

Date: 13.04.2006
To: The Employer: Project Management Unit No.85 (PMU85)
Attention: **Mr. NGUYEN NGOC CANH / Deputy General Director PMU-85**
Fax No.: 0511 644 552

The Engineer:

Joint Venture of NIPPON KOEI Co., Ltd. JAPAN & Louis Berger Int., Inc.
Attention: Mr. Ichizuru ISHIMOTO / Project Manager
Room #307, PMU85 Danang Office,
Group 35, Hoa Cuong Quarter, Hai Chau Dist
Fax No.: 0511 644 551

Our Ref: P3-PMU-009-06

Subject: Remedy of Defects – Contract Package III

Earlier References:

- 1) PMU 85 letter HVPIII-001-06 dated March 3, 2005
- 2) Our letter P3-PMU-005-06 dated 09-03-2006
- 3) Our letter P3-PMU-007-06 dated 30-03-2006
- 4) Hamadeco Report No. 353/BC-HAMADECO-OCC dated 06-04-2006
- 5) Engineer Letter PK3-001-06 dated 08-04-2006

Dear Sir,

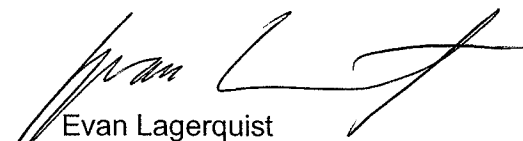
We acknowledge receipt of your notification of defects as per reference 5) above and are pleased to confirm that our warranty staff are and have been rectifying and searching for causes of defects and damages.

Please find attached to this letter a detailed Warranty Snag List (WSL) that includes a search schedule for reported defects as per your request.

Kindly note that we have been actively rectifying reported defects and have kept the Employer, PMU85, duly informed of our activities in reports reference 2) and 3) above.

We thank you for your continued support and remain

Sincerely yours


Evan Lagerquist
ABB Oy

C.C.:

To: **HAMADECO:**

Attention: Mr. Nguyen Dinh Bach / Director
Fax No. 0511 773 938

Enclosure: Hai Van Pass Tunnel Package 3 WSL (5 pages)

HAI VAN PASS TUNNEL
PACKAGE 3
WARRANTY SNAG LIST (WSL)

WSL Item	Description	Date of Notification	Date of Rectification	Status / Action Plan	Schedule of Rectification
I.1.2	RRB / AM amplifier broken.	13.1.2006	30.3.2006	Repaired Amplifier has been put back in to service in the OCC	
I.1.2	RRB / AM wave cannot be received at frequency 549 and 702 kHz from km 4+400 to km 1+640	8.4.2006	Pending	Emission power shall be adjusted to the best level for tunnel covering. Hamadeco should check integrity of fiber optic conductor after many rat damage repairs to ensure that the specified attenuation is within limits.	April 2006
I.1.3	RRB / Optical TX to OCC – S/S 5 and reverse from S/S5 to OCC occurs failure lead to RX and TX FM, VHF, UHF, wave weakly.	8.4.2006	10.4.2006	Agreed in meeting on 10.4.2006 with PMU 85, RRMU 5, Hamadeco and PK3 to remove this item from WSL	Remove item from WSL
I.2.1	TELECOM / Telecom transmission on line 2282 at STP give alarm for foreign voltage so that line 2282 does not work	8.4.2006	10.4.2006	Agreed in meeting on 10.4.2006 with PMU 85, RRMU 5, Hamadeco and PK3 that PK3 shall give Hamadeco new telephone wire connecting telecom panel to phone 2282 and will be installed by Hamadeco. This item shall be removed from WSL.	Remove item from WSL
I.2.2	TELECOM / Telecom on line at S/S 4 (2241) is broken	8.4.2006	13.4.2006	Ring bell of this telephone set has been repaired	Remove item from WSL
I.3.1	FAD / Heat sensor cable system gives fault alarm at Fire Block 3 and fire Block 4.	8.4.2006	Pending	New Power Supply Unit and Alarm Card for SS1 FAD cubicle(PBS16) have been sent by DHL on 11.04.2006 to site.	April 2006
I.3.2 to I.3.8	FAD / The action plan in item I.3.1 should clear all of these inter-related items.	8.4.2006	Pending	New Power Supply Unit and Alarm Card for SS1 FAD cubicle(PBS16) have been sent by DHL on 11.04.2006 to site.	April 2006
I.4.1	CCTV / Camera Nos. 19,21,23 & 25 sometime give fault and do not display picture.	8.4.2006	29.3.2006	Fiber Optic Patch cable replaced	Remove item from WSL
I.4.2	CCTV / Divar 2 failure.	20.2.2006	12.4.2006	Divar sent for repair and put back into service	Remove item from WSL

**HAI VAN PASS TUNNEL
PACKAGE 3
WARRANTY SNAG LIST (WSL)**

WSL Item	Description	Date of Notification	Date of Rectification	Status / Action Plan	Schedule of Rectification
I.5.1	Traffic Control System (TCS) / Computers have error in Software	13.1.2006	20.3.2006	Copy of the software was sent to our supplier and we discovered that someone has tampered with the software configuration. After checking the status, our computer expert determined that the software had one extra component installed to this system called Factory link.NET by some operators. This will install an extra Bridge Licence service that should not exist in any Factory link installation that we have delivered. After Disabling this Factory Link, the server immediately returned to its proper function after the software was re-installed on 20.03.2006 and the corrupted file deleted. This problem was due to unauthorized use of delivered software.	Remove item from WSL
I.5.1.1	TCS / Traffic OPC access information from loops give fault so cannot update parameters from loops	8.4.2006	10.4.2006	Traffic OPS access information can now update parameters from loops.	Remove item from WSL
I.5.1.2	TCS / Infomaster software that controls VMS is not operational so OCC cannot control VMS	8.4.2006	Pending	Infomaster software is operational but will some times get hung up (5 to 10 day frequency). This causes the computer to be restarted. PK3 re-confirmed that VMS expert will come to Hai Van Pass in week 17 (from 24.04 to 29.04.2006) to check and fix all VMS. This shall also clear problems stated in above item 5.1.1 and 5.2	May 2006
I.5.2, I.5.2.1 I.5.2.2 I.5.2.3	TCS / VMS VMS 2, 3, 4 give transmission failure lose data VMS 1 AND 11 unstable working VMS 12 only displays 2 lines of 3	8.4.2006	Pending	PK3 confirmed that VMS expert will come to Hai Van Pass in week 17 (from 24.04 to 29.04.2006) to check and fix all VMS	May 2006
I.5.3	VDU / Screen at OCC hangs up frequently and is now damaged entirely and does not display pictures	8.4.2006	6.4.2006	The VDU software had been corrupted. A complete new software had been reinstalled and now working.	Remove item from WSL

HAI VAN PASS TUNNEL
PACKAGE 3
WARRANTY SNAG LIST (WSL)

WSL Item	Description	Date of Notification	Date of Rectification	Status / Action Plan	Schedule of Rectification
I.5.4	TCS / Traffic Loop Nos. 29, 30, 31, 32, 33, 34 at S/S 5 cannot update	8.4.2006	10.4.2006	Traffic Loop Nos. 29, 30, 31, 32, 33, 34 are updating.	Remove item from WSL
I.6.1	PDMC / Lighting in S/S 1: Contactor and MCCB for lighting in main tunnel and SS1 have failed.	8.4.2006	4.4.2006	MCCB for lighting in main tunnel has been replaced on 04.04.2006. Contactor is no fault, Lighting in SS1 is	Remove item from WSL
I.6.2	PDMC / 2 protection relays REF543 on feeders J01 and J03 in S/S 5 are failure, cannot access to operate or locally reset directly.	8.4.2006	9.3.2006	PK3 has investigated on site and replied in letter P3-PMU 06 dated 09.03.2006. Hamadeco Operators should follow instructions in enclosure 2 attached to said letter.	Remove item from WSL
I.6.3	PDMC / Heater of 22 kV Relay & Measuring panel in SS4 is broken	8.4.2006	12.4.2006	New heater of 22 kV Relay & Measuring panel in SS4 has been handed to HAMADECO for replacement.	Remove item from WSL
I.6.4 to I.6.7	PDMC / These items are all contractually bound to PK5	8.4.2006	WARRANTY EXPIRED	6.4 – to 6.7 These items are related to PK5. ABB experts have fixed and Defect Liability period has expired on 21.10.05. ABB is pleased to support PMU 85 and Hamadeco, however, the cost and arrangements for this support must be discussed and finalised as the warranty has expired.	Remove items from WSL.
I.6.8	PDMC / MCB (F22) in 110 VDC panel at S/S 8 is broken.	8.4.2006	Pending	Resident Engineer will inspect and trouble shoot	April 2006
I.6.9	PDMC / MCB in DB-1 panel at S/S 8 is failure, frequently gives alarms.	8.4.2006	Pending	Resident Engineer will inspect and trouble shoot	April 2006
I.6.10	VDU / This item is contractually bound to PK5	8.4.2006	WARRANTY EXPIRED	First block of VDU package 5: Defect Liability period has expired on 21.10.05. HAMADECO should change projector lamp from their spare part store.	Remove item from WSL
I.6.11	Luminaries / At the moment there are 25 luminaries of 70W, 150W, 250W and 400W for lighting in the tunnel that do not work.	8.4.2006	Pending	Hamadeco shall establish what is broken, i.e. bulb, ballast or fixture and type of luminaries and confirm reason as well. PK 3 will then contact the supplier.	May 2006

M

HAI VAN PASS TUNNEL
PACKAGE 3
WARRANTY SNAG LIST (WSL)

WSL Item	Description	Date of Notification	Date of Rectification	Status / Action Plan	Schedule of Rectification
I.6.12 - I.6.13	PDMC - SCADA / Equipment for connecting LAN network at OCC has failed. Communication from PDMC system to SS1, 2, 3, 4, 5, 6 and 7 has failed.	8.4.2006	13.4.2006	PK3 Resident Engineer, with support from staff in Finland, discovered that the TX and RX FO fibers from SS5 to OCC in the OCC had been incorrectly swapped by someone, causing communication break between OCC PDMC and SS2, 3, 4, 5, 6 and 7. This has now been repaired and communication has been restored to these Substations.	Remove item from WSL
I.6.12.1	PDMC - SCADA / Communication from PDMC system to SS1 has failed.	8.4.2006	Pending	Communication from OCC to SS1 is still down and this FO will now be checked.	May 2006
I.6.14	Voltage measurement from SS6 LV Board is not working	8.4.2006	Pending	PK3 Resident Engineer, with support from staff in Finland, will investigate.	May 2006
ADDITIONAL ITEMS					
III.1	Quickly rectify the remaining snags and new ones and inform HAMADECO the cause of the failure and target date for rectification.	8.4.2006		HAMADECO is invited to read both earlier reports: P3-PMU-005-06 dated 09-03-2006 and P3-PMU-007-06 dated 30-03-2006 as well as the contents of this latest WSL. Kindly note that PK3 has consistently taken quick action to rectify Warranty Snags. HAMADECO is very welcome to take a more active role in trouble shooting for their future responsibilities.	
III.2	Provide further cooling fans for equipment panels under CCTV, Telecom and Fire Alarm.	8.4.2006		No further cooling fans for equipment panel. They are not required. However it is of utmost importance that HAMADECO ensure that ambient temperature in equipment rooms is maintained below 30 degrees C and that over pressure is maintained so that no soot enters these rooms.	

M

**HAI VAN PASS TUNNEL
PACKAGE 3
WARRANTY SNAG LIST (WSL)**

WSL Item	Description	Date of Notification	Date of Rectification	Status / Action Plan	Schedule of Rectification
III.3	Inform HAMADECO details of warranty period for equipment items installed by PKIII and durability of equipment after warranty period.	8.4.2006		In the meeting on 10.4.2006 with PMU 85, RRMU 5, Hamadeco and PK3, PMU85 stated that warrantee period for equipment has been stated clearly in PK3 Taking over Certificate and it will be copied to HAMADECO for reference. The durability of the equipment after warranty depends on the amount and quality of preventive maintenance carried out by Hamadeco in accordance with instructions supplied in Operation and Maintenance Manuals, however, 2 years defect liability show the reliability of our equipment.	
III.4	Equipment room environment and unauthorized tampering of system software	17.1.2006		HAMADECO should schedule to clean inside all equipment rooms to protect from soot deposition, because soot will cause damage to sensitive electronic devices. HAMADECO, must also monitor that equipment room temperatures and overpressure are maintained as per specification. We now have had several cases of system failures due to unauthorized tampering with system software. This has cost our Resident Engineer many hours of unnecessary work that is not compensated and caused by HAMADECO operators.	


13.04.2006