

Briefing: Secretary FOR INFORMATION

Post Travel Report: Overseas travel to Corella, Spain to witness testing and commissioning activities

Purpose: To inform the Secretary of recent overseas travel by Messrs Jake Linnenbank (Engineering Manager, Fleet) and Jose Antonio Garcia de Ciria (Business Partner) to the Construcciones y Auxiliar de Ferrocarriles (CAF) test track facility (CAF TTC) in Corella, Spain on 02 June 2023 to witness verification activities for the new fleet of rolling stock being delivered as part of the Regional Rail Project.

Analysis: The objectives of the trip as outlined in BNCIT0019291 (Overseas travel to Corella, Spain to witness testing and commissioning activities) were achieved. The primary objective of undertaking witnessing of key critical verification activities relating to on-board safety systems and other significant on-board subsystems was successfully completed, whilst additional work was undertaken to progress outstanding comments against submitted technical packages, as well as gain an update to the progress of manufacturing at the CAF production facility.

Summary

Progress Achieved

- Witnessed key critical verification activities relating to the testing of the on-board safety systems and other significant on-board subsystems.
- Progressed finalisation of detailed design review (DDR) through the review of outstanding comments against submitted technical packages.
- Reviewed progress of production and static testing of train units LR02, LR03 and LR05, along with discussions with local TfNSW quality assurance inspectors.

Key learnings and outcomes

Witnessing of verification activities

The primary objective of Messrs Linnenbank and Garcia de Ciria's trip was to witness key verification activities. These verification activities were witnessed in accordance with TfNSW's obligation to undertake due diligence under Rail Safety National Law (RSNL), to ensure the testing was performed appropriately and the systems being tested performed in accordance with the requirements of the Project Deed.

During the trip, Messrs Linnenbank and Garcia de Ciria witnessed the following verification activities at CAF TTC:

- European Train Control System (ETCS) factory type test
- Auxiliary circuits factory test safety equipment function test
- Vigilance control system factory routine test



• Event recorder factory routine test.

In addition to witnessing the abovementioned verification activities, Messrs Linnenbank and Garcia de Ciria undertook an inspection of the Technology Centre of Metal-mechanical and Transport (CETEMET) climate chamber test setup of the passenger saloon area in unit LR05 for the upcoming heating, ventilation and air conditioning (HVAC) climatic chamber test.

Discussion on technical package detail design review comments

Discussions were held with CAF engineers (including Messrs Esteban Echave and Ander Lasa) and CAF subcontractors (including Mr Unai Arteche from Lander Simulation and Training Solutions) whilst in Beasain, Spain, to work through the remaining open comments against the detailed design review (DDR) phase technical package submissions.

Progress update on LR02 / LR03 / LR05 production

Messrs Linnenbank and Garcia de Ciria were provided a walkthrough of the production line for the new fleet and observed car bodies at various stages of construction Through-out the various phases of construction, both the components as well as the construction workmanship appeared to be of appropriate standard with no obvious defects or faults.

Next Steps

Following the trip, there are a few actions and next steps to be completed by TfNSW and Momentum Trains/CAF as noted below.

- Momentum Trains/CAF to finalise and submit the verification reports from the witnessed verification activities to TfNSW.
- Momentum Trains/CAF to arrange a facilitated design review (FDR) session for each of the reviewed technical packages.
- Momentum Trains/CAF to finalise and submit the updated technical packages to TfNSW.

Expense Summary

The actual costs incurred by **Mr Linnenbank** are summarised in the table below, with funding sourced from the Regional Rail Project Overseas Travel budget (P.0021496.05.001.064):

Breakdown of costs incurred	Estimated Cost	Actual Cost
Airfares	\$7,373.78	\$3,627.02
Accommodation	\$3,763.20	\$3,356.90
Transport while overseas	\$5,220.00	\$442.87
Meals and incidentals		\$484.82
TOTAL	\$16,356.98	\$7,911.61



The actual costs incurred by **Mr Garcia de Ciria** are summarised in the table below, with funding sourced from the Ricardo Rail Professional Services contact ISD-17-6880 as shown below.

Breakdown of costs incurred	Estimated Cost	Actual Cost
Airfares	\$7,373.78	\$3,765.20
Per diem daily disbursement fee to cover accommodation, taxis, meals and other incidental costs	\$8,478.00	\$6,085.53
TOTAL	\$15,851.78	\$9,850.73

The total actual costs for **all travellers** incurred for the whole trip is tabulated as shown below.

Traveller that incurred costs	Estimated Cost	Actual Cost
Mr Jake Linnenbank	\$16,356.98	\$7,911.61
Mr Jose Antonio Garcia de Ciria	\$15,851.78	\$9,850.73
TOTAL	\$32,208.76	\$17,762.34

Alignment with Future Transport Strategy

The Regional Rail Project is an initiative which helps to deliver the Future Transport Strategy. The ageing NSW regional rail fleet of XPT, XPLORER and Endeavour trains is being replaced, with more comfortable, safe and accessible trains, for customers who travel from many NSW regional centres to Sydney, as well as Canberra, Melbourne and Brisbane, which aligns with the Future Transport 'Successful Places' key outcome.

The Future Transport 'Sustainability' principle has been adopted in many parts of the project, including the introduction of bi-mode technology on the new fleet, which is an Australian first, providing a more environmentally friendly rail service.

In alignment with the Future Transport 'Accessible Services' principle, the design of the new fleet is focused on accessibility and providing the features that are important to our customers. The new trains will have modern and accessible features such as single-deck carriages, wider doors than the current fleet, charging points for mobile devices, real-time internal and external visual displays and announcements, priority seats, accessible toilets, and spaces for customers using mobility aids. These features are guided by Future Transport's 'Customer Focused' and 'Safety and Performance' principles.

As part of the project, a purpose-built maintenance centre, named Mindyarra Maintenance Centre, is being constructed in Dubbo to support the new fleet and boost the regional economy. Creating around 200 jobs during construction of the Mindyarra Maintenance Centre and 50 ongoing roles during maintenance, the project provides opportunities for long term employment and skills development for people in regional NSW. This aligns with Future Transports guiding principles of 'Successful Places' and 'A Strong Economy'.



Agency Approval

Camilla Drover	Josh Murray
Deputy Secretary Infrastructure and Place	Secretary
	- String Noted
Approved via EBN	Date: 26/10/2023

Attachments

Attachment	Title
A	Photos taken at CAF TTC in Corella, Spain
В	Photos taken at CAF Factory in Beasain, Spain
С	Photos taken at CETEMET in Zaragoza, Spain



Internal approvals

Jake Linnenbank	Jose Antonio Garcia de Ciria
Engineering Manager - Fleet	Technical Advisor
Infrastructure and Place	Infrastructure and Place
İL	Add
Date:	Date:
Rodd Tippett	Mark Stevenson
ED Rolling Stock Delivery	Head of Fleet Delivery
Infrastructure and Place	Infrastructure and Place
Date:	Date:
Lauren Allen	Pamela Henderson
ED Sydney Technical Services	Head of Technical Services
Infrastructure and Place	Infrastructure and Place
Date:	Date:



Attachment A – Photos taken at CAF TTC in Corella, Spain





Attachment B – Photos taken at CAF Factory in Beasain, Spain





Attachment C – Photos taken at CETEMET in Zaragoza, Spain

