


Grand Hibernian
Invitation to Tender




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Issue Record

Issue	Nature of Change	Date
D1	New document – first draft	12/05/2014
D2	Updated in line with Orient Express Comments	06/06/2014
D3	Updated HVAC overhaul quantity and submission date	23/06/2014
D4	Updated paint specification	23/06/2014
1	Issued Document	28/07/2014


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Referenced Documents

1. EN 473 Qualification and certification of NDT personnel.
2. EN 15085 Certification for Welding of Railway Vehicles and Components
3. JPA-683-01-XXX Train Layout Cabin Cars Rev D
4. JPA-683-01-XXX Train Layout Public Cars Rev C
5. A143 / DM / 700 Overview Drawing for Crew Car and Generator Car

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1 **Introduction**

This document forms an invitation to tender for the strip out, repair, modification, and overhaul of 11 ex Irish Rail Mk3 carriages on BT22 bogies (wide gauge BT10). The aim is to transform them from their current state to a baseline upon which a luxury train can be constructed on behalf of Belmond (Formerly Orient Express).

The carriages have been out of use for around 6 years, however they are believed to be largely intact requiring only modest repair followed by a full overhaul.

Note that the construction of the luxury interior is not included in this tender.

Belmond have arranged for the carriages to be stored at Inchicore depot in Dublin for the duration of the works. It is acceptable for the stock to be moved to another location, however all costs must be borne by the contractor.

1.1 **Background**

Belmond plan to introducing a 5 star, luxury cruise train to operate in both Ireland and Northern Ireland. The concept is to create a luxury, 5-star train, similar to The Royal Scotsman but unique by design. The base for the train will be 9 day cars and 1 generator car. An additional day car has also been purchased to act as a spares vehicle. Note that this vehicle is for long term spares and is not to be dissembled to restore the other carriages during the work contained in this tender.

Traction will be provided by diesel electric class 201 locomotives and operated by Irish Rail. There is no work required on the locomotive as part of this tender.

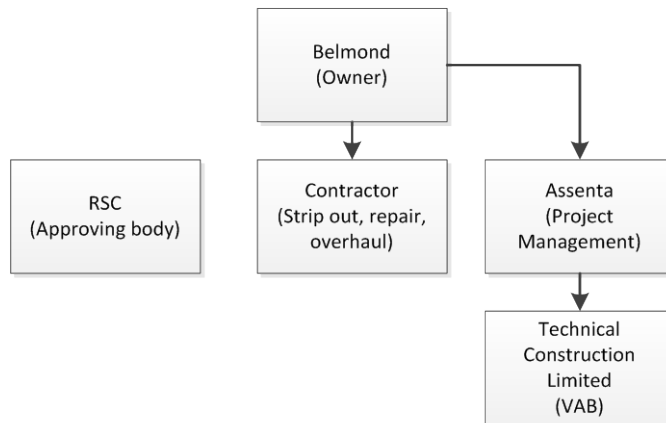
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1.2 Project Organisation

Belmond have appointed Assenta to manage the project. The successful tenderer will be contracted directly by Belmond for the complete works.

Approval of works will be conducted by both a Project VAB from Technical Construction Limited, and the Railway Safety Commission for Ireland.

The organisational chart for the project is given below:



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2 **Scope**

The scope of this tender consists of the following phases, these will be interwoven as each carriage proceeds through the process:

- Strip out
- Examine
- Repair & Modify
- Overhaul
- Handover of relevant records
- Monthly Status Meetings

The stock is as follows:

- 10 Mk3 day carriages (7104, 7116 7122, 7129, 7130, 7137, 7149, 7158, 7169, 7171)
- 1 Mk3 generator car (7601)


The completed stock will contain 7 variants of carriage due to the modification aspect. A summary of the work to be conducted is provided in 2.7 and additional detail regarding each phase is provided in the following sections.

2.1 **Strip Out**

The strip out phase of the project consists of the removal of the existing interior of the carriages as this will not be required for the finished product. All items removed from the carriages, including those items that are to be re-used, must be weighed and the data entered into the 'Vehicle weight data log' for future reference.

The strip out will provide a “shell” level of vehicle consisting of the structure, bodysides and safety critical equipment only. As such the removed equipment will include:

- Seating.
- Interior Floors (Generator and spare car excluded).
- Interior Walls (Generator car excluded).
- All lighting and associated electrical equipment.
- All heating components.
- All plumbing components.
- HVAC and associated components (where no longer required)
- Generators (Generator Car only).
- Batteries.

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When the following equipment is removed it will be retained for further use by Belmond:

- Water tanks
- Effluent tanks
- HVAC

All other material removed should be disposed of by the contractor in line with relevant regulations.

The retained equipment will be:

- Superstructure.
- Bogies.
- External Bodysides.
- Plug doors and all associated pneumatic and electrical components.
- Public Address System.
- Braking Systems.
- Wheel slip prevention systems.
- Windows.
- External Roof.

2.2 Examine

The examination phase of the project consists of performing an examination of each stripped vehicle. Following this examination a report will be produced informing Assenta of the level of work required to repair the vehicles. At this stage any additional unanticipated costs will be identified and put to Belmond for approval.

2.3 Repair & Modify

The Repair aspect of this phase of the project refers to any work identified in the Examination phase, which is required to restore existing features.

The Modification aspect consists of performing small modifications to the carriages regarding the removal of doors and windows.

The repair and modification works conclude for each vehicle when it is ready for overhaul.

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2.3.1 Repair

Repair works will include the reglazing of all non-hopper windows with toughened glass to BS 857 or higher.

The repairs will include the application of paint to specification AS/BGH/P01. The final application of graphics / livery will be determined at a later stage and not included in the scope of this tender.

Area	Specification	Comments
Paint	AS/BGH/P01 (Appendix 5)	Applies to all vehicles

All welding work will be conducted in accordance with EN 15085, and any NDT will be in accordance with EN 473.

2.3.2 Modify

In addition to reglazing, a number of the standard windows will be removed in 8 of the day cars (see 2.7 table 1) and replaced with hopper windows. These will be supplied by Belmond. These day cars will also have a number of the remaining “standard” windows removed on one side and replaced by welded sheet steel. See drawings [Referenced Doc's 3,4,5].

On the generator car 1 set of double doors and both single, inward opening doors will be removed and replaced by welded plates as these will not be required in the finished product. See drawing [5].

One of the day cars will have the plug doors removed on one end and replaced with half glazing, and half steel sheet. See drawing [Referenced Doc 4]

2.4 Overhaul

The Overhaul phase of the project consists of overhauling each vehicle to return the safety critical components, bodywork and structure to a serviceable condition. The specifications for each area are as follows:

Area	Specification	Comments
Bogies	CR_Clo510 (Appendix 1)	Although all bogies are BT22s, the Generator car bogies must be identified and returned to generator car
Plug doors	TM R22 (Appendix 2)	Note the Generator car does not use plug doors
HVAC	M 1220 (Appendix 3)	To be retained in 4 cars only.
All other areas	PB.VL2133 (Appendix 4)	One car to be overhauled to container vehicle state only as this will form a storage and donor vehicle.

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2.5 Production of Records

This phase of the project consists of the handover of all relevant records to Assenta which detail the works conducted and declare these to have been completed to an appropriate level by competent personnel. Records should be conveyed to Assenta on the completion of each vehicle. In addition a full pack covering all works should be provided at the completion of the works to all vehicles. Submission in digital form is acceptable.

2.6 Monthly Status Meetings


A Representative from Assenta will meet with the contractor once a month at the location of the works to receive a status update on the progress and any issues which have arisen.

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2.7 Scope Summary

A summary of the works to be conducted on each vehicle is given below:

Vehicle	Referenced Document	Overhaul External Doors			HVAC		Windows				Remove Generator
		Plug Doors	Manual Doors	Remove doors	Remove	Overhaul	Added		Blocked off		
							Hopper	Other	Large	Small	
7130 - Sleeper1	[3]	✓	-	-	✓	-	8		4	1	-
7137 - Sleeper2	[3]	✓	-	-	✓	-	8		4	1	-
7149 - Sleeper3	[3]	✓	-	-	✓	-	8		4	1	-
7158 - Sleeper4	[3]	✓	-	-	✓	-	8		4	1	-
7129 - PRM	[3]	✓	-	-	✓	-	8		4	1	-
7104 - Obs	[4]	✓	-	2 Plug 1 Gangway	-	✓	8	5	1	1	-
7116 - Kitchen	[4]	✓	-	-	-	✓	8		2	2	-
7122 - Pantry	[4]	✓	-	-	-	✓	8		2	2	-
7601 - Gen	[5]		✓	4 Manual	✓	-	0		-	-	✓
7169 - Crew	[5]	✓	-	-	-	✓	0		-	-	-
7171 - Spare		✓	-	-	✓	-	-		-	-	-

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3 Timescales

3.1 Response To This Document

This document should be responded to confirm interest by Tuesday 5th August 2014. The closing date for tender submissions will be 29/08/2014. Responses should be e-mailed to nigel@assenta.co.uk. Any queries can be addressed to the same party.

There will be an opportunity for contractors to visit the depot and view the stock will be will be confirmed at a later date

3.2 Outline Program For Works


It is expected that the work will commence shortly after the award of the tender.

The contractor will be responsible for providing a program of works that delivers the completed vehicles at regular intervals during the contract period.

The first 2 vehicles must be completed no later than the end of December 2014. All remaining vehicles must be completed by June 2015.

An example of a program is provided on page 13.

Two day cars will be stripped out first, followed by the generator car and the remaining 8 day cars. The first car stripped will become a storage vehicle.

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3.2.3 Example Program of Works

Car	Week																																													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41					
Tender	✓	✓																																												
Award			✓	✓																																										
S1					S	R	O	O	O	P																																				
Spare							S	R		O	O	O	P																																	
Gen									S	R			O	O	O	P																														
Obs											S	R				O	O	O	P																											
Kitchen													S	R					O	O	O	P																								
Dining															S	R						O	O	O	P																					
PRM																	S	R							O	O	O	P																		
Crew																		S	R										O	O	O	P														
S2																				S	R											O	O	O	P											
S3																						S	R										O	O	O	P										
S4																								S	R											O	O	O	P							
Close																										S	R											O	O	O	P					P

Key:

S = Strip

R = Examine/Repair

O = Overhaul

P = Prepare documentation

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4 Tender Submission Content

A response to this tender should contain the following elements:

- Quality plan
 - Health & Safety Policy
 - Drugs & Alcohol Policy
 - Control of Substances Hazardous to Health Policy
- Financial Quote. Total offer price with identified prices for:
 - Strip out (For one vehicle)
 - Plug door remove and blank (For one vehicle)
 - Bogie overhaul (For one vehicle)
 - HVAC overhaul (For one vehicle)
 - Painting (For one vehicle)
- Payment Schedule
- Quantity of Personnel
- Location of Works
- Experience of Personnel/Company
- Qualifications held e.g. ISO9001
- Timescales (if different to those indicated in 3.2)
- Caveats
- Terms and Conditions

5 Penalties for Delays

Once an agreed program of works has been determined, the following penalties will be applied for any delays to the program.

- £1,000 per week / per vehicle delay to the programmed completion date.
- 1% of the total contract price for every week delay on the project end date.