

**Minutes of the Pre-EOI Conference held on 14.7.2015 for the EOI –“Cost effective & durable washable apron (ballastless) for use on passenger platform on Indian Railway’s network for speed prevailing on its system”**

A pre-EOI conference has been held at RDSO on 14.7.2015 for interaction with prospective firms for the Global EOI on ‘Development *of a cost effective & durable washable apron (ballastless) for use on passenger platform on Indian Railway’s network for speed prevailing on its system*’ which has been published in 3<sup>rd</sup> week of June 2015 with last date of submission of offer as 21.08.2015. This pre-EOI conference has been attended by following representative(s) of the following 6 firms:

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|--------------------------|---|---|
| 1. Mr. Joyjeet Basu      | - | M/s Nagori Innovative Arts Pvt. Ltd., Kanpur  |
| 2. Mr. Dharampal         | - | M/s Anurag PMC, Hyderabad                     |
| 3. Mr. Suraj Prakash     | - | M/s Star Track Fasteners Pvt. Ltd., Sonapat   |
| 4. Mr. Pradeep Khaitan   | - | M/s Rahee Infratech. Ltd., Kolkata            |
| 5. Mr. Mallikarjun Gowda | - | M/s Patil Rail Infrastructure Ltd., Hyderabad |
| 6. Mr. D. Chattopadhyai  | - | M/s PCM Group of Industries, Siliguri         |
| 7. Mr. Ashok Agarwal     | - | M/s PCM Group of Industries, Siliguri         |

1. At the outset, purpose of the EOI was explained by ED/Track-II/RDSO that earlier EOI for design of washable apron was with requirement of line block of one/two weeks but the present EOI is for development of ballastless washable apron without any block time limit and for full speed of 160kmph which is likely to be introduced on IR on some identified routes sooner or later. Though no limit, but it would be preferable that construction time is as optimized as feasible.
2. It was explained that firms should submit break- up cost of every item / activity in detail as much as possible so that different systems can be compared at par in regard to cost of various items / activities.
3. Cost of rails should not be included in the budgetary cost.
4. Firms should provide cost of dismantling existing coach dewatering system & its re-installation cost separately as they may be applicable in certain cases.
5. System should be designed with good drainage condition for a typical Indian station condition. For this firms are advised to visit a platform & existing washable apron of a major busy station to study the washing requirement of garbage/droppings on the washable apron.
6. For drainage purposed cost of only one side drain is to be provided in the offer. The cost of other drainage improvement works, if considered necessary be provided separately.

In addition to above, representatives of the firms raised certain queries and sought clarifications on the EOI which were replied by RDSO. Details of queries and replies given are as under:

S. No.	(Firm) & Query	RDSO’s reply
1.	(M/s PCM) Length of platform to be taken for costing as mould cost will have	In the EOI, typical length of washable apron has been mentioned as 800m. But, as , platform length varies from 500 to 800 m, budgetary cost should be

	effect total construction cost of washable apron of different lengths.	given per meter length basis.
2.	(M/s PCM) Whether Ground Treatment cost is to included in total budgetary cost.	In case of marshy ground, dewatering of entire area & ground improvement may be required if bearing capacity of subsoil is less than 10 ton/sqm. Cost of such ground treatment should be given separately.
3.	(M/s PCM) Whether washable apron design is required for straight or curve track.	It was explained that as most of the washable apron is on straight track, design of washable apron is to be given for straight track.
4.	(M/s PCM & M/s Anurag) Whether transition system is required and cost to be given for transition system.	Design of transition system should also be given in detail. Cost of transition system should be given separately. Firms should also indicate the minimum speed above which transition system is necessary to be provided for their design of washable apron.
5.	(M/s PCM) Whether use of Indian fastening system is necessary?	It was explained that proposed system can be with either Indian or foreign based fastening systems ,However easy availability of fastening components should be ensured for replacement during maintenance/repair. Separate cost of fastening components should be given vis-a-vis cost difference with Indian fastening system.
6.	(M/s) Rahee Any limitation on height of washable apron and change in rail level is permitted?	It was explained that existing rail level is sacrosanct as per SOD. Base level should be fixed based on type of ground treatment required including height of BLT design.
7.	(M/s Rahee) Whether dismantling of existing track is included in the work.	It was explained that construction of new washable apron as per proposed design may require dismantling of existing washable apron or existing ballasted track in some cases. Firm should give separate cost for both type of dismantling.
8.	(M/s Rahee) Sought clarification on Footnote of Selection Criteria (Annexure – A Item 4).	RDSO clarified that for proposals submitted jointly with 2 or more firms, expertise of partner firms in specific field viz. fastening etc. will carry weight age for selection of proposals.
9.	(M/s Rahee) As per Item 2 (iii) of Annex.-D, whether firm should have design experience of washable apron design for axle load of 25 T at 160 kmph? Whether same firm should have experience in design and construction both?	It was clarified the washable apron should be fit for 25T axle load for freight trains which may not run at 160 kmph. But the same design should also fit for running of passenger trains at 160 kmph.  The designer firm need not to necessarily have expertise in construction but the designer then should offer supervision of the construction so that quality aspects are taken care during construction stage.
10	(M/s Patil) Type of fastening system has not been mentioned in the EOI.	It was explained that proposed fastening system should meet the performance criteria as per relevant code with satisfactory performance. Cost of fastening components should be mentioned separately.

11.	(M/s Rahee) Whether Transfer of Technology is necessary?	No undertaking is required for Transfer of Technology. TOT is not mandatory but optional. However, TOT is normally required in future after successful trial of the proposed design for the purpose of wider application of the successful design. For this reason, cost of TOT & terms and conditions may also be given along with proposal separately.
12.	(M/s Rahee) EOI mention that proposed design should not be copy of RDSO design. This requires study of RDSO design by firms.	It was clarified that to avoid copy of RDSO design, firm needs to stick to their original design and needs to give an undertaking about originality of their design. Idea is to discourage copied design and to get original designs.
13.	(M/s Rahee) Whether some fastening arrangement is compulsory in the BLT washable apron as fastening is not required in case of embedded rail system.	It was explained that purpose of fastening system is to fasten the rails with the base structure. Fastenings do exist in BLT in some form or other. Embedded rail system also has different fastening different from that of conventional sleeper. In case of special fastening system, detail technical note needs to be given explaining fastening mechanism and stress generated in rail, base structure etc.
14.	(M/s Rahee) Testing scheme for 25T has not been mentioned in EOI.	Design should be based on various standard code of practice being followed by advance railway systems viz. EN, DIN, AREMA, Australian Code, Other codes can also be used if these are prevalent specifications / standards.
15.	(M/s Rahee) Why washable apron is to be designed for flooding condition?	Flooding condition can also be there mostly in suburban areas especially in Monsoon season, hence washable apron should be able to sustain under flooding / water-logged condition.