1(c), given permission to AIW to consult on its behalf with the parties shown on the attached distribution list. Conditions F2.3.1(b) and F2.5.1(c) enable all affected train operators to consider the CVL Vehicle Change and bring to AIW’s attention any matters that concern them regarding the change. Train operators may also assess the impact of the proposed change on their business and inform AIW what the direct costs and benefits of implementing the change are likely to be (if any).

This CVL Vehicle Change notice outlines TfW Rail’s proposal to introduce Class 231 railway vehicles onto all routes on the CVL, with exception of Cardiff Bay. A detailed specification of the class 231 operated by TFWRL is set out in Appendix A.

TfW Rail is proposing the change because Welsh Government is investing £738m to upgrade the infrastructure. This will help to improve passenger service frequencies and journey times. Another £800m is being invested in new train fleets including the Class 231, for the whole of Wales, to provide greater capacity and more frequent services, as detailed in Appendix A.

AIW has detailed in Appendix B its estimate of the likely impact of the change on the operation of the CVL network and its own proposals in relation to various matters relating to the proposed CVL Vehicle Change as required under F2.5.1(b).

AIW must respond to this proposed CVL Vehicle Change by 9th November 2022, as required under F2.5.1 (b). AIW is seeking comments from you and the persons listed in the attached distribution list to establish whether or not you are content for the change to be implemented. We invite you to consider the proposed CVL Vehicle Change and forward your comments to us by Monday 31st October 2022. If a formal response is not received by this date, you will be

Seilwaith Amey Cymru /Amey Infrastructure Wales Ltd is a company registered in England and Wales
Registered number: 11389544

Registered office: Transport for Wales CVL Infrastructure Depot Ty Trafnidiaeth, Trefforest Industrial Estate, Gwent Road, Pontypridd, United Kingdom CF37 5UT

deemed to have accepted the proposal (including any offer of compensation) and to have no issues to raise with regard to the proposed CVL Vehicle Change.

Please respond to this notice using the appropriate standard form (e), (f) or (g), each of which can be found on AIW's website.

Train Operators who may be materially affected by the change should, if compensation is being claimed, provide evidence of the impact of the proposed change on their business and inform AIW what the costs, direct losses, expenses (minus the benefits) of implementing the change are likely to be, in line with condition F3.2 and F 3.3, other than any such costs which are attributable to TfW Rail improving its ability to compete with other operators of railway assets. Such response should be of sufficient detail to enable AIW to provide a comprehensive response to TfW Rail on your behalf as required under Condition F3.

Respondents should clearly indicate if they consider that all or part of their response is "sensitive information" as defined in Part A of the CVL Network Code.

Wherever practically possible, please send all responses electronically to cvltrackaccess@amey.co.uk.

Please let me know if you require any further details to enable you to respond formally to this notice.

If you feel that only TfW Rail will be able to answer your queries, please contact:

Chris Dellard
Head of Access Planning
Transport for Wales Rail Ltd

chris.dellard@tfwrail.wales

I would appreciate a copy of any correspondence entered into.

I look forward to receiving your response to enable the progression of this proposal.

Yours faithfully

Gary

Distribution List

DB Cargo (UK) Ltd
Freightliner Heavy Haul Ltd
Freightliner Ltd
GB Railfreight Ltd
Network Rail
Office of Rail and Road
Transport for Wales

Copy to:
TfW Rail Services

Appendix A

Reasons for proposed change

As part of its plans to introduce a Metro service to the Cardiff Valleys Network, Welsh Government is investing £738m to upgrade the infrastructure. This will help to improve passenger service frequencies and journey times. Another £800m is being invested in new train fleets for the whole of Wales, to provide greater capacity and more frequent services.

The CVL Network will be part-electrified. Services on the Taff Valleys (Cardiff to Treherbert, Aberdare and Merthyr, including the City Line) will be operated by new Class 398 tram-trains which will be maintained at a new depot at Taffs Well.

Services from the Rhymney Valley and Coryton will run through to Penarth, Barry Island and Bridgend via the Vale of Glamorgan line. These services will be operated by new Class 756 tri-mode units.

As well as the Class 756 tri-mode units there will also be a fleet of diesel-electric units of the same train family, Class 231. They will ultimately provide services across South Wales on the non-Valleys routes, but initially will be used on Valleys services before the arrival of the Class 756 units. TfW Rail wishes to have the ability to operate the Class 231s on all Cardiff Valleys routes (with the exception of the Cardiff Bay line).

A complementary Class 231 Vehicle Change proposal will be progressed for the Network Rail network in accordance with the Network Code.

TfW Rail intends that in due course the Vehicles will be added to its CVL Track Access Agreement as Specified Equipment.

Specification of Vehicles

The Class 231 units are Stadler FLIRT 4-car diesel-electric multiple units (DEMUs). There are 4 passenger vehicles and a shorter PowerPack vehicle which houses the diesel engines.

There will be 11 units in total as follows.

Passenger vehicles per unit	Formation	Total number of units	Unit numbers
4	DMSO1, TSO, PP, TSOW, DMSO2	11	231001 - 231011

- Like the Class 756 tri-mode, the Class 231 will have a PowerPack car to house the electricity generators, which in this case are diesel engines.
- The units will have a maximum operating speed of 90mph and will be classified as RA4.
- The maximum configuration in passenger service will be two Units (10 vehicles total including 2 Power Pack vehicles) (subject to infrastructure constraints).
- The Maximum configuration as ECS will also be 2 units (10 vehicles total).

The key technical characteristics of the Class 231 units are:

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Power source	Diesel
RSL Designation	Class 231
Maximum Speed	90 mph
Braking Capability	Compliant with minimum brake performance curve as specified in GM/RT2045
Differential speed Categories	MU & HST
Length of Unit (m)	80.7m
Vehicle weight (t)	Vehicles: DMSO2 - 39.7t, TSOW - 24.7t, PP - 27.1t, TSO - 23.6t, DMSO1 - 39.2t (tare) Total Unit: 154.3t
Height (m)	3.915m
Width (m)	2.72m
Axle unsprung mass (kg)	motor bogie – 1956kg per axle trailer (Jacobs) bogie – 1457kg per axle
Coupling	Scharfenberg type-10
Route Availability	RA4
Doors	bi-parting plug doors – 2 per side per DMSO; 1 per side per TSO & TSOW
Seats	204 per Unit (including tip-up seats)
Toilets	1 PRM compliant CET per Unit
Wheelslip protection	Yes including automatic sanding equipment

Details of where the Class 231s will operate

The routes that are the subject of this CVL Vehicle Change proposal are listed at the end of this Appendix A.

The CI 231 units will be maintained by TfW Rail at Cardiff Canton depot. They will be stabled overnight at both Rhymney Sidings and Cardiff Canton depot.

Reliability and Contingency plans

Prior to entering full passenger service, the Class 231s will undergo a testing process consisting of:

- Factory tests routinely for all Units
- Dynamic type testing for the first three Units, firstly on test tracks in Romania & Czech Republic, followed by testing on the UK network
- Operations proving runs on all routes
- UK static and dynamic commissioning routinely for all Units
- Fault-free running on all Units
- Mileage accumulation in service to achieve MTIN targets

Rescue and recovery is achieved by any of:

- another CI 231 Unit
- a locomotive by means of a draw hook coupler adaptor

Technical Acceptance

Technical compatibility at route level shall be demonstrated on behalf of TfW Rail by the vehicle manufacturer, Stadler Rail, in accordance with Rail Industry Standard RIS-8270-RST.

A Statement of Compatibility (SoC) for passenger operation has been issued (ref AKI-HSEQ-AIWAP11-CI231 Rev 05). All testing and fault-free running is being conducted out of Cardiff Canton depot.

Details of Network and associated works required to facilitate CVL Vehicle Change

There are no special works required to facilitate CI 231 introduction on to its planned routes of operation, although a regime of increased frequency of inspection is currently required at Adam Street Bridge between Cardiff Central and Cardiff Queen Street, due to tight clearance.

Proposed timescales

The first Unit was received at Cardiff Canton in November 2021 and the eleventh Unit is due in September 22.

Introduction in passenger service is expected during December 2022.

The proposed timetable for the implementation of this CVL Vehicle Change is:

1. Formal Sponsor's Notice (this document) - mid August 2022
2. AIWL Industry Consultation issued - mid September 2022 at latest
3. Consultation period ends - mid November 2022 at latest
4. Entry into Service (EIS) (CI 231) - mid December 2022 at latest

Compatibility Review Forum

It is not considered necessary to convene a Compatibility Review Forum to discuss the Vehicle Change proposal itself. But a separate monthly Compatibility Forum already operates covering Compatibility issues – and if it becomes necessary, Vehicle Change can be added to this meeting's agenda. Or a separate Compatibility Review Forum can be convened if any consultee requests it.

Costs and compensation

TfW Rail does not believe that any costs to other Train Operators will arise as a result of this CVL Vehicle Change. If compensation is required to affected Access Beneficiaries, this will be paid by TfWRL in accordance with Condition F3 of the CVL Network Code.

Additional terms and conditions

There are no additional terms and conditions.

Proposed Variation Procedure

None.

Any other material facts

There are no additional material facts.

List of Routes

Route	Line of route	ELR	Description	From		To	
				M	Ch	M	Ch
CVL	GW810	CAR	End of Line (Rhymney) – Ystrad Mynach South Jn	24	0	13	41
CVL	GW810	CAR	Ystrad Mynach South Jn – Heath Jn	13	41	3	32
CVL	GW810	CAR	Heath Jn – Queen St North Jn	3	32	1	22
CVL	GW828	CRY	Coryton – Heath Jn	2	57	0	15
CVL	GW830	CAM	Merthyr Tydfil – Abercynon Jn	24	44	16	35
CVL	GW830	CAM	Abercynon Jn – Pontypridd Jn	16	35	13	4
CVL	GW830	CAM	Pontypridd Jn – Radyr Jn	13	4	5	23
CVL	GW830	CAM	Radyr Jn – Queen Street North Jn	5	23	1	17
CVL	GW830	CAM	Queen Street North Jn – Queen Street South Jn	1	17	0	66
CVL	GW830	CEJ	Queen Street South Jn – CVL East Boundary	0	22	0	13
CVL	GW834	VON/ ALK	Aberdare – Cwmbach Change of ELR	22	34	20	68
CVL	GW834	ABD/ MOA	Cwmbach Change of ELR – Abercynon Jn (Including Mountain Ash Down Loop ELR MOA)	22	1	16	35
CVL	GW835	THT	Treherbert – Pontypridd Jn	23	54	13	4
CVL	GW840	RAD	Radyr Jn – CVL West Boundary	4	41	1	20

Appendix B

The following are AIW's proposals in respect of the proposed CVL Vehicle Change:

AIW's Assessment of the impact of the proposed CVL Vehicle Change

None

AIW's proposals to facilitate CVL Vehicle Change

As a response to the Sponsor's Vehicle Change request, AIW shall:

1. Facilitate to conclusion the Vehicle Change Consultation
2. Establish the Vehicle Change on behalf of the Sponsor, when consultation ends and all matters raised by affected parties are resolved.

Proposed timescales

By the Relevant Response Date of 9th November 2022, which is 90 days after the notification of this proposed Vehicle Change, on the 11th August 2022.

AIW's proposals for the division of costs and compensation

TBA

Additional Terms and Conditions

AIW has no further proposals which vary from those outlined in Appendix A