

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 Jason Zhang and Suresh Panicker to the Construcciones y Auxiliar de Ferrocarriles (CAF) test track facility (CAF TTC) in Corella, Spain on 10 July 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 the approved Briefing Note were achieved. The primary objective of undertaking witnessing of key critical verification activities relating to Noise, Traction and EMC testing was successfully completed, including an additional visit to the CAF manufacturing facility to formally witness the Weigh test.

Summary

Progress Achieved

- Witnessed key critical verification activities relating to the testing of the on-board safety systems and other significant on-board subsystems.
- Reviewed progress of production and formally witnessed weigh testing of train units LR02, DMCA car.

Key learnings and outcomes

Witnessing of verification activities

The primary objective of Messrs Zhang and Panicker's trip was to witness key critical verification activities that were identified through TfNSW's judgement of significance process. These verification activities were witnessed in accordance with TfNSW's obligation to undertake due diligence under Rail Safety National Law, to ensure they were performed appropriately, and the systems / functionality being tested are correct, safe So Far As Is Reasonably Practicable (SFAIRP) and meet the requirements of the Project Deed.

During the trip, Messrs Zhang and Panicker witnessed the following verification activities at CAF TTC:

- Noise type test protocol (electric mode & diesel mode),
- Traction system track Type test,
- Radiated emission test,
- EMF emissions regarding to human exposure,
- Compatibility with axle counters.

Visit to CAF Beasain production facility

Contact:

Jason Zhang, Project Engineer Fleet, Technical Services, IP,



In addition to witnessing the abovementioned verification activities, Messr Panicker undertook a visit to the CAF manufacturing facility in Beasain to witness the Weigh Type Test and were provided a walkthrough of the production line for the new fleet, CETEST (independent test laboratory) facilities, as well as formally witnessing the Weigh test on DMCA (LR02). The test was successful.

Next Steps

Following the trip, there are a number of actions and next steps to be completed by the travellers, the TfNSW project team and CAF:

- CAF test engineers to finalise and submit the verification reports from the witnessed verification activities to TfNSW for formal review.
- CAF test engineers to create Failure Reporting, Analysis and Corrective Action System (FRACAS) reports on any failures encountered during testing.
- TfNSW project team to prepare and start approval process for future trips to Spain to undertake further witnessing of critical verification activities identified through the TfNSW judgement of significance process and thus undertake relevant due diligence activities to support TfNSW compliance to Rail Safety National Law.

Expense Summary

The actual costs incurred by Mr Zhang 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 | \$7,056.66 | \$4,449.77 |
| Accommodation | \$7,476.08 | \$5,724.78 |
| Transport while overseas | \$6,090.00 | \$1,031.50 |
| Meals and incidentals | | \$1,035.66 |
| TOTAL | \$20,622.74 | \$12,241.71 |

The actual costs incurred by Mr Panicker are summarised in the table below, with funding sourced from the Ricardo Rail Professional Services contact ISD-17-6880. The travel was approved under BNCIT0021340 – **Attachment C**.:

| Breakdown of costs incurred | Estimated Cost | Actual Cost |
|---|----------------|-------------|
| Airfares | \$7,056.66 | \$5,426.40 |
| Per diem daily disbursement fee to cover accommodation, taxis, meals and other incidental costs | \$9,891.00 | \$7,065.00 |
| TOTAL | \$16,947.66 | \$12,491.40 |

The total actual costs for all travellers incurred for the whole trip is tabulated below:

| Traveller that incurred costs | Estimated Cost | Actual Cost |
|-------------------------------|----------------|-------------|
| Mr Jason Zhang | \$20,622.74 | \$12,241.71 |



| Mr Suresh Panicker | \$16,947.66 | \$12,491.40 |
|--------------------|-------------|-------------|
| TOTAL | \$37,570.40 | \$24,733.11 |

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 | Secretary |
| Infrastructure and Place | |
| | Noted |
| Approved via EBN | Date: 14/11/23 |

Attachments

| Attachment | Title |
|------------|---|
| Α | Photos taken at CAF TTC in Corella, Spain |
| В | Photos taken at CAF Factory in Beasain, Spain |



Internal approvals

| Jacob Zhana | Coursel Benjalan |
|------------------------------|----------------------------|
| Jason Zhang | Suresh Panicker |
| Project Engineer - Fleet | Technical Advisor |
| Infrastructure and Place | Infrastructure and Place |
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| Date: 10/08/2023 | Date: 13/09/2023 |
| Rod Tippett | Mark Stevenson |
| ED Rolling Stock Delivery | Head of Fleet Delivery |
| Infrastructure and Place | Infrastructure and Place |
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| Approved via EBN | Approved via EBN |
| Lauren Allen | Pamela Henderson |
| ED Sydney Technical Services | Head of Technical Services |
| Infrastructure and Place | Infrastructure and Place |
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| Approved via FDN | Approved via FDN |
| Approved via EBN | Approved via EBN |



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



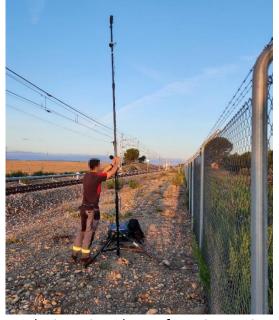
Front view of train under test (LR01)



EMF emissions test in driver cab



Preparing exterior test equipment for radiated emissions test



Deploying microphones for noise testing



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



Weigh test (DMCA)



Weigh test load cell (closeup)



Roof mounted equipment



Compensation weight for unfitted equipment



Front view (DMCA)



Gauge template (RRP)