JUNE 2005

Tender For The Supply of 18 No. Railway Passenger Cars for Greater Wellington Regional Council – RFT Number RS10/5

Tender Evaluation Report (Pre-Price Opening)

We, the undersigned as members of the Tender Evaluation Team, have read and agree to the contents and outcome of this evaluation report.		
Name	Signature	Date
Rhona Nicol		
Murray Kennedy		
Christopher Ham		

Prepared by: Christopher Ham

I, Dave Watson, have read this report and agree to the recommendations in section 5.0 of this report. In doing so, I authorise the opening of the price envelope for the relevant bidder only.		
Name	Signature	Date
Dave Watson, Divisional Manager – Transport		

FOR FURTHER INFORMATION

Chris Ham
Transport Infrastructure
Manager

Contents

1. Introduction

1.1 Tender Requirements

On the 22nd December 2004, a request for tenders were issued by GWRC for the supply (on a design build basis) of 18 railway passenger cars which were to be supplied in 3 identical train consists. Tenders were issued via the local government tender website, Tenderlink. Potential tenderers had to register to download the documents and any queries raised had to be placed on the website system for GWRC to answer. The total budget price as agreed with Land Transport New Zealand was $26.42M.

The Request for Tender specified the following deliverables:

- 3No. 6-car train-sets comprised of 5No. SW carriages (seating only) and 1No. SWS carriage (seating + servery). In addition one carriage would need to be fitted with a generator for the train electrical supply.
- Training for Operating and Maintenance Staff
- Maintenance and Overhaul Documentation

1.2 Tender Discussion and Clarification

During the course of the tender period, GWRC issued a clarification document which set out the move to a 2 envelope price quality evaluation method as outlined in Transfund (now Land Transport New Zealand) Manual PFM3. Tenderers were requested to provide price information in a separate envelope so that non-price attributes could be evaluated without knowledge of pricing. Given this change in tendering process, GWRC revised the tender submission deadline date to the 30th March 2005 from the original date of 23rd March 2005.

A number of questions were raised during the tender period and answers provided via the Tenderlink system. In 2 cases, questions were received directly from potential tenderers. In both cases the answers and questions were placed on the Tenderlink website for all potential tenderers to consider.

During week commencing 21st March 2005, one potential tenderer enquired as to the extended deadline date and was wrongly informed that the deadline would be the 31st March 2005. In this instance, GWRC decided that they would accept the tender given the short delay of 1 day. This extra day was not considered material to the tendering process. In the course of events, a tender was NOT received from this potential tenderer.

On the 30th March 2005, 3 tenders were received by GWRC in response to its RFT Number RS10/5 – Tender For The Supply of 18 No. Railway Passenger Cars for Greater Wellington Regional Council. The bidders were as follows:

1 Daewoo International **("Daewoo")**, CPO Box 2810, Seoul, 100-174, Korea (Local Agent – Pacific Rail Corporation) – 5 Copies

2 Haiphong Railway Compartment Company Limited **("HP")**, 39 Luong Khank Thien Str., Ngo Quyen District, Hai Phong City, Vietnam (Local Agent – Motor Zealand Limited) – 5 Copies

3 Toll NZ Consolidated Limited **("Toll")**, Smales Farm, Cnr Northcote Road, Takapuna, Auckland – 5 Copies

Copies of the tenders were distributed as follows:

1 GWRC Records Filing

2 Lloyds Register for Technical Evaluation

3 Rhona Nicol – Tender Review

4 Murray Kennedy – Tender Review

5 Chris Ham – Tender Review

1.3 Non-Compliance with Tender Format

On receipt of the tenders, it became clear that Daewoo had not followed the instruction for the price to be submitted in a separate envelope. This information was removed by Chris Ham from the tenders before being distributed as above, and placed in an envelope in the safe along with the price envelopes from the other tenderers. Other members of the TET not present at the tender opening, have no knowledge of the contents of this tenderer's price submission at this point.

2. Overview of Received Tenders

2.1 Toll

Toll submitted a bid based on the re-build of ex-British Rail Mk 2 carriages which is similar to the previous re-builds of this type of rolling stock they have carried out in the past i.e. Capital Connection S cars. Their base option (price) was for a 7 car train-set as opposed to a 6-car so as to comply with seat numbers requested and luggage requirements. Whilst a 6-car option was detailed in the tender, discussions with Toll confirmed that they had not submitted a price envelope for this option. They also included an option for using new bogies instead of refurbished bogies.

2.2 HP

HP submitted a 'new-build' tender based on their existing Vietnamese Railways design. This design is slightly larger than the permitted NZ railway loading gauge but is believed by HP to fit the system as required by GWRC. However, HP also submitted a fully compliant bodyshell which they have indicated (without details of pricing information) would be more expensive than the existing design due to the re-design of existing tooling.

2.3 Daewoo

Daewoo submitted a 'new-build' tender based on their standard export design. Unfortunately it has a track and loading gauge which is significantly greater than that allowable on the NZ railway system.

3. Tender Evaluation Process

3.1 General

A Tender Evaluation Process, which is set out in Appendix A, had been developed based on LTNZ's Transfund Manual processes. A core tender evaluation team (TET) comprising the following personnel was assembled.

- Chris Ham (Evaluation Team Leader) – Transport Infrastructure Manager
- Rhona Nicol – Procurement Manager, Transport
- Murray Kennedy – Project Manager, Regional Rail

In addition, Lloyds Register and Phillips Fox were appointed to undertake reviews of the technical and legal aspects of the tenders and provide reports to the TET so as to enable the completion of the evaluation. The non-price evaluation attributes and weightings were as follows:

Attribute 1 Track Record – 4.5.

Attribute 2 Technical Skills and Specification – 7.5

Attribute 3 Relevant Experience – 4.5

Attribute 4 Resources – 4.5

Attribute 5 Management Skills – 4.5

Attribute 6 Methodology – 4.5

3.2 Tender Evaluation Timetable

3.2.1 Initial Evaluation

The initial evaluation was completed between 31st March and 2nd May by the TET. At this point a number of clarification questions were issued to 2 tenderers on the 3rd May 2005. In the clarification letters to the tenderers, they were also invited to make a general presentation on their tender.

Clarification questions were not issued to Daewoo due to their technical non-compliance with the specification i.e. total technical incompatibility with the New Zealand Railway fixed infrastructure. Hence, effectively at this stage Daewoo had been rejected from further consideration.

3.2.2 Clarification and Final Evaluation

HP presented their bid to the TET in Wellington on the 17th May and Toll presented their bid on the 20th May 2005, also in Wellington. Toll presented a written response to GWRC's clarification letter at the 20th May 2005 meeting, but both bidders were given until Noon on the 1st June 2005 to make a final submittal. Toll elected not to make any further submittal but HP submitted their clarification on the 2nd June 2005 by e-mail. This was a day later than that agreed, but the TET Leader believed that this did not present HP with an unfair advantage i.e. a delay of 24 hours, particularly as Toll had not

submitted further information. Audit NZ were present at both clarification meetings/presentations.

The TET met again on the 8th June 2005 to agree the final evaluation scores. The result of this is discussed in the next section.

4. Results of Tender Evaluation

4.1 Summary of Final Score

Following the completion of the evaluation process, the TET came to the following results where a score of 100 would represent excellent.

	Score Out of 100		
Attribute	**Toll**	**HP**	**Daewoo**
1	57	39	44
2	77	72	3
3	79	60	74
4	77	30	10
5	72	55	10
6	77	30	10

Sections 4.2 to 4.4 outline the core reasons for the attribute scores.

4.2 Evaluation Commentary - Toll

4.2.1 Track Record

Whilst relevant experience was high (see below) it was difficult to determine compliance with core requirements on past projects i.e. quality, budget and timescale. Compliance was noted on previous projects for ARTA but of course the S Car Capital Connection was an 'internal' Tranz Rail project. Given the compliance on the ARTA project, Toll was assigned a score of 57.

4.2.2 Technical Skills and Specification

Near full compliance was noted in the tender. The high risk areas such as gauging and platform interface were clearly understood and designed for. In addition, proper analysis had been given to the issues of accessibility, seating and luggage storage. The only issue arising was that Toll submitted a 7-car consist as their base bid, with the 6-car consist being an option (un-priced at this stage). Toll's reasoning for submitting the 7-car option as the base bid was the compliance with seating and luggage requirements. With regards to skills, all the relevant staff in both design and production were of the relevant skill level and had relevant experience from the previous projects. On this basis Toll were assigned a score of 77.

4.2.3 Relevant Experience

Whilst the quantities of cars are low, the product offered by Toll is an exact derivative of the Capital Connection S Car. In addition, Toll has been carrying out similar conversions for ARTA over the past 3 years. Some additional systems that would be fitted over that already on the S cars have been used on the ARTA cars. On this basis they were given the high score of 79.

4.2.4 Resources

The detailed management plans in the tender clearly identified both the personnel and facilities to be used for the execution of the project and confirmed their availability for this project. Being New Zealand based, they could clearly communicate with GWRC and there would be no difficulties in resolving technical and commercial issues. The present financial status of Toll gives GWRC confidence that there will be no project financing issues and Toll have also agreed to the drawdown profile outlined in the preliminary agreement. Given this high level of proficiency, Toll was assigned a score of 77.

4.2.5 Management Skills

On the basis of the tender and subsequent clarification, Toll is adopting a low risk approach by building on the past. There is strong evidence of the key issues and risks that need to be managed and the personnel and processes identified in the bid should appropriately manage these issues/risks. One drawback was the lack of a risk planning framework and hence this was the reason for the 3rd quartile score of 72.

4.2.6 Methodology

Again, building on previous similar projects, Toll submitted a comprehensive suite of project plans (quality, testing and production) which when implemented with the resources identified above gives the TET confidence that the project would be delivered on time and schedule, and to the budget. Being adapted from previous relevant projects gives added credit to their bid and no important deficiencies were identified by the TET and hence the score of 77.

4.2.7 Conclusion

Toll has presented a highly credible bid. They have achieved top quartile scores in all attributes with the exception of Track Record. The reason for the lower score is that fact they have only undertaken projects within New Zealand and only relatively recently on a commercial basis with Auckland Regional Transport Authority.

Toll's tender detailed a project methodology with appropriate project, quality and test plans backed with resource and organisation plans. Personnel involved have relevant experience from previous projects. In addition, their proposal builds on the initial S Car Project.

4.3 Evaluation Commentary - Daewoo

4.3.1 Track Record

Whist producing large numbers of cars in the past there was no external demonstrable proof (i.e. external referee) of complying with quality, cost and timescale in the past compliance. Given this, a score of 44 was assigned.

4.3.2 Technical Skills/Specification

Daewoo's bid did not take into account, in any form, the restrictions and requirements of the New Zealand operating environment. They submitted a proposal which meant that the trains would not fit the tracks or through the tunnels. In addition, they did not produce a clause by clause response to the specification. Hence their tender is totally unacceptable and the score of 3.

4.3.3 Relevant Experience

The tender did demonstrate that they had produced a large number of high quality railway cars in the past 5 years, significantly more than Toll and HP. Hence the highest score in this category of 74.

4.3.4 Resources, Management Skills and Methodology

For all these attributes, Daewoo did not supply any information on which an assessment could be carried out. The only information was an overview of the senior management team and the factory. No project specific data or information was produced. Hence for all these attributes the score of 10 was given.

4.3.5 Conclusion

The TET has established that the Daewoo bid is unacceptable on a number of attributes and presents an unacceptable level of risk to GWRC. The TET therefore has eliminated this tender from further consideration.

4.4 Evaluation Commentary - HP

4.4.1 Track Record

All contracts to date have been internal to Vietnam Railways. There was no demonstrable proof that key project requirements such as schedule and budget had been achieved for these projects. This was the reason for the second quartile score of 39.

4.4.2 Technical Skills and Specification

Near full compliance was noted in the tender. The key issue was the bodyshell and its interface with the New Zealand loading gauge. HP's base bid was based on using its current bodyshell design that infringes the existing New Zealand loading gauge in 2 places by up to 15mm. However, given that they have also submitted a compliant bodyshell (admittedly at a price premium), they were given a score of 72. This was further backed by the tender that showed that HP obviously employ highly qualified and experience local engineers and managers who can deliver the projects within Vietnam

4.4.3 Relevant Experience

The tender is clear that HP have produced similar cars within the last 5 years though it is noted that not all the systems called for by the specification have been fitted and designed for by HP in the past 5 years. This was further evidenced by the presentation which led to the TET only granting a score of 60.

4.4.4 Resources

Whilst obviously being competent to undertake the types of project within Vietnam, the bid did not identify the resources that would be required to manage an international project. In addition, HP could not confirm that key design and production resources required would be available and only stated that if they got into problems they would turn to sister companies for help. None of the Vietnam based team could communicate with GWRC in English and there would be a high risk of misunderstanding throughout the project. The TET considered the above issues as showing low compliance with the evaluation criteria and hence a score of 30 was given. The TET concludes that failings in this area mean that the tender is totally unacceptable.

4.4.5 Management Skills

Whilst risk management, both commercial and technical, was referred to there was no clear demonstration of process. The local New Zealand project management team did not give the TET confidence that the project would be effectively managed due to a poor understanding of project management techniques and communication problems with Vietnam. Of particular concern to the TET was how management decisions would be resolved and dealt with between New Zealand and Vietnam, and on this point the tender did not demonstrate that they had the capability to deliver an international project. Given this, the TET granted a score of 55.

4.4.6 Methodology

Whilst all the key issues were referred to in both the tender and clarification data, at no point were detailed project plans, safety, test and quality plans were provided. The clarification responses were of an amateurish nature and provided no confidence whatsoever to the TET and hence the score of 30 was assigned to this attribute.

4.4.7 Conclusion

The TET has established that the HP bid is unacceptable on a number of attributes and presents an unacceptable level of risk to GWRC. The TET has eliminated this tender from further consideration.

5. Recommendations

The TET has agreed that of the 3 tenders, only 1 tender has reached acceptable scores in all attributes. However, Toll's tender essentially proposes an alternative carriage arrangement which does not comply with the specification and is considered an alternative. However the non-price attribute submission does demonstrate that Toll can offer a compliant 6-car specification. The TET is agreed that the alternative 7-car arrangement is acceptable on which to proceed to open the price envelope for Toll and provides a number of attractive improvements over the 6-car consist. The TET therefore recommends the following.

1. The price information is opened for **Toll only**.

2. Pending the acceptability of the outcome of the price envelope, identify Toll as the preferred tenderer.

3. Toll is requested to provide a 6-car price, once the acceptability of the 7-car option price has been ascertained.

4. GWRC identify the preferred option from the following.

    - 7-Car or 6-Car Consist

    - New Bogie versus refurbishment of existing bogie.

With regards to the new versus existing bogie, the deciding criteria will be as follows.

- Improved comfort.

- Life cycle costs.

With regards to 7-Car versus 6-Car consist, the deciding criteria will be

- Life cycle costs

- Improved seating and luggage capacity and wheelchair accessibility.

The TET seek approval from the Divisional Manager, Transport to open the price envelope for Toll only and progress analysis of the preferred option as detailed above.

Appendix A Tender Evaluation Process

RFT Number RS10/5 - Tender Evaluation Process

1. Introduction

GWRC have invited tenders for the supply of 18 railway passenger cars.

This document outlines the evaluation process.

2. Submission of Tender

Tenderers shall submit tenders in two separate envelopes:

- Envelope 1 shall contain all tender information other than price.
- Envelope 2 shall contain the tender price information.

3. Evaluation of Tender

3.1 Method and Criteria

The tenders will be evaluated using the price quality method as set out in Transfund Manual. The evaluation attributes and weighting are indicated below and have been adapted from the standard Transfund attributes.

1 Track Record – 4.5%

2 Technical Skills and Specification – 7.5%

3 Relevant Experience – 4.5%

4 Resources – 4.5%

5 Management Skills including risk management – 4.5%

6 Methodology – 4.5%

7 Price – 70%

Appendix 1 contains the Master Evaluation Matrix which sets out which parts of the RFT Tender Response are relevant to each individual criterion.

Appendix 2 is Agreement Compliance Matrix which will be used to determine the level of compliance by each tender to the draft agreement contained within the RFT.

Appendix 3 is the Specification Compliance Matrix which will be used to determine the level of compliance to the Technical Specification.

4. Tender Evaluation Team

The team will comprise of the following personnel. The TET Leader is Chris Ham

- Chris Ham - Will assess all non-price criteria with the exception of 2.
- Murray Kennedy – Will assess all non-price criteria with the exception of 2.
- Rhona Nicol – Will assess all non-price criteria with the exception of 2
- Lloyds Register – Will assess criteria 2 only. Refer to Lloyds Register document 9069Raw0101 in Appendix E for full details.

5. Tender Evaluation

Each member of the TET will evaluate the tender in line with the charts included in the appendices independently and award a score to each tender out of a maximum score of 100.

Following individual review and scoring the TET will come together in a 'Delphi' group to agree the group score and resolve any differences in opinion. At this stage, the TET may invite the Tenderers to make a presentation if further clarification is required.

Following the agreement of the scores, envelope 2 which contains the price information will be opened and both the price and scores will be entered into the Price Quality Model to determine the preferred bidder. Contract negotiations will then proceed with the preferred bidder.

6. Guidance on Scoring

Scoring of each tender heavily depends on the judgement of the evaluator, and hence the reason for the 'delphi' group to consolidate and ensure fair scoring. Appendix 4 provides some guidance on the scoring approach to be adopted.

7. Timescales

- Tenders received – 30th March 2005 (17:00 New Zealand.
- Tenders Opened (Non Price – Envelope 1) – 31st March 2005.
- Initial Review 31st March to 21st April
- Tender Presentations (if required) 25th to 29th April 2005
- Announcement of Preferred Bidder – 6th May 2005
- Contract Negotiation and Signature 6th May to 1st July 2005

8. Other Issues

- LTNZ will be informed of progress throughout the process on a weekly basis.
- Audit NZ will be asked to attend the Delphi group and provide a review report on the progress and transparency of the evaluation process.

Appendix A – Master Evaluation Matrix

Note NA = Not Applicable and NDE = Not directly evaluated.

			RFT Tender Response																					
RFT Evaluation Criteria			Executive Summary	Organisation name and primary contact		Organisation profile		Relevant expe		Risk Managem	Other specific information							Agreement and specification			Training of Operator	Health and safety	Tender price	Additional Information
No.	Issue	Weighting	1	2.1	2.2	3.1	3.2	4.1	4.2	5	6.1	6.2	6.3	6.4	6.5	6.6	6.7	7.1	7.2	7.3	8	9	10	11
1	Track Record - The relative capability of each Tenderer to deliver the required Cars, in accordance with the proposed Delivery Schedule, and the Tenderer's previous record demonstrating that capability.	4.5	NDE	NDE	NDE	NA	NA	Y	Y	NA	NA	NA	NA	NA	NA	NDE	NA	NA	NA	NA	NA	NA	NA	AA
2	Technical skills and specification - The degree to which your Tender meets the technical and quality requirements.	7.5	NDE	NDE	NDE	NA	NA	NA	NA	NA	NA	NA	NA	NA	Y	NDE	NA	Y	Y	Y	NA	NA	NA	AA
3	Relevant experience - Your experience in providing urban rail passenger cars.	4.5	NDE	NDE	NDE	NA	NA	Y	Y	NA	NA	NA	NA	NA	NA	NDE	NA	NA	NA	NA	NA	NA	NA	AA
4	Resources - Financial standing, quality of key individuals involved, understanding of the Principal's requirements and ability to communicate with the Principal.	4.5	NDE	NDE	NDE	Y	Y	NA	NA	NA	NA	Y	NA	Y	NA	NDE	NA	NA	NA	NA	NA	NA	NA	AA
5	Management skills including risk management - The Tenderer's ability to manage the construction and the level of risk to the Principal inherent in the Tenderer's Tender (including capacity to manage contingencies and emergency responses), the Tender's ability to reduce commercial and operational risk.	4.5	NDE	NDE	NDE	NA	NA	Y	Y	Y	Y	NA	NA	NA	NA	NDE	NA	NA	NA	NA	NA	NA	NA	AA
6	Methodology - Adequacy of the Tenderer's plans for quality assurance and health and safety relating to the provision of the Cars, the Tenderer's project and construction methodology, the content and method of delivery pf the Tenderer's operator training programme.	4.5	NDE	NDE	NDE	NA	NA	NA	NA	Y	Y	NA	Y	NA	NA	NDE	Y	NA	NA	NA	Y	Y	NA	AA
7	Price	70	NDE	NDE	NDE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NDE	NA	NA	NA	NA	NA	NA	Y	AA

Appendix B – Agreement Compliance Matrix

Appendix B Agreement Compliance

Clause/Heading	*Tender 1*	*Tender 2*	*Tender 3*	*Tender 4*
Section 2 - Interpreatation				
2.1				
2.2				
2.3				
2.4				
2.5.1				
2.5.2				
2.5.3				
2.5.4				
2.5.5				
2.5.6				
2.5.7				
Section 3 - Purpose				
3.1				
3.2				
Section 4 - Price				
4.1				
4.2				
4.3				
Section 5 - Delivery				
5.1				
5.2				
5.3				
Section 6 - Title				
6.1				
Section 7 - Insurance and risk				
7.1				
7.2				
7.3				
7.4				
7.5				
7.6				
Section 8 - Payment terms				

Appendix C – Specification Compliance Matrix

Cl.	*Sub-Clause*	*Sub-Clause*	*Heading*	*Tender 1*	*Tender 2*	*Tender 3*	*Tender 4*
Section 1 - General scope and description							
1	1	15	General Scope and description				
Section 2 - General Contract Arrangements							
2	1	9	General Scope and description				
2	10	12	Quality and repeatability				
2	13	16	Sub Suppliers				
2	17	18	Design copyright				
2	19	20	Language to be used				
2	21	23	Variations from the Principal Specification				
2	24	29	Warranty and technical support				
2	30	35	Packing and shipping				
2	36	37	Protection for shipment				
2	38	40	Responsibility for design				
2	41	46	Design liasion				
2	47	49	Drawings				
2	50	55	Spare parts				
Section 3 - Operating Limits							
3	1	2	Engineering Interoperability Standards				
3	3	4	Static gauge				
3	5	8	Running rights				
3	9	11	Speed rating				
3	12	13	Wind loadings				
3	14	21	Weather conditions				
3	22	26	Structural strength				
3	27	29	Compatability with other rolling stock				
3	30	35	Platform heights				
3	36	39	Certification for operation on the Wellington network				
3	40	41	Reliability				
3	42	43	System Safety Assurance				
3	44	44	Workability				
Section 4 - Car Requirements							
4	1	4	General				
4	5	7	Structure				
4	8	12	Strength of structure				

4	13	17	Underframe				
4	18	25	Body				
4	26	32	Sheathing				
4	33	37	Body and underframe assembly				
4	38	42	Alignment				
4	43	45	Dragboxes				
4	46	53	Bogie centres and transoms				
4	54	65	Weatherproofing				
4	66	74	Floor construction				
4	75	88	Thermal and acoustic insulation				
4	89	92	Noise suppression				
4	93	102	Wall partitions, ceilings and linings				
4	103	105	Lifting and jacking pads				
Section 5 - Bogies							
5	1	10	General				
5	11	18	Track				
5	19	21	Type of bogie				
5	22	32	Bogie frames and bolsters				
5	33	35	Bogie centres\				
5	36	40	Wheels				
5	41	43	Axles				
5	44	49	Axleboxes and bearings				
5	50	52	Wheelsets				
5	53	55	Axle bearings				
5	56	68	Suspension				
5	69	72	Dampers				
5	73	78	Ride quality				
5	79	83	Heigth adjustment				
5	84	89	Brakes				
5	90	96	Tread brakes				
5	97	104	Disc brakes				
5	105	111	Brake shoes				
5	112	117	Brake rigging				
5	118	119	Piping				
Section 6 - Intercar Connections							
6	1	8	General				
6	9	10	Drawgear and coupling general				
6	11	15	Transition head				

6	16	20	Concertina and end door (intercar ganagway)				
Section 7 - Braking and Air Systems							
7	1	3	Brake system design				
7	4	8	Car braking system				
7	9	11	Air reservoirs				
7	12	24	Air piping and connections				
7	25	27	Auxiliary air supplies				
7	28	35	Park brakes				
Section 8 - Electrical Systems							
8	1	8	Main power supply				
8	9	16	Generator and installation				
8	17	20	High voltage (mains) electrical wiring				
8	21	26	Low voltage and emergency power supplies				
8	27	29	Battery charging				
8	30	32	Internal power sockets				
8	33	36	Lighting levels				
8	37	41	Wiring and cable standards				
8	42	46	Cable sockets and terminations				
8	47	49	External power supply				
Section 9 - Heating, Ventilation and Air Coniditoning							
9	1	9	General				
Section 10 - Exterior							
10	1	8	Paint and self trim				
10	9	20	Exterior doors and steps				
10	21	41	Door operation				
10	42	44	Emergency door opening				
10	45	46	External door lights				
10	47	48	Doors opening in tunnels				
10	49	51	Door testing and acceptance				
10	52	53	Saloon end doors				
Section 11 - Fitout of The Body							
11	1	4	Styling, branding and interior design				
11	5	16	Passenger seating				
11	17	21	Fire resistance compliance				
11	22	25	Thermal and acoustic insulation				
11	26	28	Body linings				

11	29	38	Windows				
11	39	40	Flooring				
11	41	43	Fire protection equipment				
11	44	45	Emergency escape				
11	46	49	Emergency systems				
11	50	53	Signage				
11	54	58	Toilets				
11	59	62	Luggage and bike storage				
11	63	69	Disabled access				
11	70	71	Reading lights				
11	72	73	Saloon ligthing				
11	74	77	Drinking water				
11	78	79	EFTPOS				
11	80	81	Internet access				
11	82	83	Servery				
11	84	85	Vending machine				
11	86	87	Hearling loops				
11	88	90	Smoke detectors				
11	91	93	Train Manager's compartment				
11	94	95	Keys				
11	96	97	UHF Radio				
11	98	111	Water tanks and pressurised system				
11	112	113	External tail lights				
11	114	116	AVI tag				
Section 12 Passenger Information Systems							
12	1	6	Public address system				
12	7	8	Train staff intercommunication				
12	9	12	Passenger Information Display System (PIDS)				
12	13	14	CCTV				
Section 13 - Commissioning, Documentation and Acceptance							
13	1	8	Commissioning				
13	9	10	Documentation				
13	11	14	Acceptance documentation				
Section 14 - Construction							
14	1	4	Materials				
14	5	6	Workmanship				
14	7	10	Jigging				

14	11	15	Working of materials				
14	16	20	Cutting and edge preparation				
14	21	31	Welding				
14	32	36	Carbon steel				
14	37	38	Stainless steel and aluminium alloys				
14	39	43	Fasteners general				
14	44	47	Huckbolting				
14	48	55	Castings				
14	56	60	Painting and surface preparation				
14	61	62	Decals				
Section 15 - Quality Assurance							
15	1	3	General				
15	4	9	Acceptance inspection				
15	10	17	Records				
15	18	19	Qualifiaction of inspection personnel				
15	20	21	Inspection				
15	22	23	Commissioning				
15	24	25	Acceptance certificate				
15	26	27	Testing				
15	28	30	Acceptance requirements				

Appendix D – Evaluation Guidance Matrix

		Scores			
	RFT Evaluation Criteria	0 to 25	25 to 50	51 to 75	76 to 100
No.	Issue				
1	Track Record - The relative capability of each Tenderer to deliver the required Cars, in accordance with the proposed Delivery Schedule, and the Tenderer's previous record demonstrating that capability.	No demonstration or proof of capability. Poor programme delivery on past projects i.e. delays greater than 6 months.	Little demonstration or proof of capability relevant to their render proposal.	An outline demonstration or proof of capability relevant to their render proposal and evidence that they have delivered in the past. This should include demonstration of compliance with delivery requirements set out in the schedule	Full demonstration of capability both within tender and on previous projects. This should include full compliance with delivery requirements.
2	Technical skills and specification - The degree to which your Tender meets the technical and quality requirements. *Pay particular attention to system interface issues such as gauging, external doors and platform access.*	Low compliance with requirements and no demonstrated proof of design compliance.	Low compliance but with some proof of demonstrable compliance in other areas	Indication of full compliance or near full compliance with adequate technical demonstration	Full compliance and demonstrated.
3	Relevant experience - Your experience in providing urban rail passenger cars.	No relevant experience	Some related experience in the past 10 years.	Related experience in the past 5 years.	Undertaking similar project in the past 2 years
4	Resources - Financial standing, quality of key individuals involved, understanding of the Principal's requirements and ability to communicate with the Principal.	No resource and/or project team structure.	Some resource structure and project team structure	Demonstrated understanding of key issues in a project and a resource and project structure with identified individuals. Stakeholders identified.	Demonstrated understanding of key issues in a project and a resource and project structure with identified individuals including strengths that they bring to the project. Stakeholders identified and appropriate management/communication plan.
5	Management skills including risk management - The Tenderer's ability to manage the construction and the level of risk to the Principal inherent in the Tenderer's Tender (including capacity to manage contingencies and emergency responses), the Tender's ability to reduce commercial and operational risk.	No evidence of risk analysis and management	Some ad-hoc approach but not readily thought through	Proper risk management and identification of key issues	Proper risk management and identification of key issues and appropriate responses to the management of the issues/risks.
6	Methodology - Adequacy of the Tenderer's plans for quality assurance and health and safety relating to the provision of the Cars, the Tenderer's project and construction methodology, the content and method of delivery pf the Tenderer's operator training programme.	No quality, safety, construction or project plans	Some evidence of plans but not coherent and resource approach	Evidence of quality, safety, construction, project and training plans which are relevant to this project.	Well resourced and comprehensive plans which if implemented should fully deliver the project requirements
7	Price				

Appendix E – Detailed Technical Review Proposal from Lloyds Register

Greater Wellington Regional Council

PROPOSAL FOR
S-CAR TENDER ASSESSMENT

Lloyd's Register Rail Limited
Level 6, The Fawkner Centre,
499 St Kilda Road,
(PO Box 7297)
Melbourne VIC 3004
Australia
Email: andy.webb@lr.org
www.lrrail.com

DISTRIBUTION CONTROL SHEET			
Issue	**Date**	**Compiled by**	**Approved by**
0A	29/03/2005	M Edwards	DRAFT
01	30/03/2005	M Edwards	A Webb (AW023)
File Reference: 9069Raw0101			

DISTRIBUTION LIST

Name	**Organisation**	**from (Issue)**	**to (Issue)**
C Ham	Greater Wellington Regional Council	01	Current
Project File	Lloyd's Register Rail	0A	Current
Master Contracts File	Lloyd's Register Rail	01	Current
Uncontrolled copies as required			

PROPOSAL FOR
S-CAR TENDER ASSESSMENT
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1. THIS PROPOSAL

1.1 Introduction

Lloyd's Register Rail (LR Rail) is pleased to be asked to submit this proposal in response to the remit from Chris Ham of Greater Wellington Regional Council (GWRC).

In submitting this proposal we have complied with our Conflict of Interest Policy and confirm that we are adequately independent from other stakeholders in this project.

1.2 Background

GWRC are acquiring "SW" class cars to provide the Wellington to Wairarapa outer urban service, with modern, efficient, air conditioned passenger trains, with a good ride quality and with servery car facilities. The “SW” cars will replace near life expired locomotive hauled cars providing the present service to the Wairarapa. The upgraded service will operate with standard AAR (American Association of Railroads) type locomotives provided by the service operator, Toll NZ Consolidated Ltd (Toll).

LR Rail have previously assisted GWRC in the preparation of the requirement specification, RS 10/5, ‘Supply of 18 No. Railway Class Passenger Cars’ and have now been invited to tender for the provision of services to assist in the technical assessment of the returned tenders prior to placement of the contract for the supply of the rolling stock.

GWRC are required to complete a full tender assessment prior to letting the contract in accordance with New Zealand government guidelines. It is understood that GWRC anticipate the receipt of no more than four tenders for this contract, and LR Rail have therefore compiled this proposal based on the need to fully assess four detailed submissions.

1.3 Point of Contact

This proposal is being managed from our Melbourne office. Please contact Andy Webb on +61 3 9864 1607, mobile +61 407 530 776 or email andy.webb@lr.org.

2. RELEVANT EXPERTISE OF OUR TEAM

The LR Rail team for this proposal comprises a team of consultants with a collective experience in preparation and assessment of tenders for new build and refurbishment rolling stock projects having worked as project engineers or in similar positions for a number of years each.

In recent years the team has experience in the preparation of tenders for the following UK based projects:

- Class 377 Electrostar project,
- CTRL Domestic Service vehicles,
- Class 390 Virgin Pendolino,
- Class 220 and 221 Virgin Voyager projects.

3. THE BENEFITS OF USING LLOYD'S REGISTER

3.1 Ownership and Corporate Structure

Lloyd's Register is a Registered Friendly Society, under the Industrial and Provident Societies Act, 1965. It is a non-profit distributing organisation, in which any surplus of income over operating costs is directed to research and development, training, and service development. Lloyd's Register's constitution directs it to:

> "*secure for the benefit of the community high technical standards of design, manufacture, construction, maintenance, operation and performance for the purpose of enhancing the safety of life and property both at sea and on land."*

Lloyd's Register, our owner, is an independent non-profit distributing safety organisation, founded in 1760 and now operating in over 100 countries worldwide.

It provides safety assurance services to the marine, offshore, land-based industrial and transport sectors, and contributes to international standards making in these fields. Lloyd's Register Group services generate a combined revenue in excess of £300M pa.

While the form of these services varies considerably between sectors, the common element is that all Lloyd's Register's principal services involve some form of independent verification and validation, and Lloyd's Register has an international name and reputation as a provider of robust and authoritative independent appraisal. The services cover the design and through-life integrity of plant and equipment and the management of safety throughout the lifecycle, including the assessment and certification of safety management systems.

Lloyd's Register is appointed as a Notified Body in the UK and Netherlands under the Railways (High-Speed) (Interoperability) Directive 2002. The accreditation includes the full scope of the Technical Standards for Interoperability (TSIs).

Lloyd's Register is not in business to make short term financial gain but aspires to become the preferred global supplier of risk management solutions to enhance our clients' safety, quality, environmental and business performance.

3.2 Lloyd's Register LR Rail Limited (LR Rail)

LR Rail is an established international independent consultancy offering a wide range of services to the rail industry.

We operate under a number of framework agreements with major organisations, including Network Rail, and London Underground. We are also approved consultants in Hong Kong to KCRC and MTRC and in Singapore to the LTA. In addition, LR Rail is registered under the Link-up Supplier

Qualification and Registration Scheme (QLINK).

Our head office is in Reading, with further offices in Glasgow, Leatherhead,

London, Belper, Derby, Crewe, Preston, York, Birmingham, Bristol and through our subsidiaries in Singapore, Hong Kong and Sydney. LR Rail employs over 200 professional staff with a wealth of experience within the rail industry.

In 2003 we acquired the Holmes Davis Partnership bringing significant permanent way and railway civil engineering capability in-house. This was followed, in 2004, by the strategic acquisition of Blue Print Rail Limited to further strengthen our overall rolling stock capability, particularly in vehicle engineering, design, audit and project engineering and management.

The services we provide include feasibility studies, design and specification of integrated systems, human factors, reliability and maintainability, and safety / risk engineering. LR Rail has been working on safety-related projects for the last 10 years, and is actively involved in Safety Case writing and Independent Safety Assessment. We have developed a number of decision support tools to assist clients in risk-based asset management. These include SICA for signalling, TICA for telecommunications and SCMI for bridges and structures.

3.3 Competence Framework

Most our of consultants have operational rail experience and most are members of appropriate professional institutions, some at senior level. We operate a custom Competency Framework based on current best practice. In implementing this framework the intent is to:

- Improve the overall assurance of safety-related projects by identifying the competence requirements for specific activities.
- Provide a benchmark for competency requirements to assist in the optimisation of our operations with respect to competitiveness and liability obligations.
- Help assess the competence of our staff against objective criteria so as to be able to ascertain what changes might be required in, for instance, recruitment and training.
- Help individuals identify their professional development requirements.
- Facilitate the effective appointment of competent people to projects.

All our staff, although specialist in one of a number of areas, work together in project-specific teams formed on demand to provide a multi-functional approach suited to the needs of a particular client. We have a number of Functional Heads who are responsible for the overall delivery of work in particular disciplines and for ensuring that our clients are happy with the work that we perform.

We ensure that our staff have the opportunity to work on many different types of projects, so for instance, no one is deployed continuously on audit or assessment activities where they may become stale or fall behind latest

developments. It is our policy that every consultant attends and achieves the course certificate for the UK Rail Engineering Safety Management ("Yellow Book") training course run on behalf of the Railway Safety & Standards Board.

4. METHODOLOGY

4.1 Clause by clause analysis

LR Rail recognise the importance of the two week turn-around on the tender assessment and therefore intend to mobilise up to four consultants, in order to try and eliminate the subjective element of the review and to ensure consistency the review will centre around a pre-devised spreadsheet.

LR Rail will conduct a full clause by clause analysis of the technical submissions from each sub-contractor against the requirement specification (to be supplied by GWRC). Each assessment will be conducted independently and assessed to a level, which not only identifies the tenderers' stated compliance but also researches their proposals to determine a level of confidence in their compliancy statement.

Each clause in the tender will be assessed on a grade of 1-10, for stated compliance, with 1 being a clearly stated non-compliance and 10 being a clearly stated compliance. Ambiguous or unclear statements will be rated using intermediate scores to be agreed amongst the assessors at project commencement.

Once a compliancy statement assessment has been completed each tender will be reviewed in order to determine a level of confidence in the level of compliance to the defined requirement. The result will be scored 1-10 with 1 being a clear demonstration of non-compliance and 10 being a clear demonstration of full compliance. Again intermediate levels of compliance will be scored between 1 and 10 according to a scoring regime agreed between the assessors prior to commencement.

The assessments will be summarised in a table including the headings shown below:

- Clause Number,
- Defined requirement,
- For each tender:
  - Stated compliance score 1-10,
  - Assessed compliance score 1-10,
  - Overall compliance assessment,
  - Comments and questions.

The overall compliance assessment will be scored in accordance with the remit given by GWRC, summarised in Table 1 below, using a simple lookup chart.

This lookup chart is provided in Table 2.

RFT Evaluation Criteria	0 to 25	25 to 50	51 to 75	76 to 100
Technical skills and specification - The degree to which your Tender meets the technical and quality requirements. *Pay particular attention to system interface issues such as gauging, external doors and platform access.*	Low compliance with requirements and no demonstrated proof of design compliance.	Low compliance but with some proof of demonstrable compliance in other areas	Indication of full compliance or near full compliance with adequate technical demonstration	Full compliance and demonstrated.

Table 1 – Assessment Scoring

		Stated Compliance									
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Assessed Compliance	**1**	1	2	3	4	5	51	52	53	54	55
	2	2	4	6	8	10	52	54	56	58	60
	3	3	6	9	12	15	53	56	59	62	65
	4	4	8	12	16	20	54	58	62	66	70
	5	5	10	15	20	25	55	60	65	70	75
	6	26	27	28	29	30	76	77	78	79	80
	7	27	29	31	33	35	77	79	81	83	85
	8	28	31	34	37	40	78	81	84	87	90
	9	29	33	37	41	45	79	83	87	91	95
	10	30	35	40	45	50	80	85	90	95	100

Table 2 – Compliance Lookup

In recognition of the fact that some of the specification requirements will be considered more critical and of higher importance to GWRC than others a weighting system will be employed against each clause in order to rank its overall criticality and thus enable a fair comparison between tenders. For example, a clause requiring that the vehicle shall have seats is far more critical than a clause requiring that the seats are of a particular colour, some differentiation between the criticality of these requirements needs to be made.

The weight system will be arranged such that weight factors need not be linear, however in the first instance the factors will be set linearly and GWRC consulted with regard to the final settings, Table 6 refers.

Weighting Score	1	2	3	4	5	6	7	8	9	10
Weighting Factor	10	20	30	40	50	60	70	80	90	100

Table 3 – Weighting Factors

4.2 Report

LR Rail will summarise the findings in a report to be submitted to GWRC no later than 20th April 2005. The report will contain the following:

- Scope and purpose of report;
- Detail of tenders assessed, including references, issue numbers *etc*,
- Explanation of the assessment process;
- Overview of each tender, with the key points of the proposal highlighted from a technical perspective;
- Summary assessment table;
- Comparison of the tenders and a written summary of the assessment findings;
- Conclusions and recommendations.

In addition to the report, the spreadsheet used to determine the tender ratings will be provided in soft copy to GWRC such that weightings etc can be manipulated in light of GWRC's superior knowledge of critical issues and requirements. In the event that this information can be provided in advance of the report submission these weightings will be taken into account in the submitted report.

4.3 Support for bid presentations and tender analysis

At this point in time we have assumed that support for the tender assessments in New Zealand is not required and have not included this support in this proposal. However we can provide any support required for the 'Delphi' meetings or tender presentations at GWRC's request. The cost of any such support will be provided and agreed on request.

5. PROJECT ORGANISATION AND KEY RESOURCES

5.1 Project Team

Our philosophy is based on the use of experienced staff and proactive project management. We will provide a dedicated Project Manager, Andy Webb, who will provide the focus for the project and the principal link to GWRC and our UK support team. Andy is our Company Manager (Australasia) and is based in Melbourne, Australia.

Mark Edwards will be our Lead Assessor and will co-ordinate the UK consultants involved in the technical appraisal of the tenders and be the principal author of the final assessment report.

The project organisation roles are developed in Table 4. CVs of staff are attached in Appendix A.

Consultant	Role	Key Qualifications
Andy Webb	Project Manager / Peer Review	Chartered Engineer with extensive experience of maintenance and project management within the rail industry. Andy is based in Melbourne.
Mark Edwards	Lead Assessor	Chartered Engineer with over 14 years experience in the rail industry as a Design and Project Engineer for Alstom and Bombardier.
Steve Wadeson	Assessor	Chartered Engineer with over 15 years experience in the rail industry as a design and project engineer with some worlds leading rolling stock manufacturers.
Tony Brown	Assessor	Principal Consultant. Over 30 years experience in the rolling stock industry working for British Rail and the leading rolling stock manufacturers.
Nigel Hanley	Assistant Assessor	Recently completed graduate training, with experience in all aspects of LR Rail's business.

Table 4 – Project Team Member Roles & Skills

5.2 Programme Management

Based on receipt of an order and the tender documentation by 4th April 2005 the report, as detailed in section 4.3 above will be delivered by 20th April 005 at the latest. Any further scopes of work will be agreed on an emerging cost basis as required.

5.3 Progress Reporting

To maximise value, no formal progress reporting is included in this proposal, GWRC will be provided with informal progress updates as appropriate. Areas of concern, if any, will be raised with the GWRC at the earliest opportunity.

5.4 Deliverables

The deliverables for this project are to consist of an assessment report, as defined in Section 4.2 above.

All document deliverables will be provided to GWRC as fully reviewed and complete documents at "draft for acceptance" status for GWRC's comments.

Comments will be discussed and when agreed, incorporated (together with their implications) into a formal issue. Documents will normally be supplied in Adobe Acrobat format together with a reasonable number of paper copies on request.

6. ASSUMPTIONS

The following assumptions have been made in preparing this proposal:

- The tender documents will be in the available in the UK ready for LR Rail to start assessment by 4th April 2005 in either hard or soft copy.
- The tender assessments will be conducted against GWRC requirement Specification No. RS 10/5, 'Supply of 18 No. Railway Class Passenger Cars', Issue 1, 14 December 2004 unless a revised issue is provided by 4th April 2005.
- All work and meetings will take place in the United Kingdom, unless GWRC specifically request the option to have an LR Rail presence in New Zealand as detailed in Section 4.3.
- All relevant documentation provided will be in English.
- The work will be complete by the end of 20th April 2005

7. COMMERCIAL

7.1 General

Currently we can mobilise immediately on contract award, note that delivery of the report findings by the 20th April 2005 is dependent on contract award by 4th April 2005 latest.

7.2 Terms and Conditions

Our standard Terms and Conditions are attached in Appendix B.

7.3 Liability

With the exception of liabilities arising from death or personal injury, and unless otherwise agreed separately in writing, liability for any and all claims will be limited to the lower of three times the value of any contract arising from this tender or the insured levels detailed in Section 7.4.

7.4 Insurance Cover

We declare that we have the following insurance cover:

7.4.1 Primary Public/Products Liability

Insurer: Lloyd's Underwriters & various companies

Policy No: LLO00904

Indemnity Limit: Not less than £5,000,000

7.4.2 Professional Indemnity

Insurer: Lloyd's Underwriters & various companies

Policy No: PLLO00104

Indemnity Limit: Not less than £5,000,000

7.4.3 Employers Liability

Insurer: Lloyd's Underwriters

Policy No: LLO00804

Indemnity Limit: Not less than £5,000,000 per occurrence

7.5 Contracting Party

Should this tender be accepted, the contracting party will be Lloyd's Register Rail Limited, a company registered in Australia, ARBN 86 109 312 870.

7.6 Currency

All prices quoted in this proposal are in New Zealand Dollars unless otherwise stated.

7.7 Price/Payments

Our price for the work is on en emerging fee basis, with an upper limit of **$45,865**, exclusive of GST at the current rate, but inclusive of all consultancy time.

As the level of assessment will be dependent upon the technical tenders received by GWRC, we feel that an emerging basis will offer best value for GWRC. We would be happy to fix our price, should GWRC prefer.

Our price is valid for three months from the date of this document. An indicative schedule of payments/milestones in detailed in Table 5. The exact profile can be formalised once the Methodology is agreed.

Milestone	Description	Value
1	Submission of Assessment Report	$41,275
2	Acceptance of Assessment Report	$4,590
	Sum Total	**$45,865**

Table 5 – Indicative Milestone Schedule

Should GWRC require LR Rail to attend meetings in New Zealand, we will provide additional pricing, as described in Section 4.3.

7.8 Principal Sub-contractors

It is not proposed to use sub-contractors for the delivery of this project.

8. ASSURANCE

This project will be managed and implemented in accordance with all relevant Health and Safety legislation for the activities undertaken.

8.1 Quality Management

All work will be undertaken in accordance with our Management Assurance System certified by BSI to ISO9001:2000. A copy of our Assurance Policy is attached in Appendix C.

If required project specific procedures will be written. The project execution will be reviewed to establish that it meets the contract specification and objectives of the project.

8.2 Project Safety Management

The Project Manager shall be responsible for safety on this project and act as the designated Safety Manager/. Adequate resources shall be made available for staff training and supervision.

Our staff are subject to an alcohol and drugs policy as a condition of their terms of employment. Staff will only work on this project within their agreed area of competence. Staff will comply with the Institution of Electrical Engineer's Code of Professional Conduct.

No accidents have occurred over the last three years to our staff. No prosecutions have been found against us or are pending.

8.3 Health & Safety

Within the activities of carrying out this project it is not proposed to go on or about the track. All activities shall be undertaken in an office environment or in places normally accessible to the general public.

8.4 Initial Risk Assessment

Risk	Mitigation
Normal office hazards	Experienced staff, good quality equipment and environment.

Table 6 - Initial Risk Identification

APPENDIX A
CVs of LR RAIL PERSONNEL

Profile:
Antony Brown

KEY QUALIFICATIONS

Over twenty-five years experience in the design and manufacture of railway rolling stock. A well rounded engineer with multi discipline capabilities covering all technical areas of modern railway passenger vehicles. Extensive managerial, technical and budgetary experience, consistent with being director responsible for product design, safety and certification throughout Europe.

PROFESSIONAL AFFILIATIONS and EDUCATION

Higher National Certificate Electrical Engineering (1972)
Certificate of Supplementary Studies (1975)
- Electrical Engineering
- Instrumentation and Control
- Electricity Supply

Diploma in Management Studies (1974)
Member IIE & IEE Engineering Council reg. No. 413497
Numerous short courses in engineering, safety and quality systems.
Engineering Safety Management (Yellow Book 3) Certificate

CAREER SUMMARY

2003 to Date - Principal Consultant, Lloyds Register Rail Ltd (formerly Lloyd's Register MHA Ltd)
Working independently or as part of the client team, the preparation of documents and studies in support of specialist railway rolling stock subject areas required by the project. These can include the following:- Formal Safety Case submissions, Safety Assessments, Risk Assessments, System Failure Analysis, Client process reviews, Safety Audits, Technical Audits, Design Review / Audits etc.

1999 to Dec 2002 - Director of Safety Engineering, Bombardier Transportation
Responsible for the development and management of an integrated safety management team capable of ensuring that all rolling stock projects meet the agreed safety targets and gain full operating consent from the appropriate acceptance authorities. Full accountability for rolling stock product safety throughout European markets. Specific responsibility for the safety approvals and full operating consents for the Virgin Voyager tilting & non-tilting trains for Cross Country routes in the UK. This included approvals for all mandated requirements including those for the DTLR, HMRI as well as Network Rail.

1996 to Dec 1998 - Engineering Director, Bombardier Transportation
Responsible for a complete department preparing engineering designs, performance and test specifications for new and refurbished UK rolling stock. Full managerial, financial and technical accountability.
Engineering project undertaken during this period were
LUL refurbishment of the Piccadilly line fleet
Refurbishment of Mk 2 Coaches
New bogie designs

Email: antony.brown@lrrail.com
www.lrrail.com

Numerous wagon designs
New DEMU fleet for Virgin Cross Country

1994 to 1996 - Engineering Manager, Bombardier Transportation Systems and Projects
Responsible for the technical management of railway rolling stock system definition, specification and integration, for a number of UK rolling stock projects. The management of a team of project and specialist engineers engaged on various UK rolling stock projects.
Projects include:-
LUL Fleet refurbishment
Locomotive Bodyshell
EMU electrical sub assembly & looms
Various wagon designs

1991 to 1994 - Chief Engineer, Babcock Rail Ltd.
Responsible for a complete department preparing engineering designs and validation processes for UK rolling stock sub-systems and refurbishment projects. Acting as Independent Technical Competent Authority, (as required by BS6853), for the assessment of fire performance of railway vehicles.

Projects included:

- New LUL vehicles for Jubilee Line
- MK3 coach refurbishment
- Class 323 TCA
- LUL refurbishment

1989 to 1991 - Principal Project Engineer, Babcock Rail Ltd.
Mark 4 Coaches, LUL refurbishment

1987 to 1989 - Principal Project Engineer, BREL Class 465
Product development & Tendering

1986 to 1987 - Project Engineer, BREL
Class 442 - Train technical development & testing

1985 to 1986 - Design Manager, BREL
Class 442 - Whole vehicle design

1984 to 1985 - Senior Design Engineer, BREL
International Coaches – Electrical Systems Design

1980 to 1984 - Design Engineer,
BRB (Electrical Systems) Advanced Passenger Train & Mark 3b coaches

1977 to 1980 - Design Engineer (Electrical),
BRB Advanced Passenger Train Electrical systems design & test

Email: antony.brown@lrrail.com

1973 to 1977 - Senior Technical Officer, British Railways Board
Electrical systems design for EMU;s.
1972 to 1973 - Project Draughtsman, Dupar Pelapone Limited

1971 to 1972 - Draughtsman, Dupar Pelapone Limited

1969 to 1971 - Test Engineer, Dupar Pelapone Limited

1964 to 1968 - Apprentice Engineer, Dupar Pelapone Limited

Email: antony.brown@lrrail.com
www.lrrail.com

Profile:
Nigel Handley

KEY QUALIFICATIONS

An Electrical and Electronic Engineering Graduate with two years of training within the railway industry. Experience of Engineering Safety Management for various projects in both Signalling and Rolling Stock domains.

PROFESSIONAL AFFILIATIONS and EDUCATION

Member of the Institution of Electrical Engineers (MIEE)
Student Member of the Institution of Railway Signalling Engineers
MEng (Hons) in Electrical and Electronic Engineering, University of Newcastle
IEE Prize 2002 – Awarded for academic achievement
IEE Undergraduate Scholarship 2001
Sir William Siemens Medal Winner 2001
UK Rail Engineering Safety Management (Yellow Book 3) Course and Certificate
Personal Track Safety Course (card expires 22/11/06)

CAREER SUMMARY

2002 to Date - Lloyd's Register Rail Limited

September 2004 to Date – Consultant

- Worked for the ICP Alliance to support generic acceptance of the GE Transportation Systems (GETS) Modular Control System (MCS) and commissioning of the Ledburn Junction MCS, North Staffs MCS, and other installations at Stoke and Rugby SCCs. Authored and reviewed documentation including Hazard Identification (HAZID) Reports, Hazard Logs, Safety Requirements Specifications and Risk Assessments. Acted as Secretary to the North Staffs ICP HAZID.

September 2002 to September 2004 – Graduate Engineer

- Successfully completed 2 years of Graduate Training, gaining knowledge of various disciplines within the railway industry. This has included placements with various functions including Safety Engineering, Telecomms, and Signalling Design. In addition, external secondments and placements have provided first-hand experience of Project Engineering, Testing & Commissioning and Maintenance. Skills and knowledge have also been enhanced through formal training. Most notable railway-specific training is as follows:
  - Railway Experience Course on the Romney, Hythe and Dymchurch Railway (January 2003);
  - Basic Telecommunications Appreciation Course (February 2003);
  - Basic Signalling Technology Course (June/July 2003);
  - IEE Railway Signalling and Control Systems Course (March/April 2004);
  - Transport Engineering Course (May/June 2004).
  - IEE Electric Traction Systems Course (October 2004).

Email: nigel.handley@lrrail.com

- Completed a placement with Jarvis Infrastructure Services for the Thameslink 2000 Project, gaining practical experience for the testing and commissioning of a signalling system. The result of the various stages of commissioning was to provide a turnback facility at King's Cross Thameslink and improve the line capacity through Belsize Tunnels. Involved with testing at the circuit level and testing of the overall system against Signalling Principles from the signaller's panel.
- Participated in an Electromagnetic Study of the Automatic Warning System (AWS) for Railway Safety and Standards Board (RSSB). Supported the setting up of a test rig and carried out measurements of the magnetic fields emanating from the AWS magnets and traction feeder cables for a variety of scenarios.
- Seconded as an Assistant Project Engineer to the Electrostar Project Engineering Team at Bombardier Transportation (January to April 2003). Carried out a wide variety of activities to support introduction of the Class 375 and Class 376 Electric Multiple Units. Active involvement in the design review and design certification processes.

2000 and 2001 - Lloyd's Register Rail Limited (Summer Vacation Placements)

- Supported the production of safety cases for the design and testing of the Bombardier Class 221 Super Voyager tilting DEMU train for Virgin Cross-Country.
- Updated the Safety Requirement Specification and various safety case modules as part of the EE&CS Safety Case developed on behalf of HSBC (Rail) UK Limited to extend operation of Networker EMUs over most Connex South Eastern routes. Modified the assessment of interference on Reed FDM track circuits for Networker EMU operation between Tonbridge and Tunbridge Wells to cover the worst-case hazard scenario.
- Assisted with the night testing of a traction software modification on a Networker EMU between Dartford and Charing Cross.

1998 to 2002 – Undergraduate, University of Newcastle upon Tyne

As part of the integrated MEng course completed a twelve weeks Industrial Placement with Intelligent Power Systems Ltd., a company specialising in the design and manufacture of intelligent power control systems and power supplies. Involved with the theory and construction of a small-scale controllable rectifier. The company was developing a controllable rectifier as part of a distributed power generation project in which 400KW alternators are connected directly to gas turbine engines. Individual Project entitled "Three-Level Half-Bridge Inverter for Photovoltaic Application". This involved the design and construction of a low power inverter with an unconventional structure, having potential benefits for photovoltaic applications in which there is no isolation between the solar arrays and the grid. Awarded a prize by TRW for this project.

Email: nigel.handley@lrrail.com

Profile:
Mark Edwards

KEY QUALIFICATIONS

An Electrical Engineer with over twelve years experience within the automotive and railway traction & rolling stock industries. The experience includes all aspects of engineering from project management to specialist design.

PROFESSIONAL AFFILIATIONS and EDUCATION

Chartered Engineer Member of the Institution of Electrical Engineers
BEng (Hons) Electrical and Electronic Engineering (Classification 2:1)
Railtrack Engineering Safety Management course and certificate

CAREER SUMMARY

Dec 2002 to date - Senior Consultant, Lloyd's Register Rail Limited (formerly Lloyd's Register MHA Limited)

- Appointed to provide expert electrical engineering support to projects associated with traction and rolling stock.

June 2000 – Dec. 2002, Project Engineer, Bombardier Transportation Ltd.

- Project Engineer for a £600m project for 182 Electrostar EMU's to London's South Central franchise. Working closely with the Project Manager to control the project's engineering budget, develop workable engineering plans, establish technical solutions and monitor a team of specialist design engineers against targets for the delivery of the product. This was achieved whilst ensuring that the project met the contractual legal and safety requirements of the client, Railtrack, HMRI and other regulatory bodies. In order to do so the Project Engineer acted as the primary interface with these bodies and also with all internal functions within Bombardier including sales and marketing, manufacturing, logistics, purchasing, finance, test, customer support and other specialist engineering functions.

October 1998 - May 2000, Senior Electrical Engineer, Alstom Transport

- Whilst working on Virgin Rail Group's, prestigious West Coast Main Line tilting train project took full engineering budgetary and project management responsibility for the provision of a full task driver training simulator, HV power system and the inter-vehicle services. Also provided support for other electrical engineering activities within the project. This developed a further understanding of railway vehicle design and functionality particularly with regard to the electronic systems used on modern rolling stock.

June 1996 - October 1998, Senior Original Equipment Engineer, Pirelli Tyres Ltd.

- Pirelli Tyres Limited is a first tier automotive supplier. Took full responsibility for customer liaison and project management of tyre development to meet the technical and commercial requirements of a major automotive manufacturers producing cars, 4 x 4 vehicles and motorcycles. This required active support of customer vehicle and tyre development activities on a day-to-day basis, including

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objective and subjective testing, prototyping, specification writing and commercial development.

September 1995 - May 1996, Project Engineer, UK - NSi Ltd.

- As a project engineer for one of the world's largest independent instrument suppliers to the automotive industry solely responsible for the project engineering and management of instrumentation packs for several current and development projects for Rover, Landrover and Triumph. This position involved liaison with commercial, logistics, production and engineering personnel from both customers and internal departments with significant commercial input such as costing designs and modifications for customers, cost realignment to meet customer targets and commercial negotiations. This required an understanding of and working with the Japanese 'Kan Ban', 'Right first time' and 'Just in time' philosophies.

October 1990 - August 1995, GEC Alsthom Ltd.

December 1994 - August 1995, Engineer

- Building on experience gained as an Assistant Engineer with GEC Alsthom, responsible for tender activities whilst managing the implementation on a day-to-day basis of the Train Control System onto the London Underground, Jubilee Line Extension Rolling Stock contract. In addition to activities undertaken as Assistant Engineer this required an understanding of, and management of equipment installation, mechanical properties, EMC and other practical aspects of system design together with line management responsibility for a number of staff and contract engineers.

July 1992 - November 1994, Assistant Engineer

- Full responsibility for technical and project management activities for the development of Train Communication Systems for a number of high profile projects. This required the compilation of tender specifications, project plans, technical documentation, risk analysis contract negotiations as well as day-to-day project management.

October 1990 - June 1992, Graduate Engineer, GEC Alsthom Ltd.

- Full training to meet the requirements of IEE and Engineering Council schemes for registration as IEE.member and Chartered Engineer. This included work experience in all major operations within the organisation including manufacturing, test, procurement, finance and quality as well as engineering.

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Profile:
Stephen Wadeson

KEY QUALIFICATIONS

Wide experience in the electronics, systems and interface management fields for transportation technologies with knowledge and responsibilities in the design, development, engineering and management of a variety of transit vehicle and rail systems.

PROFESSIONAL AFFILIATIONS AND EDUCATION

BSc (Hon), Electronics & Communications Engineering
MSc, Electronics and Electrical Engineering
Member of the Institution of Electrical Engineers

CAREER SUMMARY

2001 to Date – Senior Consultant, Lloyd's Register Rail Limited (formerly Lloyd's Register MHA Limited)

- Project Engineer, at Bombardier Transportation's Derby site, on a £600m project for 182 Electrostar EMU's to London's South Central franchise. Responsibilities included establishing technical solutions for new build (Lots 3 &4) and in-build (Lots 1a, 1b and 2) issues with the Customer, Project Management and Engineering; monitoring a team of specialist design engineers against targets for the delivery of the technical solutions; interfacing with internal functions within Bombardier including manufacturing, logistics, purchasing, finance, test, customer support and other specialist engineering functions.
- Preparations of safety case documentation for the Hitachi 'A' Train System Safety Case.
- Independent assessment of OTMR installation on Class 317/6 and 317/7 vehicles, operated by West Anglia Great Northern, for Interfleet Technology Limited
- Safety Case Project Manager for the Chiltern Pilot Project for the trial of advanced wheel/rail monitoring systems involving the installation of both vehicle and infrastructure-based equipment.

1999 to 2001 - Systems Design Manager, Bechtel Corporation/Attiko Metro, Athens, Greece

Preparation of specifications for the various systems associated with the Metro extension programs; Signalling, Communications, Power Supply, Fare Collection, Trackwork, Station and Tunnel Services, Ventilation and, Lifts and Escalators. Supervision of international tenders for these systems as well as selected Contractors, implementation of the various systems and their interfaces with Civil Works.

1997 to 1998 - Assistant Systems Manager, Mott MacDonald, MPMC Joint Venture, Bangkok, Thailand

Advise MRTA for the Bangkok ISP (Blue Line) on the mechanical and electrical systems of Rolling Stock, Signalling and Communications, Automatic Fare Collection and Platform Screen Doors for the concessionaire contract. Liase with designated

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contractors and supervising consultants and the Blue Line concessionaire on M&E system aspects, both contractual and system design.

1997 to 1997 - Consultant, **Bechtel Corporation, Taipei, Taiwan**

For the proposed Taiwanese High Speed Line Project advise on the system and design criteria for the Rolling Stock, Train Radio, Telecommunications, Telephone, Public Address, Passenger Information Display, CCTV and Automatic Fare Collection Systems.

1995 to 1997 - Consultant, Bechtel Corporation, Seoul, Korea

For the Korean High Speed Rail Corporation (KHRC), the Seoul to Pusan project, advise on the reliability, availability and maintenance, system, hardware and software technical aspects for the electronic equipment on TGV-Korea, with respect to the On Board Computer System (OBCS), Train Radio System, Train-borne Signalling Equipment, Motor Bloc's, Audio and Video System, and the SCADA System for the Electrical Facilities for the Catenary System.

1995 to 1995 – System Engineer, GEC - Alsthom, Metro Cammel, Birmingham, UK

Northern Line Rolling Stock Project, responsible for the Train Management System (TMS) functional control of the Alarms and Warnings, Train Radio and Audio/Visual Communications System.

1995 to 1995 – Systems Engineer, GEC - Alsthom, Power Transmission and Distribution, Stafford, UK

For the Islington, NZ SVC project, undertook computer simulation and studies to evaluate the performance of the proposed SVC, 3 phase 220/66/11kV transformer and surge arresters using in-house software packages. The studies included energisation of the SVC from the 220kV and 66kV via the 11kV windings; energisation of a 2nd 220/66/11 kV transformer; application and removal of 2 and 3 phase faults on the 220, 66 and 11kV windings.

1992 to 1995 – Systems Engineer, British Rail Research, Derby, UK

- Within the TMST Reliability Task Force, particular responsibility for the reliability of the TMST Informatique System. Involved with the specifying, preparation, monitoring and final reporting of accelerated life/endurance testing of Informatique PLC cards. Team member for the reliability growth improvement of the TMST equipment under the responsibility of GEC Alsthom Traction, Manchester. Undertook the design review for the Informatique System, Audio/Visual System and Train Borne Signalling Equipment.
- Evaluation for Cross Rail of a proposed Passenger Information System, responsible for the system, functional and interface requirements of a tender for the retrofit of a Communication and Information System for Class 319 EMU's for Thameslink.

1992 to 1995 – Systems Engineer, Network Southeast, Derby, UK

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Profile:
Stephen Wadeson

For the Class 371 Rolling Stock Project for Thameslink, involved with the tender preparation for the proposed Class 371 EMU. Responsible for the system, functional and interface requirements for the on-train Data Transmission System and the Passenger Information System as integral parts of the trains overall control and monitoring system.

1992 to 1992 – Systems Engineer, GEC - Alsthom, Metro Cammel, Birmingham, UK

For the Jubilee Extension Rolling Stock project, involved with the initial tender proposal to London Underground Ltd., responsible for the system, functional and interface requirements of the Passenger Information System. Also a member of a team responsible for specifying the system, functional and interface requirements of the Train Management System as part of the trains overall Control and Monitoring System.

1991 to 1992 – Electrical Engineer, BREL Limited, Derby, UK

For the Central Line Rolling Stock project, involved with the overall system and interface requirements for the Control and Monitoring System (CMS). Responsible for the system, functional and interface requirements, and design scrutiny of the Data Transmission System/Train Management System (DTS/TMS). Liaison with suppliers in aspects of the hardware and software requirements for interfacing to the DTS, and the testing and commissioning of the interfaces between the DTS and the other train systems, Traction, Brakes, Driver Controls, Passenger Information System, Train Displays, Train Radio, Automatic Train Protection and Operation, Fault Analysis and Diagnostic Information. Developed the on-train system integration of the DTS and associated interfaces via test procedures.

1990 to 1991 – Systems Engineer, GEC - Alsthom, Power Transmission and Distribution, Stafford, UK

For an LPG Plant in Brunei, involved with the simulation of the electrical generation and distribution including generators, motors, transformers and power lines connected to the 415V, 3.3kV and 6.6kV busbars. Considered the effects of earth faults on power lines and busbars, and switching in and out of generators and motors at different times on the whole system with results taken at critical points around the system. Results presented in graphical form with specified time duration verses busbar voltage and machine parameters.

1989 to 1990 – Systems Engineer, VSEL, Barrow-in-Furness, UK

For the Trident Co-ordination and Systems Design Authority, part of the Combat Systems Department, involved in the system integration of the tactical weapon system for Vanguard and Class SSBN's. The integration involved the documentation, preparation and undertaking of interface trials between equipment's across various data and electrical interface standards, e.g. 1553B, RS422. The documentation was for the electrical, protocol and data conformance between individual equipment's to the overall system performance, including test software for test equipment. Equipment for the weapon system comprised of Sonar 2054, navigation console, a digital data

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distribution system (PDM4), digital echo sounder for depth, underwater telephone, self-protection masts (periscopes) and computer controlled surveillance systems.

1987 to 1988 – Electrical Engineer, Rolls-Royce and Associates, Derby, UK

Within the Control and Instrumentation Department for nuclear power plants, investigating problems with existing designs, both analogue and digital circuits, with the aid of PC based software packages, plus the implementation of new designs. Analysis of pressure and temperature transducers for the harsh environments of a reactor. Preparation of documentation for equipment specification system design/integration. Liaison with sub-contractors in respect to the building and testing of equipment.

1985 to 1987 – Lecturer, Grade 1, Matthew Boulton College, Birmingham, UK

Teaching electronics and electrical principles, electronics, digital electronics, microelectronics, electronic applications and mathematics to BTEC III.

1981 to 1984 – Researcher, University of Birmingham, UK

Research into the processing of large time-bandwidth signals in sonar systems, involving the mathematical modelling of a sonar system, with returning sonar signals, and the signal processing via the use of Fast Fourier Transforms.

1980 to 1981 - Design and Development Engineer, Marconi Space and Defence Ltd, Portsmouth, UK

- Within the Military Communications Department, responsible for the developed an interactive program for an antenna matching network for a frequency hopping radio system.
- Within the Underwater Weapons Department, Part of the Technical Design Authority Management Team for the Stingray torpedo, involved with the homing section and the associated electronics.

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Profile:
Andrew Webb

KEY QUALIFICATIONS

Chartered Engineer with extensive experience of engineering asset management within the rail industry. In-depth knowledge of signalling condition assessment processes with a proven record of producing signalling asset management standards within the UK rail industry. Strong appreciation of the key issues facing the delivery of signalling maintenance and experienced in the production of risk-based maintenance regimes. Experienced in the delivery of major multi-disciplinary projects at both project and programme management level, including technical and commercial aspects.

PROFESSIONAL AFFILIATIONS and EDUCATION

Chartered Engineer,
Member of the Institution of Electrical Engineers,
Member of the Institution of Railway Signal Engineers,
Diploma in Business, University of Strathclyde,
BEng (Hons), Electrical & Electronic Engineering, University of Strathclyde,
IRSE Examination,
Railtrack Engineering Safety Management Certificate.

Other Training Courses:

- BSi PAS55 Asset Management
- MACRO Tools: APT-M and APT-I
- Business Auditing
- Safety Management of Projects
- Managing Smaller Projects
- RoSPA Safety Management Development
- FIDIC Conditions of Contract
- Personal Track Safety (AC/DC)
- Individual Working Alone

CAREER SUMMARY

2005 to present – Company Manager (Australasia), Lloyd's Register Rail Limited
Responsible for leading and developing Lloyd's Register Rail's business through Australia and New Zealand.

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2002 to 2005 – Principal Consultant, Lloyd's Register Rail Limited (formerly Lloyd's Register MHA Limited)

Responsible for leading the activities of the Signalling group with the Asset Management function and deputising for the Head of Function as required.

Recent projects include:

- Production of a Process Map for Upgrade Projects incorporating recommendations for process improvement, for the Strategic Rail Authority. Work included: devising project methodology; organising inter-disciplinary Expert Reviews; identifying value-added project activities; producing of reports and formulating of recommendations.
- Development of the SICA^3 model for Network Rail including: reviewing all signalling condition assessment questionnaires; providing expert advice on the inclusion of level crossing assets; advising on the requirements for a new SICA standard; reviewing all final documentation and model operation.
- Review of Network Rail signalling installation practices including devising Expert Review methodology and authoring review report, including recommendations for maximising the value of installation practices.
- Production of Network Rail Company Standard RT/E/S/19608 Level Crossing Infrastructure (Inspection and Maintenance) Handbook including: authoring of standard and associated drafts; consulting with Network Rail Level Crossing Engineers; responding to Stakeholder Review; attending SigCom Review; preparing initial briefing documentation and methodology report.
- Production of Network Rail Company Standard RT/E/WI/00108 HPSS Risk Based Maintenance including: authoring of standard and associated drafts; undertaking FRAME failure analysis, FMEA analysis and task analysis; trialing of standard; responding to Stakeholder Review; attending SigCom Review; preparing initial briefing documentation and the production of a Justification Report demonstrating the analyses undertaken
- Production of Network Rail Company Standard RT/E/C/11400 HPSS Equipment Handbook incorporating Installation and New Works Testing instructions. Specific activities included: authoring the installation portion, leading an FMEA study; identifying critical installation activities; consulting with equipment manufacturers; organising trials and recording results; and producing a Justification Report detailing all analyses undertaken, their findings, and methodology employed.
- Production of a Signalling Assets Hierarchy and accompanying information requirements for Railtrack Decision Support Tools Project. Work involved analysing the underlying business needs for information; production of a supporting functional asset hierarchy; consultation with stakeholders throughout the industry; identification of asset information required to manage signalling assets.

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1997 to 2002 - Senior Consultant, Lloyd's Register MHA Limited

2001 to 2002 – Signal Engineer (Projects) (Irish Rail, Full time secondment)

- Responsible to the Chief Engineer (SET) for the delivery of all major signalling projects within Ireland, principally DART Enhancement and Heuston Resignalling. Work involved managing design consultants including preparation of contract documentation; programme setting; preparation of funding papers for CIE Board; claim negotiation with contractors; review of contract and initial design deliverables; liaison with senior management, government, Railway Inspecting Officers and solicitors. Projects value circa UK£180m.

2000 to 2001 – Engineer (Irish Rail, Full time secondment)

- Undertook, the role of the Engineer (under FIDIC contract conditions) for two major resignalling schemes covering Heuston Station, feeder lines and seven CCTV level crossings. Responsible for design acceptance, contract management, claim resolution, safety, installation and testing processes. Project value circa UK£13.5m.

1997 to 2000 – Senior Consultant

Responsible for developing the Maintenance Consultancy activities of MHA as well as contributing to the overall company work programme. Projects included:

- Design, development and production of Signalling Assets Condition tools, namely Primary SICA and Secondary SICA on behalf of Railtrack Asset Management.
- Project management of Strategic Safety Study of Irish Railways on behalf of the Irish Government, involving audit of engineering process and inspection of signalling, telecommunications and permanent way assets.
- Design, development and production of a Signalling Assets Cost Model for LUL, to describe the future capital and operating expenditure profiles over 15 years. Work carried out in conjunction with Imperial College, Railway Technology Strategy Centre, London.
- Undertaking the role of Records Update Manager for Railtrack's Records Group in Glasgow. Work involved planning, financial control, man management, safety inspections and liaison with Zone engineers.
- Providing Design and Construction Engineer support to Railtrack Project Delivery.
- Production of a documented Safety Management System for Carstairs ISSI, to control the risks associated with this novel application of SSI technology.
- Performing SICA inspections in the Preston and Lancaster area as part of a WCML survey from Madeley to Carlisle. Ensured that safety planning for the entire project was fit for purpose.
- Assisting in the Railtrack strategic review of signalling.
- Assisting in the signalling technical audit of Railtrack Midlands Zone.
- Responsible for project managing and producing Outline Project Specifications, Design & Development Reports and Technical Workscopes for a variety of schemes for Railtrack Project Delivery.

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1994 to 1997 - First Engineering Limited

1996 to 1997 - Contract Manager - Signal Maintenance

Responsible for delivering the Infrastructure Maintenance Contract to Railtrack Scotland, for all signalling and operational telecommunications equipment in the North Subzone, and latterly the Central Subzone (including Glasgow Central and the WCML). Principal duties and responsibilities included:

- Ensuring that all signalling equipment was maintained to defined specifications, and faulting was carried out to meet contractual and safety standards, and that all safety critical failures were fully investigated. Responsible for Level 3 sign off of all wrong side failures.
- With up to 90 technicians, supervisory and technical staff, responsibilities also included meeting the requirements of HASAW Act. Responsible for developing and implementing processes for system and staff safety inspections. Reviewed and revised the company's Local Policy Statement to encourage its regular use as a safety document.
- Pioneered the trial of the STAR asset database and MASS control systems for maintenance management in Scotland.

1992 to 1994 - BR ScotRail

1993 to 1994 - Signalling Technical Support Engineer

Responsible for leading and directing the activities of the second line S&T maintenance support function covering the whole of Scotland.

1992 to 1993 - Engineering Assistant

Undertook roles within the Glasgow Project Group's Schemes Development Section and within ScotRail's maintenance organisation.

1986 to 1992 - British Railways Board

Undertook the British Rail Signalling and Telecommunications Engineering Management Training Programme.

PROFESSIONAL ACTIVITIES

Honorary Secretary to the Railway Engineers' Forum, Scotland, 1999.

"Signalling Assets Whole Life Modelling" Paper presented to ASPECT99 International Conference, London 1999.

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APPENDIX B
TERMS & CONDITIONS

1. Definitions

"LR Rail" shall mean Lloyd's Register Rail Limited, a company registered in Australia, ABN 86 109 312 870.
"the work" shall mean the consultancy, testing, goods, services or other work which LR Rail offers to perform for the customer.
"customer" shall mean the person, entity or company for which LR Rail is carrying out the work.

2. Validity

Unless otherwise specified or previously withdrawn, the offer to perform the work and the price quoted are valid for acceptance within sixty days of the date of the offer.

3. Supply of Information, etc.

Unless otherwise agreed, the customer shall supply all necessary information, data, drawings and items to be tested, to the timescale required by LR Rail, and shall arrange, at its own expense and risk, for the conveyance of all such items to and from LR Rail's offices.

4. Payment

Unless otherwise specified or agreed in writing by LR Rail:-

4.1 Goods and Services Tax will be added to all prices and charged at the rate applicable at the tax point.

4.2 Payment shall be made within 28 days of receipt of an invoice submitted by LR Rail following completion of the work. If the payment of any sum payable shall be improperly delayed, interest at the rate of 2% per annum above the United Overseas Bank base lending rate from time to time in force on the amount of the delayed payment for the period of delay shall be additionally due.

4.3 Payment shall be in Australian Dollars unless otherwise stated in LR Rail's offer to undertake the work.

5. Confidentiality

5.1 The work performed, all information supplied by the customer and all results are confidential to the customer and will not be discussed with or disclosed by LR Rail to a third party without the prior permission of the customer. This clause shall not apply to information which can be proven to have previously been known to LR Rail or which is, or becomes available to LR Rail by lawful means or which is already in the public domain.

5.2 Each party agrees to maintain secret and confidential all information relating to the business affairs methods and know-how of the other.

5.3 Any obligation of confidentiality between LR Rail and the customer shall not apply where LR Rail in its sole and absolute discretion considers it necessary in the interests of safety to disclose information obtained under the contract to any third party the safety of whose undertaking might be affected by the disclosure or withholding of the same. Nothing set out herein is intended or should be taken as absolving the customer of the need to comply with its own statutory or other obligations in respect of safety.

6. Liability

6.1 Subject as may otherwise be agreed LR Rail shall only be liable to the customer to the extent expressly provided for below.

6.2 LR Rail shall be responsible for and shall indemnify the customer, its employees and agents from, and against any liability, direct loss and claim in respect of death, injury, loss or damage to the employees of its customer or the property of its customer to the extent it is caused by LR Rail's negligent performance of its work, or breach of statutory duty by LR Rail provided that, save for death and injury, such indemnity shall in no event exceed the contract price. LR Rail shall not be required to indemnify the customer for any loss or damage caused by any act or omission of the customer, its employees or agents and provided further that LR Rail's liability to indemnify the customer as aforesaid shall be reduced proportionately to the extent that the negligence of the customer, its employees or agents may have contributed to the said loss or damage.

6.3 Under no circumstances shall LR Rail be liable for any indirect or consequential loss howsoever caused, including but not limited to, loss of anticipated profits, loss of contracts, goodwill, reputation and losses or expenses resulting from third party claims.

7. Results, Conclusions and Recommendations

7.1 Whilst LR Rail undertakes that it knows of no such infringement LR Rail does not warrant that any information data or results passed to the customer is not an infringement of any valid or subsisting intellectual property rights held by third party.

7.2 LR Rail does not warrant that any test results achieved, conclusions reached, or recommendations made by LR Rail, or scientific and engineering concepts, disciplines and procedures used or adopted by LR Rail, will necessarily be achieved by other parties, or that such conclusions or recommendations will necessarily be valid in circumstances other than those of which LR Rail has direct experience.

7.3 Ownership of the results achieved by LR Rail shall vest in the customer. Ownership of all skills knowledge know-how techniques and methods employed in obtaining the results insofar as such skills knowledge know-how techniques and methods have their origin in the skill and endeavour of LR Rail shall vest with LR Rail

8. Obligations of the Parties

8.1 LR Rail undertakes not to employ or engage any members of the customer's staff or the staff or any other company directly or indirectly associated with the performance of the services until at least six months after completion of the services.

8.2 The customer undertakes not to employ or engage any members of LR Rail's staff or the staff or any other company directly or indirectly associated with the performance of the services until at least six months after completion of the services.

9. Force Majeure

LR Rail shall not be liable in respect of any failure or delay in fulfilling its obligations hereunder so long as such failure or delay results from any cause beyond the reasonable control of LR Rail and in the event of any such failure or delay the time for performance of any such obligations shall be extended correspondingly.

10. Publicity

No public announcement or communication (other than required by law) concerning this contract shall be made by either party without the prior written consent of the other party.

11. Assignment

Neither party may assign or transfer or purport to assign or transfer any of its rights or obligations under the contract without the prior written approval of the other party.

12. Termination

12.1 Either party may terminate the contract with immediate effect by notice in writing on or at any time after the occurrence of any of the events specified in this clause in relation to the other party. The events are:

I. a material breach of any of its obligations which the other party has failed to remedy within 28 days after receipt of notice in writing to remedy such breach;
II. the passing of a resolution for its winding-up or the making by a court of an order for the winding-up or dissolution of the other party;
III. the making of an administration order, other than pursuant to a reorganisation. The appointment of a receiver,
IV. the making of an arrangement with its creditors generally or making of an application to a court for protection from its creditors.

12.2 All rights and obligations of the parties save for the obligations pursuant to Clauses 5 and 7 shall cease to have effect immediately upon termination except that termination shall have no effect on the accrued rights and obligations of the parties at the date of termination.

13. Governing Law

These conditions shall be governed by and shall be construed in accordance with Australia Law.

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APPENDIX C
ASSURANCE POLICY

Assurance Policy

General: Our objective in Lloyd's Register Rail (LR Rail) is to achieve high levels of employee satisfaction and rewards by executing challenging assignments to the complete satisfaction of our clients in our chosen areas of activity:

rail engineering, design, systems, safety, operational and strategic consultancy, risk management, project management, planning, independent assessment, appraisal and audit.

In addition to the skills of our employees, quality, safety and care for the environment are essential to the achievement of this objective. These are the responsibilities of all of us, therefore, quality, safety and environmental performance are an inherant part of our culture.

All employees are required to work and behave according to the LR Rail Management Assurance System which is designed to ensure that we meet our objective. Specific responsibilities are defined and agreed with all staff, including additional responsibilities for those undertaking key roles in the business.

The Managing Director is responsible for monitoring the implementation of the Management Assurance System and for preparing an annual review for presentation to the Management Team.

Quality: Our business is focused on providing added value and satisfying our clients. A reputation for quality is a vital asset, providing assurance to customers and a future for employees.

Quality has to be developed, managed and controlled. Quality management is a continuous process of improvement. The business environment is constantly changing and our Management Assurance System must adapt, where necessary, to such change, but the essentials remain the same:

- clear management responsibility;
- effective documentation;
- defined methods of work and control;
- regular, effective, auditing;
- staff training and development;
- feedback and preventive/corrective action;
- continuous improvement.

Safety: Quality and safety are inseparable. People cannot be expected to produce good quality work if they are exposed to risks of injury or damage to their health. Our work involves the development, validation and verification of safety-related systems and we will ensure as far as reasonably practical, that the whole life effects of our project deliverables contribute to an increase in overall system performance and reduction in risk to both clients, employees and the public.

Our commitment to health, and safety is total, and we require employees at all levels to plan and implement safe systems of work. We aim to provide a safe place of work and we require employees to work and behave in a manner which will not endanger themselves or others.

Our Lineside Safety Policy MAS CP02 provides detail for lineside working and follows Railway Group Standards.

Drugs and Alcohol: LR Rail has a no alcohol on duty and no drugs policy which is compliant with current Railway Group standards.

Environment: We must consciously strive to conduct our operations with care and regard for the environment. We take environmental responsibilities seriously and will identify and report on the environmental impacts of our work.

Our Assurance Case MAS CP03 gives further detail on the implementation of this Assurance Policy.

Signed: 

Date: 01 February 2004

Paul Thomas, Managing Director

Note: This policy supersedes all previous assurance, quality, safety and environmental policies

Appendix B Land Transport New Zealand Funding – Meeting Minute re funding budget

Board resolution	Action as at 10/2/2005
4C Submission No. TF 04/7/1424 **File No AF 89 02 02** Wellington Passenger rail – Funding of Rolling Stock Refurbishment Resolved: That the Transfund New Zealand Board: (a) **approves** funding for a limited refurbishment of 36 English Electric units estimated to cost $5.4 million (Transfund share **$1.62 million)** requested in the letter from the Greater Wellington Regional Council (GWRC) dated *6* July 2004 and appended as Attachment **1** to submission TF 04/7/1424; (b) **approves** the contract variation appended as Attachment 2 to submission TF 04/7/1424 as the procurement procedure for this work; (c) **requests** the GWRC to include the contract variation referred to in (b) above as part of any new contract entered into between the GWRC and Tranz Metro; and (d) **agrees** to retain submission TF 04/7/1424 "In Committee" until a new operating contract has been signed between the GWRC and Tranz Metro.	Need to confirm relevant wording included in graft operating contract. Follow up April/May **2005?**
Submission No. TF 04/9/1461 **File No AF 89 02 02** Greater Wellington Regional Council – Funding of ex British Rail Carriage Refurbishment Resolved: That the Transfund New Zealand Board: (a) **approves** funding for refurbishment of 18 ex British Rail carriages estimated to cost **$26.42** million (Transfund share **$15.85**	

million) subject to the preparation of an ownership plan by Greater Wellington Regional Council to the satisfaction of the Board;	Ownership Plan now being reviewed. Need to arrange teleconference with **ARUP** to discuss.
(b) **delegates** to the Chief Executive the approval of the contract conditions for the procurement of the work by the Greater Wellington Regional Council; and	Land Transport NZ not yet seen contract conditions???
(c) **agrees** to take submission TF 04/9/1461 out of Committee once Greater Wellington Regional Council have been notified of the Board's decision.	OK. Information is now public.
C **Submission No. TF 03/5/1210** **File No AF 89 *02* 04** **CPP for Wellington Urban Rail** **Resolved:** **1** That the Transfund New Zealand Board:	
(a) **confirms** ten years as the maximum duration of any contract formed under this CPP;	
(b) **approves** the CPP for Wellington Passenger Rail included as Attachment 1 to submission TF 03/5/1210, providing the Greater Wellington Regional Council agree to advise Transfund's Chief Executive, before finalising a contract, if the negotiation of contract terms will result in non-compliance with the CPP;	Changes to penalty provisions appear substantial. To be confirmed by discussion with GW and ARUP.
(c) **delegates** the Board's power of negotiation pursuant to section 26 *(2)* (a) and (b) to Transfund's Chiel Executive and requests him to inform the Board of any circumstance that would warrant it considering any changes to the contract terms and conditions; and	See above. Will depend on outcome of discussion and assessment of whether changes are material.

(d) **agrees** to retain submission TF 03/5/1210 "In Committee" until the Greater Wellington Regional Council has been advised **of** the Board's decision and them agreeing that there is no commercial reason for the submission continuing to be retained "In Committee".	Need GW advice on this.
3C **Submission No. TF 04/11/1489** **File No. AF 89 02 02** **Business Case for Wellington Passenger Rail** Resolved: That the Transfund New Zealand Board: (a) **approves** the funding of the operation of passenger rail services in the Wellington region between 2005/06 and 2014/15 to secure the existing levels of service as defined in the Business Case (Attachment 1 to submission TF 04/11/1489), Transfund share estimated at $276 million (in 2004 dollars at a ***60%*** FAR), subject to:	
(i) confirmation **by** the Greater Wellington Regional Council (GWRC) to the Chief Executive **of** Land Transport New Zealand that Council's share of the funding necessary to provide services on the existing network to the standards specified in the contract with Toll Rail Ltd on a long-term sustainable basis is included in the LTCCP	Awaiting outcome of LTCCP consultation process. April/May **2005?**
(ii) approval by the Land Transport New Zealand Board	See comment on Submission TF 03/5/1210 above.

	of the final contract between the GWRC and Toll Rail Ltd as the procurement procedure for passenger rail services in Wellington	
(iii)	the Chief Executive of Land Transport New Zealand being satisfied the business plan included in the operating contract with Toll Rail Ltd is consistent with the Business Case	Still to see this. Required as a pre-condition of final signing of the operating contract.
(iv)	approval by the Land Transport New Zealand Board of a full risk analysis for all funding aspects of passenger rail services in Wellington	Still awaiting this analysis.
(v)	confirmation by GWRC that a full review of the Business Case will be completed in 3 years, including a review of the passenger transport services to Johnsonville and Melling	Need to agree any limitations on funding requests for network improvements to be applied pending this review. For example – should indicative programmes in the NLTP include J'ville line improvements?
(vi)	approval by the Land Transport New Zealand Board of a Greater Wellington Regional Council plan governing the ownership, maintenance and replacement of the passenger rail rolling stock;	See comment on submission TF 04/9/1461 above.
(a)	**notes** that improvements to the passenger rail network which are not included in the Business Case are to be put forward for funding consideration through the Allocation Process;	Work is progressing on developing these proposats. Dependent also on the outcome 01 the Western Corridor Study. (August **2005??)**
(c)	**requests** the Chair to write to the Minister advising *of* Transfund's concerns in regard to funding **of** passenger rail in Wellington;	
(d)	**notes** that the review of the Regional Land Transport Strategy and the Western Corridor Study is	

	very likely to recommend expansion of services well beyond what is provided for in the Business Case appended as Attachment **1** to submission TF 04/11/1489; and	
(e)	**agrees** to retain submission TF 04/11/1489 'In Committee' until GWRC has completed contract negotiations with Toll Rail Ltd and notified ratepayers of the funding requirements through the LTCCP process.	Dollar amounts released with WTP. **Any** point in continuing to retain In Committee??

Appendix C Confidentiality and Conflict of Interest Declarations

CONFIDENTIALITY DEED

DATED:

PARTY UNDERTAKING DEED

1 Greater Wellington Regional Council, 142 Wakefield Street, Wellington, New Zealand

2 Lloyd's Register Rail Limited, Level **6,44** Market Street, Sydney, New South Wales **2000,** Australia

BACKGROUND

Greater Wellington Regional Council ("GWRC") has received tenders ("The Tenders") in response to its request for tender for the supply of **18** No. Railway Passenger Cars for Greater Wellington Regional Council.

GWRC has appointed Lloyds Register Rail limited ("LRR") to carry out a review of TheTenders in relation to the tender responses to the technical specification. During thecourse of the provision of such Services LRR will receive or become aware of certain information pertaining to the Tenders and/or GWRC's operations which is confidential to GWRC.

IT IS AGREED

Definition

1 "Information" referred *to* in this Agreement means copies, extracts or other reproduction in whole or in part and includes documents, memoranda, notes and other data whether stored on paper or electronically and all oral information disclosed by GWRC to LRR in connection with the Services.

Confidentiality

2 In consideration of GWRC appointing LRR to undertake the Services disclosure being made by or on behalf of GWRC to LRR of information concerning its operations and the Tenders, LRR hereby covenants and agrees with GWRC:

a LRR shall not make any use of the information except for the purpose *of* undertaking the Services.

b LRR shall hold all information in the strictest confidence without disclosure of any part of the information to any third party without the prior written consent of GWRC except to the extent the information is in the public domain (other than by a breach of the terms and conditions of this undertaken), or is required to be disclosed by law

or by any court, tribunal or authority or by any competent jurisdiction. The burden of proving that any information is in the public domain shall rest upon LRR.

c LRR shall not copy, reproduce or part with possession of any documents without the written consent of GWRC and then subject to such terms as GWRC requires.

d During the continuance of this Agreement LRR will, if requested by GWRC, return all documents, any other material containing the information which it has in its possession or within its control.

e Upon the termination of this Agreement by either LRR or GWRC, LRR, upon request by GWRC, will return to GWRC all information and any other material containing the information which it has in its possession or within its control. LRR will not retain any information in any form whatsoever, it having been either returned ***to*** GWRC or destroyed as requested by GWRC.

f. LRR shall not assist or advise or be seen to assist or advise any shortlisted tenderer in any way in respect of their tenders which are in response to GWRC's Tender For The Supply of **18** No. Railway Passenger Cars for Greater Wellington Regional Council.

3. LRR shall not make any public statements or media statements relating to the Contract and Project Works without the prior consent of GWRC by its authorised representative.

4 Any reference to LRR includes its directors, officers and employees.

Execution

SIGNED for and on behalf of LRR)
)
by)
)
)

Andrew Webb
.....
Signed

ANDREW WEBB
.....
Name

in the presence of:

.....
Signed (DAVID HARVEY)

13 May 2005
.....
Date

Chartered Engineer
.....
Occupation

CONFIDENTIALITY DEED

DATED:

PARTY UNDERTAKING DEED

1 Greater Wellington Regional Council, 142 Wakefield Street, Wellington, New Zealand

2 Phillips Fox, **50-64** Customhouse Quay, PO Box 2791, Wellington, New Zealand

BACKGROUND

Greater Wellington Regional Council ("GWRC") has received tenders ("The Tenders") in response to its request for tender for the supply of 18 No. Railway Passenger Cars for Greater Wellington Regional Council.

GWRC has appointed Phillips Fox ("PF") to carry out a review of The Tenders in retation to the tender responses to the preliminary agreement. During the course of the provision of such Services PF will receive or become aware of certain information pertaining to the Tenders and/or GWRC's operations which is confidential to GWRC.

IT IS AGREED

Definition

1 "Information" referred to in this Agreement means copies, extracts or other reproduction in whole or in part and includes documents, memoranda, notes and other data whether stored on paper or electronically and all oral information disclosed by GWRC to PF in connection with the Services.

Confidentiality

2 In consideration of GWRC appointing PF to undertake the Services, disclosure being made by or on behalf of GWRC to PF of information concerning its operations and the Tenders, PF hereby covenants and agrees with GWRC:

a PF shall not make any use of the information except for the purpose of undertaking the Services.

b PF shall hold all information in the strictest confidence without disclosure of any part of the information to any third party without the prior written consent of GWRC except to the extent the information is in the public domain (other than by a breach of the terms and conditions of this undertaken), or is required to be disclosed by law or by any court, tribunal or authority or by any competent jurisdiction.

The burden of proving that any information is in the public domain shall rest upon PF.

c PF shall not copy, reproduce or part with possession of any documents without the written consent of GWRC and then subject to such terms as GWRC requires.

d During the continuance of this Agreement PF will, if requested by GWRC, return all documents, any other material containing the information which it has in its possession or within its control.

e Upon the termination of this Agreement by either PF or GWRC, PF, upon request by GWRC, will return to GWRC all information and any other material containing the information which it has in its possession or within its control. PF will not retain any information in any form whatsoever, it having been either returned to GWRC or destroyed as requested by GWRC.

f. PF shall not assist or advise or be seen to assist or advise any shortlisted tenderer in any way in respect of their tenders which are in response to GWRC's Tender For The Supply of 18 No. Railway Passenger Cars for Greater Wellington Regional Council.

3. PF shall not make any public statements or media statements relating to the Contract and Project Works without the prior consent of GWRC by its authorised representative.

4 Any reference to PF includes its directors, officers and employees.

Execution

SIGNED for and on behalf of PF)
) .....Signed
by – X o/RUSSELL STRAHL)
) John Russell Strahl
) Name

in the presence of:

.....
Signed

10 May 2005
Date

Legal Secretary
Occupation

CONFLICT OF INTEREST DECLARATION

Project: Supply of **18** No. Railway Passenger Cars for Greater Wellington Regional Council

I, CHRISTOPHER JOHN _____ an employee of _____ am not aware any circumstances' relating to myself, or to any family member or close associate of mine, that could lead to a conflict of interest as a result of any involvement I may have in the evaluation of this tender or any other aspect of this tender other than those documented below.

I undertake to advise DAVE _____ immediately should I become aware of any circumstances in the or of any actual or impending allegation or perception of others on any conflict of interest in relation to this or any other aspect of this tender.

Circumstances in which a potential conflict of interest may exist:

Have contact with Toll over other rail matters

but do not discuss content of tenders or areas of tech

Name: CHRISTOPHER JOHN HAY

Signed: _____ Date: 02/05/2005

Witnessed by Dave Watson

Signed: _____ Date: 16/06/2005

Assessment Actions

CONFLICT OF INTEREST DECLARATION

Project: Supply of 18 No. Railway Passenger Cars for Greater Wellington Regional Council

I, RHONA NICOL, an employee of GREATER WELLINGTON REGIONAL COUNCIL am not aware of any circumstances' relating to myself, or to any family member **or** close associate **of** mine, that could lead to **a** conflict of interest **as** a result of any involvement I may have in the evaluation **of** this tender or any other aspect of this tender other than those documented below.

I undertake to advise CEO, GWRC immediately should I become aware of any circumstances in the future or of any actual or impending allegation or perception of others on any conflict of interest in relation to this evaluation, or any other aspect of this tender.

Circumstances in which a potential conflict of interest may exist:

HAVE ON GOING RELATIONSHIP WITH TOLL REGARDING THE PROVISION OF THE GREATER WELLINGTON REGION URBAN RAIL SERVICE.

Name: RHONA NICOL.

Signed: Rhona Nicol Date: 9/5/05.

Witnessed by Kelly Maher

Signed: KJ Maher Date: 9/5/05

Assessment & Actions

CONFLICT OF INTEREST DECLARATION

Project: Supply of 18 No. Railway Passenger Cars for Greater Wellington Regional Council

I, Murray Kennedy, an employee of Greater Wellington Regional Council (GWRC) am not aware of any circumstances relating to myself, or to any family or close associate of mine, that could lead to a conflict of interest as a result of any involvement I may have in the evaluation of tender or any other aspect of this tender other than those documented below.

I undertake to [illegible] immediately should I become aware of any in the or of any actual or impending allegation or perception of others on any conflict of interest in relation to this evaluation, or any other aspect of this

Circumstances in which a potential conflict of interest may exist:

Purchase of shares in Toll Rail

Name: M KENNEDY

Signed: [signature] Date: 6 May 2005

Witnessed by Michelle Groves

Signed: [signature] Date: 6/5/05

Assessment & Actions

Appendix D Clarification Letters Issued to Tenderers

greaterWELLINGTON
REGIONAL COUNCIL

3 May 2005

P O Box 11646
142 Wakefield Street
Wellington
New Zealand
T 04 384 5708
F +64 (0)802 0352
W www.gw.govt.nz
Greater Wellington is the promotional name of the Wellington Regional Council

Peter Morris
Toll NZ Limited
Smales farm
Takapuna
Auckland

Dear Peter,

Supply of 18 No. Railway Passenger Cars - Presentation and Clarification

Further to recent discussions, I am writing to confirm that I would like you to make a presentation on your proposal to At the same time, I would like you to address the issues of clarification raised below. Can you please ensure that a full written response is provided to these issues in addition to discussions at the presentation. If there are any price implications could you please submit them in a sealed separate envelope.

Proposal Presentation

You are invited to present your proposal. In doing *so,* you can the issues raised below. The presentation format should be as follows.

Background to your organisation and its capabilities.

Present your technical proposal addressing potential options and variations.

your management approach to delivery of the project. This should clearly the following.

- Clear understanding of project scope and
- Clear understanding of stakeholders and their requirements. This should include how stakeholders would be communicated with.
- Demonstration **of** a workable project programme highlighting key responsibilities and resources. Identification **of** critical path activities would be appreciated.
- Demonstrate how inter-department processes are co-ordinated.
- Identify and explain how key risks and issues are managed throughout the project.

2. Preliminary Agreement Clarification

- What does Toll's 'self insurance' consist of and how does it relate to other insurances held?
- Does the requirement to commit to purchase of spare parts prior to manufacture apply to all spare parts?
- Provide further information in relation to proposed subcontract.

3. Technical Specification Clarification

Clause 3.38 - Please clarify the engineering safety management process to be adopted.

Clauses 5.76, 5.77, 7.33 & 7.34 - GWRC propose that a level of dynamic testing is undertaken to ensure ride performance and brake performance. Please provide your arguments for not undertaking such testing with reference to all stakeholders

Clause 8.36 - Please reconsider issue of central lighting control as per the specification.

Clause 11.9 - Please clarify your statement that a continuous 'T' slot seat mounting arrangement does not meet the 5g shunt load requirement.

Clause 11.48 - Please reconsider your compliance with this clause.

Clause 11.90 - Please clarify the sounding of alarms over the PA.

Clause 10.43 - Please confirm the arrangements to prevent doors opening at speed when the emergency handle is operated.

General - Please clarify physical operation of external doors. Swing plug doors as opposed to sliding plug doors require significant additional clearance when compared to the sliding type which may be an issue when considering any potential need to detrain passengers in a tunnel emergency.

General - Please explain the fire safety compliance standards you are working to so that they can be discussed with relevant statutory authorities.

General - Please provide details on how you would work with GWRC to ensure that many of the HRC recommendations on access are dealt with.

General - Please provide further details of the advantages of moving to the new bogie. This should consider life cycle costing analysis and benefits to operators and passengers and Ontrack.

Finally, could you please confirm your agreement to GWRC discussing your tender with Ontrack and LTSA for the purpose of safety and interoperability acceptance.

Regards

Christopher Ham
Transport **Infrastructure** Manager

Direct dial: +64 (0)4 803 0369
chris.ham@gw.govt.nz

greater WELLINGTON
REGIONAL *COUNCIL*

3 May 2005

P O Box 11646
142 Wakefield Street
Wellington
New Zealand
T 04 384 5708
F +64 (0) 802 0352
W www.gw.govt.nz

Greater Wellington is the promotional name of the Wellington Regional Council

David Lewis
67 Awarua Street
Ngaio
Wellington

Dear David,

Supply of 18 No. Railway Passenger Cars - Presentation and Clarification

Further to recent discussions, I am writing to confirm that I would like you to make a presentation on your proposal to GWRC. At the same time, I would like you to address the issues of clarification raised below. Can you please ensure that a full written response is provided to these issues in addition to discussions at the presentation. If there are any price implications could you please submit them in a sealed separate envelope.

1. Proposal Presentation

You are invited to present your proposal. In doing so, you can answer/address the issues raised below. The presentation format should be as follows.

- Background to your organisation and its capabilities.
- Present your technical proposal addressing potential options and variations.
- Present your management approach to delivery of the project. This should clearly identify the following.
    - Clear understanding of project scope and deliverables.
    - Clear understanding of stakeholders and their requirements. This should include identifying how stakeholders would be communicated with.
    - Demonstration of a workable project programme highlighting key responsibilities and resources. Identification of critical path activities would be appreciated.
    - Demonstrate how inter-department processes are co-ordinated.
    - Identify and explain how key risks and issues are managed throughout the project.

2. Technical Specification Clarification

Clauses **2.25,2.26,2.28** – Please clarify warranty to be provided in compliance with the WT.

Clause **3.38** - Please clarify the engineering safety management process to be adopted.

Clause **3.4** – Your base offer is non-compliant. Please advance discussions with Ontrack over the practicality of your base option and advise GWRC.

Clause **4.84** – Please confirm the thermal conductivity predictions.

Clause 11.10 – Please confirm seat choice since fabric backed seat could present maintenance concerns and increased cost.

General – Please provide further details of your passenger information systems

General – Please provide further details of your Internet Access System

General - Please explain the fire safety compliance standards you are working to so that they can be discussed with relevant statutory authorities.

General - Please provide details on how you would work with GWRC to ensure that many of the HRC recommendations on access are dealt with.

3. Management Approach Clarification

- Please provide a detailed project programme.
- Please provide a detailed project structure for this project illustrating how all activities are planned, executed and reviewed.
- Please clarify how you will secure track access for testing in New Zealand and explain general testing logistics.
- Please clarify how you will manage safety acceptance with LTSA and Ontrack.
- Please clarify how you would manage operational interface and training issues with Toll.
- Please provide a detailed explanation of your design and production management processes.
- Please explain how systems integration will be achieved between New Zealand and Vietnam based activities.
- Please explain how project risk management is used in your organisation and on previous projects.

- Please provide further details of your quality and testing plans.
- Please provide further details of your health and safety plans.
- Please provide further details as to the role of Transys.

Finally, could you please confirm your agreement to GWRC discussing your tender with Ontrack and LTSA for the purpose of safety and interoperability acceptance.

Regards

Christopher Ham
Transport Infrastructure Manager

Direct dial: +64 (0)4 803 0369
chris.ham@gw.govt.nz

Appendix E Supplier Quality Premium Results

RFT RS10/5 - SQP Results Sheet (Pre-Price Opening)

Evaluation of Suppliers (non-price attributes)

	Relevant Experience		Track Record		Technical Skills		Resources		Management Skills		Methodology		Determination of Supplier Quality Premium (SQP)			Check the sum of all weights	Evaluation of Alternatives (alternative products) - this spreadsheet will accommodate 20 separate "alternative product items". Columns Y to AM are hidden. To "unhide" you will need to temporarily remove the sheet protection					Determination of Alternative Tender Premium (ATP)		Determination of Preferred Tender			
Weight																100										
Tenderer	Grade	Index	Grade	Index	Grade	Index	Grade	Index	Grade	Index	Grade	Index	Weighted sum of the non-price attribute grades (WS)	WS margin (WS - lowest WS)	Supplier Quality Premium (SQP) (dollars)		Premium (alternative product item 1) (dollars)	Premium (alternative product item 2) (dollars)	Premium (alternative product item 3) (dollars)	Premium (alternative product item 4) (dollars)	Premium (alternative product item 5) (dollars)	Sum of individual premiums (dollars)	Alternative Tender Premium (ATP) (dollars)	(SQP + ATP) for each tender (dollars)	Tender prices (dollars)	Tender price less (SQP + ATP) (dollars)	
	79	3.56	67	2.57	77	5.78	77	3.47	72	3.24	77	3.47	22.07	11.36	4,285,701.43							0.00	0.00	4,285,701.43		-4,285,701.43	<<<<< pn
	74	3.33	44	1.98	3	0.23	30	1.35	55	2.48	30	1.35	10.71	0.00	0.00							0.00	0.00	0.00		0.00	
	60	2.70	39	1.76	72	5.40	10	0.45	10	0.45	10	0.45	11.21	0.49	186,827.14							0.00	0.00	186,827.14		-186,827.14	
Is any grade 35 or less?					YES		YES		YES		YES																
Budget Price as agreed with LTNZ													Lowest WS	10.71								0.00			Lowest tender price less (SQP + ATP)	-4,285,701.43	