

Date 30th March 2017

SL NO.	Reference Clause	Original Clause	Addendum Clause
1.	NIT point 4, Key details, Page-NIT/2	Date & Time of Submission of Tender 15.00 Hours on 15 th March 2017	Date & Time of Submission of Tender 15.00 Hours on 20 th April 2017
2.	NIT point 5, Key details, Page-NIT/3	Date & Time of Opening of Tender 15.30 Hours on 15 th March 2017	Date & Time of Opening of Tender 15.30 Hours on 20 th April 2017
3.	Clause 2.6, Vol-1, Page-ITT/11	The Form of Tender shall be completed and signed by a duly authorised and empowered representative of the Tenderer. If the Tenderer comprises a consortium or a joint venture the Form of Tender shall be signed by the Representative authorized in the Joint Venture/ Consortium agreement to act on behalf of them. Signatures on the Form of Tender shall be witnessed and dated. Copies of relevant powers of attorney shall be attached. The Form of Tender shall be submitted on Rupees 100/- Stamp Paper	The Form of Tender shall be completed and signed by a duly authorised and empowered representative of the Tenderer. If the Tenderer comprises a consortium or a joint venture the Form of Tender shall be signed by the Representative authorized in the Joint Venture/ Consortium agreement to act on behalf of them. Signatures on the Form of Tender shall be witnessed and dated. Copies of relevant powers of attorney shall be attached
4.	Vol 2, Clause No 1.11.1, Page – ECR/3	T13 - If the member of JV/JVA/Consortium responsible for manufacturing & supplying of elevator is of foreign origin then they should have experience of manufacturing and supplying minimum 60 Heavy Duty Escalators for MRTS (Metro Stations/ Airport) application, excluding the country of Origin.	T13 - If the member of JV/JVA/Consortium responsible for manufacturing & supplying of escalator is of foreign origin then they should have experience of manufacturing and supplying minimum 60 Heavy Duty Escalators for MRTS (Metro Stations/ Airport) application, excluding the country of Origin.
5.	Basis of Evaluation, T 13 Vol-2, ECR/39	T 13 - If the member of JV/JVA/Consortium responsible for manufacturing & supplying of elevator, is of foreign origin then they should have experience of manufacturing and supplying minimum 60 Heavy Duty Escalators for MRTS (Metro Stations/ Airport) application, excluding the country of Origin. > 60 = PASS < 60 = FAIL	T 13 - If the member of JV/JVA/Consortium responsible for manufacturing & supplying of escalator, is of foreign origin then they should have experience of manufacturing and supplying minimum 60 Heavy Duty Escalators for MRTS (Metro Stations/ Airport) application, excluding the country of Origin. > 60 = PASS < 60 = FAIL
6.	Clause-48, Vol-2, Page-SCC/21	The Contract Price shall be adjusted for increase/decrease of the price of Labour, Steel, Stainless Steel, Copper and Fuel as per the Price Adjustment Formula detailed below (Applicable only to Payment Schedule Appendix E, Page Appendix E/1, Items E2 to E7, Vol. 6)	The Contract Price shall be adjusted for increase/decrease of the price of Labour, Steel, Stainless Steel, Copper and Fuel as per the Price Adjustment Formula detailed below (Applicable only to Payment Schedule Appendix E, Page Appendix E/1, Items B to E, Vol. 6)
7.	Clause-48, Vol-2, SCC/23	Price adjustment shall be applicable only to Items E2 to E7 of the Payment Schedule in Appendix E of Vol. 6. No price adjustment shall be applicable to the other Items in the Appendix E.	Price adjustment shall be applicable only to Items B to E of the Payment Schedule in Appendix E of Vol. 6. No price adjustment shall be applicable to the other Items in the Appendix E.
8.	Clause 12.4 ix), Vol-2, Page-GCC/68	ix) For decrease beyond 25% for individual items or 25% of contract agreement value, payment may be made on actual quantity executed and no further claim of the contractor will be entertained.	ix) For decrease beyond 25% for individual items or 25% of contract agreement value, payment may be made on actual quantity executed at agreement rate and no further claim of the contractor will be entertained.
9.	Vol 3, Part I, Clause No 1.6, Page-14	All equipment and materials shall be fully tropicalized and suitable for use in the local climate and operating conditions. The Contractor is deemed to be familiar with the prevailing local climatic conditions and is aware of high dry bulb temperature and high relative humidity (up to 100%) during certain times of the year. All equipment/system shall be suitable for operation with dry bulb temperature of at least up to 45 deg C and relative humidity of up to 100%. Contractor shall ensure that necessary equipment for monitoring the Ground sub-soil temperature using PT 32 or RTD probes. All facilities necessary for monitored every six months of the sub-soil temperature shall be provided by the Contractor.	All equipment and materials shall be fully tropicalized and suitable for use in the local climate and operating conditions. The Contractor is deemed to be familiar with the prevailing local climatic conditions and is aware of high dry bulb temperature and high relative humidity (up to 100%) during certain times of the year. All equipment/system shall be suitable for operation with dry bulb temperature of at least up to 45 deg C and relative humidity of up to 100%.
10.	Vol 3, Part I,	CAPACITY (NO. OF PASSENGER S/ MIN.): 135 (For Escalator)	CAPACITY (NO. OF PASSENGER/ Hour.): As per EN 115 Latest Version

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	Clause No 3.1 (a), Column 3 of the Table Page-21		
11.	Vol 3, Part I, Clause No 3.1 (a), Column 7 of the Table Page-21	CAPACITY (KW): 22.5 (For Escalator)	CAPACITY (KW): Deleted
12.	Vol 3, Part I, Clause No 3.1 (a), Column 3 of the Table Page-21	CAPACITY (KW): 10 (For Elevator)	CAPACITY (KW): Deleted
13.	Vol 3, Part I, Clause No 6.2.6, Page-35	<p>The gear less drive machine shall be mounted on guide rails accommodated within the elevator shaft. The power switch gear and main control equipment shall suitably located inside or near the Elevator shaft, the location of which is to be decided in coordination with the Designated Civil Contractors. No separate machine-room is proposed to be provided for machine room less Elevators</p> <p>The function of each Elevator involves primarily for the movement of disabled and elderly persons and also of other commuters and staff. The reliability of the Elevator is therefore of paramount importance.</p> <p>Each Elevator shall have a carrying capacity (rated load) of at least 1000 kg / 13 persons or 1600Kg / 21 persons as defined in the Form of tender. The nominal speed for the Elevators shall be 1.0 m/s in either direction.</p> <p>Elevator shaft dimension for 1000 kg/13 persons elevator will be 2500mm (Width) x 2000mm (Depth) (Except for Howrah Maidan station which is 1850 mm (depth)x 2425 mm (width) and for 1600 kg/ 21 persons elevator will be 3000 mm (width) x 2500 mm (depth). The Contractor shall take all necessary measures to accommodate the Elevators in the above shaft. The Contractor shall co-ordinate with the Designated Civil Contractors for all matters related to shaft size. Any minor reduction in the shaft size (depth and width) to the tune of + 250 mm and – 100 mm shall have to be accommodated in the design by the contractor by way of provision of suitable guide brackets/stainless steel channels without any additional charges. The contractor shall be responsible for any delay on this account.</p> <p>For the Elevators with “Hanging – Pit” / “Floating – Pit” the dimensions of Lift shaft shall be increased by 200 mm (either in Depth or in Width). For such cases, the Elevator contractor should provide the detailed design / requirements for such Lift shafts as per specific site conditions and Interface with designated civil contractor to ensure that the Lift shaft is constructed as per the design / requirements.</p>	<p>The gear less drive machine shall be mounted on guide rails accommodated within the elevator shaft. The power switch gear and main control equipment shall suitably located inside or near the Elevator shaft, the location of which is to be decided in coordination with the Designated Civil Contractors. No separate machine-room is proposed to be provided for machine room less Elevators.</p> <p>The function of each Elevator involves primarily for the movement of disabled and elderly persons and also of other commuters and staff. The reliability of the Elevator is therefore of paramount importance.</p> <p>Please refer to Table No 2 for Passenger Capacity of elevators, Elevator Shaft Dimensions, Pit Depth, Door Size etc. The nominal speed for the Elevators shall be 1.0 m/s in either direction.</p> <p>The Contractor shall take all necessary measures to accommodate the Elevators in the above shaft. The Contractor shall co-ordinate with the Designated Civil Contractors for all matters related to shaft size. Any minor reduction in the shaft size (depth and width) to the tune of + 250 mm and – 100 mm shall have to be accommodated in the design by the contractor by way of provision of suitable guide brackets/stainless steel channels without any additional charges. The contractor shall be responsible for any delay on this account.</p> <p>For the Elevators with “Hanging – Pit” / “Floating – Pit” the dimensions of Lift shaft shall be increased by 200 mm (either in Depth or in Width). For such cases, the Elevator contractor should provide the detailed design / requirements for such Lift shafts as per specific site conditions and Interface with designated civil contractor to ensure that the Lift shaft is constructed as per the design / requirements.</p>
14.	Vol 3, Part I, Clause No 6.2.7, Page-35	<p>Elevator car shall have minimum internal dimensions of 2000 mm (D) by 2100 mm (W) for carrying the rated load 2000 Kg / 26 persons and 1600mm (W) by 1400 mm (D) for carrying the rated load 1000 kg/ 13 persons along with wheel chair.</p> <p>The false ceiling height of the Elevator car shall not be less than 2300mm. The Elevator and door shall be configured so that it is possible to handle a person on a wheel chair.</p>	<p>Please refer to Table No 2 for Passenger Capacity of elevators, Elevator Shaft Dimensions, Pit Depth, Door Size etc.</p> <p>The false ceiling height of the Elevator car shall not be less than 2300mm. The Elevator and door shall be configured so that it is possible to handle a person on a wheel chair.</p>
15.	Vol 3, Part I, Clause No 6.2.8, Page-35	Both the car and landing entrance clear opening width shall not be less than 1000mm for 13 Persons and 21 Persons Elevators and height not less than 2100mm the door shall be of center opening type.	Both the car and landing entrance clear opening width dimensions shall be as per table no 2 and the door shall be of center opening type.
16.	Vol 3, Part I,	The Contractor shall provide Seismic operation Control system with primary wave sensor for the Lifts	The Contractor shall provide Seismic operation Control system with primary wave sensor for the Lifts

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	Clause No 6.2.11, Page-36	measurable in Richter scale. These shall be integrated with Seismic operation control device through RMS/ BMS System. Upon detecting such wave, the equipment shall direct all the Lift cars in the Station/ Admin & OCC Building/ Depot to the nearest floor and immediately open doors for safe exit. The lift shall only be reset manually after the signal is clear and the lift has been inspected by the maintenance personnel. One number of primary wave seismic sensor shall be provided in each station, Admin & OCC building and Uppal depot.	measurable in Richter scale. These shall be integrated with Seismic operation control device through RMS/ BMS System. Upon detecting such wave, the equipment shall direct all the Lift cars in the Station to the nearest floor and immediately open doors for safe exit. The lift shall only be reset manually after the signal is clear and the lift has been inspected by the maintenance personnel. One number of primary wave seismic sensor shall be provided in each station.
17.	Vol 3, Part I, Clause No 6.3.2(g), Page-38	(g)The Elevator machine shall be fitted with a manual mechanical emergency device capable of having the brake released by hand and requiring a constant effort to keep the brake open. In normal operation, the electromagnetic brake shall only be applied when the lifts has come to complete stands still. The brake shall only be meant for holding the lift in the position at every landing, providing best stopping control without any jerking effect. In case of MRL lifts, the motor brake shall be able to be remotely released outside the lift well.	(g) The Elevator machine shall be fitted with a manual electrical emergency device with battery backup capable of having the brake released by hand and requiring a constant effort to keep the brake open. In normal operation, the electromagnetic brake shall only be applied when the lifts has come to complete stands still. The brake shall only be meant for holding the lift in the position at every landing, providing best stopping control without any jerking effect. In case of MRL lifts, the motor brake shall be able to be remotely released outside the lift well. Additionally the battery charging status is to be linked with RMS/BMS to monitor the status.
18.	Vol 3, Part I, Clause No 6.3.2(h), Page-38	(h) The Elevator machine shall be fitted with a manual electrical emergency device with battery backup capable of having the brake released by hand and requiring a constant effort to keep the brake open. In normal operation, the electromagnetic brake shall only be applied when the lifts has come to complete stands still. The brake shall only be meant for holding the lift in the position at every landing, providing best stopping control without any jerking effect. In case of MRL lifts, the motor brake shall be able to be remotely released outside the lift well. The battery charging status is to be linked with RMS/BMS to monitor the status.	(h) In case manual electrical emergency device with battery backup operational fails, additionally manual system has to be provided for rescue of the passengers. Design for additional manual system will be reviewed and functionality will be witnessed by employer/consultant during prototype and thereafter the design will be accepted and the clearance for the manufacturing will be granted.
19.	Vol 3, Part I, Clause No 6.8.10 a (ii), Page-45	(ii) Architrave (Fascia/ Jamb) - Scratch Resistant Stainless steel SS 304 5WL / Stone work, stainless steel of not less than 1.5 mm in thickness. The fascia of minimum 300 mm width on every landing or as per site condition for fixing the Landing Plate, Indicators, MCP etc. shall be of Scratch Resistant Stainless steel SS 304 5WL/ Stone work and shall be in scope of elevator Contractor. The architrave design with drawings and details have to submitted and approval to be taken before manufacturing.	(ii) Architrave (Fascia/ Jamb) - Scratch Resistant Stainless steel SS 304, stainless steel of not less than 1.5 mm in thickness. The fascia of minimum 300 mm width on every landing or as per site condition for fixing the Landing Plate, Indicators, MCP etc. shall be of Scratch Resistant Stainless steel SS 304 5WL and shall be in scope of elevator Contractor. The architrave design with drawings and details have to submitted and approval to be taken before manufacturing.
20.	Vol 3, Part I, Clause No 6.11.4 (a) (i), Page-51	i. Fully Automatic with Attendant operation.	(a) (i) Fully Automatic without Attendant operation.
21.	Vol 3, Part I, Clause No 6.16.2, Page-55	Hall Call Buttons One (1) set of hall call buttons shall be provided for each Elevator at every floor served. The set of buttons shall be installed on the wall adjacent to each Elevator landing. The faceplate shall be made of stainless steel grade 316 hairline finishes. The Stainless steel plate should be 2-2.5 mm thick and its mounting arrangement should have two minimum Sunken Screws. This plate should be pilfer proof. The hall call buttons shall be	Hall Call Buttons One (1) set of hall call buttons shall be provided for each Elevator at every floor served. The set of buttons shall be installed on the wall adjacent to each Elevator landing. The faceplate shall be made of finish SS304 5WL. The Stainless steel plate should be 2-2.5 mm thick and its mounting arrangement should have two minimum Sunken Screws. This plate should be pilfer proof. The hall call buttons shall be micro-push type, suitable for heavy duty and vandal

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		<p>micro-push type, suitable for heavy duty and vandal proof. The response light of the call buttons shall be orange or red, when illuminated. When an Elevator arrives at the hall, the illumination shall cease.</p> <p>Pushbuttons: Provide single riser(s) with flush mounted faceplates. Include pushbuttons for each direction of travel which illuminate to indicate call registration. Include approved engraved message and pictorial representation prohibiting use of Lift during fire or other emergency situation as part of faceplate. Provide vandal resistant pushbutton with Braille markings, LED illumination and tactile symbols. The buttons should be permanently illuminated of dull illumination and on activation shall be bright illumination. Hall fixture face plates shall be stainless steel SS 316 or 304. Sizes should be submitted by the Contractor to Client for review and finalization during detailed design phase.</p>	<p>proof. The response light of the call buttons shall be orange or red, when illuminated. When an Elevator arrives at the hall, the illumination shall cease.</p> <p>Pushbuttons: Provide single riser(s) with flush mounted faceplates. Include pushbuttons for each direction of travel which illuminate to indicate call registration. Include approved engraved message and pictorial representation prohibiting use of Lift during fire or other emergency situation as part of faceplate. Provide vandal resistant pushbutton with Braille markings, LED illumination and tactile symbols. The buttons should be permanently illuminated of dull illumination and on activation shall be bright illumination. Hall fixture face plates shall be stainless steel SS 316 or 304. Sizes should be submitted by the Contractor to Client for review and finalization during detailed design phase</p>
22.	Vol 3, Part I, Clause No 7.2.2, Page-75	Escalators shall be designed for installation and operation at an angle of inclination of 30°.for concourse to platform and 30°.for ground to concourse escalators.	Escalators shall be designed for installation and operation at an angle of inclination of 30° for concourse to platform and 30°.for ground to concourse escalators, except one escalator at Phool Bagan station ground to concourse which is of 35° angle of inclination.
23.	Vol 3, Part I, Clause No 7.3.3, Page-75	The lower constant lengths from the edge of support to Escalator working point will be assumed as 3347mm while the pit sizes will be assumed as 1750mm (W) x 1350mm (D) x 6500mm (L) for the preparation of civil works. The upper constant length will be assumed as 4000mm for vertical rises below 7.5m, 4500mm for vertical rises between 7.5m to 10m and 4850mm for vertical rises above 10m up to 15m, The “Engineer” will review these dimensions after the award of the Contract. The Contractor shall coordinate with the Civil Contractor for all interfacing requirement. In the event that there are some civil restraints such that the “Engineer” may or may not require to revise the well way dimensions either as a whole or in part, the Contractor shall provide the Escalator(s) with the truss so designed to suit the civil structure as directed by the “Engineer” at no cost to the Employer.	Please refer Table No 2 for all the dimensions of the escalator. The Contractor shall coordinate with the Civil Contractor for all interfacing requirement. In the event that there are some civil restraints such that the “Engineer” may or may not require to revise the well way dimensions either as a whole or in part, the Contractor shall provide the Escalator(s) with the truss so designed to suit the civil structure as directed by the “Engineer” at no cost to the Employer.
24.	Vol 3, Part I, Clause No 7.3.6, Page-80	Stainless steel (SS 304) surface comb plates with yellow – coloured diecast. The alternatives like coloured fiber, for the Comb plate is subject to the Employers acceptance at the design stage. Corrosion resisting aluminium alloy comb teeth shall be provided at both landings of each Escalator. The comb plate structure shall withstand a load of 6000N/m ² with a deflection not exceeding 2.0 mm. The teeth of the combs shall properly mesh with the cleats on the step treads and shall be designed to permit simple replacement in sections. The yellow colour light in the pits shall be provided to demarcate the moving and the non-moving parts of the Escalators. The Escalator Contractor shall provide UPS of suitable capacity to feed power to Comb light, pit light, etc.	Stainless steel (SS 304) surface comb plates and corrosion resistant die casted Aluminium Alloy comb section (teeth) with yellow colour painting shall be provided at both landings of each escalator. The alternatives like coloured fiber, for the Comb plate is subject to the Employers acceptance at the design stage. Corrosion resisting aluminium alloy comb teeth shall be provided at both landings of each Escalator. The comb plate structure shall withstand a load of 6000N/m ² with a deflection not exceeding 2.0 mm. The teeth of the combs shall properly mesh with the cleats on the step treads and shall be designed to permit simple replacement in sections. The yellow colour light in the pits shall be provided to demarcate the moving and the non-moving parts of the Escalators. The Escalator Contractor shall provide UPS of suitable capacity to feed power to Comb light, pit light, etc.
25.	Vol 3, Part I, Clause No 7.4.1, Page-83	Balustrades shall be provided with smooth and continuous handrails moving in the same direction and at the same speed as the steps with tolerance of 0% to 2% of the speed of the steps. The handrail shall have a life span of at least seven (7) years under operating conditions as stated in clause 7.2.1. The colour of the handrails shall be black but the Employer reserves the right to select other colours or designs at no extra cost. The escalators shall be provided with V type hand rail for all the rises	Balustrades shall be provided with smooth and continuous handrails moving in the same direction and at the same speed as the steps with tolerance of 0% to 2% of the speed of the steps. The handrail shall have a life span of at least seven (7) years under operating conditions as stated in clause 7.2.1. The colour of the handrails shall be black but the Employer reserves the right to select other colours or designs at no extra cost.
26.	Vol 3, Part I,		

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	Clause No 7.5.5, Page-85	Step chains shall be of the endless roller type located on both sides of the moving step. The chains shall be provided in matched lengths and be of high quality steel construction incorporating links, pins, bushes, axles and rollers with three pitches between adjacent rollers. The step rollers shall be located outside the chain links and shall be easily replaceable without dismantling the links. All chain pins shall be circlipped. Each step chain shall be provided with an automatic tension device to ensure proper tension under varying load conditions. A method shall be provided to shorten the chain by one step to compensate for chain elongation.	Step chains shall be of the endless roller type located on both sides of the moving step. The chains shall be provided in matched lengths and be of high quality steel construction incorporating links, pins, bushes, axles and rollers with three pitches between adjacent rollers. The step rollers shall be located outside/Inside the chain links and shall be easily replaceable without dismantling the links. All chain pins shall be circlipped. Each step chain shall be provided with an automatic tension device to ensure proper tension under varying load conditions.												
27.	Vol 3, Part I, Clause No 7.8.24, Page-93	Four number Bollards shall be installed at the entry of Escalator landings to prevent the passenger with bulky luggage or baby carriage from boarding the Escalator. The bollards height shall be 100 cm and shall carry the traffic light. The traffic light should interface with the direction of Escalators i.e. light shall be red when Escalator is not available for use and shall be Green when Escalator is available for use. The details shall be got approved from the Employer at the time of design.	Deleted												
28.	Vol 3, Part I, Clause No 7.12,1, Page-97	<p>The space required for machinery and other accessories shall be provided by the Civil Contractors in accordance with the co-ordinated requirements of the Contractor. Controllers and other accessories such as incoming isolators, ITBs, switches, shall be housed outside the truss in Enclosure of controller below the Escalator inclined section or in wall recess/closet besides the upper landing. Further wiring work including conduits/ trunking from the incoming isolators to Escalator equipment shall be provided by the Contractor.</p> <p>The Contractor shall co-ordinate with civil contractor for the layout of the equipment in the wall recess/closet.</p>	<p>The space required for machinery and other accessories shall be provided by the Civil Contractors in accordance with the co-ordinated requirements of the Contractor. Controllers and other accessories such as incoming isolators, ITBs, switches, shall be housed inside the truss in Enclosure of controller below the Escalator inclined section or in wall recess/closet besides the upper landing. Further wiring work including conduits/ trunking from the incoming isolators to Escalator equipment shall be provided by the Contractor.</p> <p>The Contractor shall co-ordinate with civil contractor for the layout of the equipment in the wall recess/closet.</p>												
29.	Vol 3, Part I, Clause No 7.17,1, Page-102	Equipment shall be designed to operate quietly and smoothly. The sound level at one meter from the balustrade of each Escalator shall not exceed 65 dBA peak value as measured by a slow response sound level meter. The required acoustic treatment shall be supplied and fitted as necessary to meet this requirement.	Equipment shall be designed to operate quietly and smoothly. The sound level at one meter from the balustrade of each Escalator shall not exceed 65 dBA average value as measured by a slow response sound level meter. The required acoustic treatment shall be supplied and fitted as necessary to meet this requirement.												
30.	Vol 3, Part I, Clause No 10.1.1, Page-97	<p>The design of each component shall achieve the minimum service life given below. The failure rate of the components shall not exceed 5%. Failure rate is defined as the number of failures (during the service life) divided by the total quantity of the components in of that section</p> <table border="0"> <thead> <tr> <th><u>Escalators</u></th> <th><u>Service life(years)</u></th> </tr> </thead> <tbody> <tr> <td>(i) Steps</td> <td>15</td> </tr> </tbody> </table>	<u>Escalators</u>	<u>Service life(years)</u>	(i) Steps	15	<p>The design of each component shall achieve the minimum service life given below. The failure rate of the components shall not exceed 5%. Failure rate is defined as the number of failures (during the service life) divided by the total quantity of the components in of that section</p> <table border="0"> <thead> <tr> <th><u>Escalators</u></th> <th><u>Service life(years)</u></th> </tr> </thead> <tbody> <tr> <td>(i) Steps</td> <td>15</td> </tr> <tr> <td>(ii) Relays, timers and control gear</td> <td>10</td> </tr> <tr> <td>(iii) Handrail drive system</td> <td>15</td> </tr> </tbody> </table>	<u>Escalators</u>	<u>Service life(years)</u>	(i) Steps	15	(ii) Relays, timers and control gear	10	(iii) Handrail drive system	15
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31.	Vol 3, Part I, Appendix A S.N. 3, Page-224	<p>Interface Specification L&E Contractor and Integrated Station Management System (ISMS) Contractors.</p> <table border="1"> <thead> <tr> <th>Item No.</th> <th>Subject</th> <th>L&E responsibilities</th> <th>ISMS responsibilities</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Elevator</td> <td> <p>Design ;</p> <ul style="list-style-type: none"> - PC based RMS software to jointly operate the functions of control & signalling for lifts in the SCR on the PC being provided by ISMS contractor. <p>Construction :</p> <ul style="list-style-type: none"> - Interfacing of elevator control and operating parameters available on Ethernet / RS-485 based protocol provided by Lift contractor at ITB (To be provided by ISMS Contractor) in SCR with RMS. </td> <td> <p>Design :</p> <ul style="list-style-type: none"> - Provision of lifts' control and operating parameters on RS-485 based protocol at ITB in SCR. <p>Construction :</p> <ul style="list-style-type: none"> - To wire the lifts' control and operating parameters on Ethernet / RS-485 based protocol at ITB in SCR with screened wires. ITB (To be provided by ISMS Contractor) to be located in SCR. - ISMS Contractor is also responsible to interface for linking the elevator software from ITB in SCR to OCC </td> </tr> </tbody> </table>	Item No.	Subject	L&E responsibilities	ISMS responsibilities	1.	Elevator	<p>Design ;</p> <ul style="list-style-type: none"> - PC based RMS software to jointly operate the functions of control & signalling for lifts in the SCR on the PC being provided by ISMS contractor. <p>Construction :</p> <ul style="list-style-type: none"> - Interfacing of elevator control and operating parameters available on Ethernet / RS-485 based protocol provided by Lift contractor at ITB (To be provided by ISMS Contractor) in SCR with RMS. 	<p>Design :</p> <ul style="list-style-type: none"> - Provision of lifts' control and operating parameters on RS-485 based protocol at ITB in SCR. <p>Construction :</p> <ul style="list-style-type: none"> - To wire the lifts' control and operating parameters on Ethernet / RS-485 based protocol at ITB in SCR with screened wires. ITB (To be provided by ISMS Contractor) to be located in SCR. - ISMS Contractor is also responsible to interface for linking the elevator software from ITB in SCR to OCC 	<p>Interface Specification L&E Contractor and Integrated Station Management System (ISMS) Contractors.</p> <table border="1"> <thead> <tr> <th>Item No.</th> <th>Subject</th> <th>L&E responsibilities</th> <th>ISMS responsibilities</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Elevator</td> <td> <p>Design ;</p> <ul style="list-style-type: none"> - PC based RMS software to jointly operate the functions of control & signalling for lifts in the SCR on the PC being provided by L&E contractor. <p>Construction :</p> <ul style="list-style-type: none"> - Interfacing of elevator control and operating parameters available on Ethernet / RS-485 based protocol provided by Lift contractor at ITB (To be provided by ISMS Contractor) in SCR with RMS. </td> <td> <p>Design :</p> <ul style="list-style-type: none"> - Provision of lifts' control and operating parameters on RS-485 based protocol at ITB in SCR. <p>Construction :</p> <ul style="list-style-type: none"> - To wire the lifts' control and operating parameters on Ethernet / RS-485 based protocol at ITB in SCR with screened wires. ITB (To be provided by ISMS Contractor) to be located in SCR. - ISMS Contractor is also responsible to interface for linking the elevator software from ITB in SCR to OCC </td> </tr> </tbody> </table>	Item No.	Subject	L&E responsibilities	ISMS responsibilities	1.	Elevator	<p>Design ;</p> <ul style="list-style-type: none"> - PC based RMS software to jointly operate the functions of control & signalling for lifts in the SCR on the PC being provided by L&E contractor. <p>Construction :</p> <ul style="list-style-type: none"> - Interfacing of elevator control and operating parameters available on Ethernet / RS-485 based protocol provided by Lift contractor at ITB (To be provided by ISMS Contractor) in SCR with RMS. 	<p>Design :</p> <ul style="list-style-type: none"> - Provision of lifts' control and operating parameters on RS-485 based protocol at ITB in SCR. <p>Construction :</p> <ul style="list-style-type: none"> - To wire the lifts' control and operating parameters on Ethernet / RS-485 based protocol at ITB in SCR with screened wires. ITB (To be provided by ISMS Contractor) to be located in SCR. - ISMS Contractor is also responsible to interface for linking the elevator software from ITB in SCR to OCC 																										
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32.	Vol 3, Part I, Clause No 6.8.2, Page-43	A suitable car frame fabricated from galvanized cold rolled steel, bolted, or welded together to form a rigid structure shall be provided. The deflection of the members carrying the platform shall not exceed 1/1000th of their span under static conditions with the rated load uniformly distributed over the platform. It shall be able to withstand the operation of the safety gear or any condition loading without permanent deformation and shall not transfer the load to the enclosure. The safety factor of the frame shall not be less than five (5).	A suitable car frame fabricated from galvanized rolled steel, bolted, or welded together to form a rigid structure shall be provided. The deflection of the members carrying the platform shall not exceed 1/1000th of their span under static conditions with the rated load uniformly distributed over the platform. It shall be able to withstand the operation of the safety gear or any condition loading without permanent deformation and shall not transfer the load to the enclosure. The safety factor of the frame shall not be less than five (5).
33.	Vol 3, Part I, Clause No 6.8.4, Page-43	(a)The car platform shall be constructed from spray galvanized cold rolled steel with steel flooring. The platform shall be designed on the basis of the rated load being evenly distributed with a minimum safety factor of five (5). The design of the final floor finish is subject to acceptance by the "Engineer".	(a)The car platform shall be constructed from spray galvanized rolled steel with steel flooring. The platform shall be designed on the basis of the rated load being evenly distributed with a minimum safety factor of five (5). The design of the final floor finish is subject to acceptance by the "Engineer".
34.	Vol 3, Part I, Cl No 7.8.15, Page-92	Each handrail shall be fitted with a device, which shall stop the Escalator when the handrail speed exceeds $\pm 30\%$ of the rated speed.	Each handrail shall be fitted with a device, which shall stop the Escalator when the handrail speed exceeds $\pm 15\%$ of the rated speed as per the latest editions of EN 115.
35.	Vol 2, Clause No 1.11.1,Page – ECR/2	I – Financial Standing T1 - Adequate Liquidity, Cash flow of INR 167 Million	I – Financial Standing T1 - Adequate Liquidity, Cash flow of INR 102 Million
36.	Clause-11.7, Vol-2, Page-GCC/60	Statement at Completion Not later than 60 days after the issue of the Taking Over Certificate for the whole of Works, the Contractor shall submit, to the Engineer, six copies of a statement at completion with supporting documents, showing in detail, in the form approved by the Engineer under Clause 11.3: (a) the final value of all work done in accordance with the Contract, up to the date stated in such Taking Over Certificate, (b) any further sums which the Contractor considers to be due, and (c) an estimate of amounts which the Contractor considers shall become due to him under the Contract. The estimated amounts shall be shown separately in such statement at completion. The Engineer shall certify payment under Clause 11.4.	Statement at Completion Not later than 60 days after the issue of the Taking Over Certificate for the whole of Works, the Contractor shall submit, to the Engineer, six copies of a statement at completion with supporting documents, showing in detail, in the form approved by the Engineer under Clause 11.3: (a) the final value of all work done in accordance with the Contract, up to the date stated in such Taking Over Certificate, (b) any further sums which the Contractor considers to be due, and (c) Not Used The Engineer shall certify payment under Clause 11.4.
37.	Clause-11.8, Vol-2, Page-GCC/60	Application for Final Payment Certificate Not later than 56 days after the issue of the Performance Certificate, the Contractor shall submit to the Engineer six copies of a draft final statement with supporting documents showing in detail, in a form approved by the Engineer: (a) the value of all work done in accordance with the Contract, and (b) any further sums which the Contractor considers to be due to him under the Contract or otherwise. If the Engineer disagrees with or cannot verify any part of the draft final statement, the Contractor shall submit such further information as the Engineer may reasonably require and shall make changes in the draft as may be agreed between them. The Contractor shall then prepare and submit to the Engineer the Final Statement as agreed. If, following discussions between the Engineer and the Contractor and any changes to the draft final statement which may be agreed between them, it becomes evident that a dispute exists, the	Application for Final Payment Certificate Not later than 56 days after the issue of the Performance Certificate, the Contractor shall submit to the Engineer six copies of a draft final statement with supporting documents showing in detail, in a form approved by the Engineer: (a) the value of all work done in accordance with the Contract, and (b) Not Used If the Engineer disagrees with or cannot verify any part of the draft final statement, the Contractor shall submit such further information as the Engineer may reasonably require and shall make changes in the draft as may be agreed between them. The Contractor shall then prepare and submit to the Engineer the Final Statement as agreed. If, following discussions between the Engineer and the Contractor and any changes to the draft final statement which may be agreed between them, it becomes evident that a dispute exists, the Employer shall pay those parts of the draft final statement as certified by the Engineer as not

SL NO.	Reference Clause	Original Clause	Addendum Clause
		Employer shall pay those parts of the draft final statement as certified by the Engineer as not being in dispute. The remainder of the dispute may then be resolved under Clause 17, in which case the Contractor shall then prepare and submit to the Engineer a Final Statement in accordance with the outcome of the dispute.	being in dispute. The remainder of the dispute may then be resolved under Clause17, in which case the Contractor shall then prepare and submit to the Engineer a Final Statement in accordance with the outcome of the dispute.

Prosenjit Chakraborty
Chief Electrical Engineer, KMRCL

