

**Government of India
Ministry of Railways
(Railway Board)**

No. 2006/TGIV/39/21/EOI

New Delhi, dated 1.06.07

The General Manager,
Northern Railway,
New Delhi.

(Commercial Circular No. 53 of 2007)

Sub: On board audio/video information dissemination and entertainment system on Shatabdi Express trains

The proposal for on-board audio/video information dissemination and entertainment system has been under consideration in Board. Expression of Interest (EOI) was invited from the firms/companies with a view to select a party to install such a system on Shatabdi and Jan Shatabdi Express trains (copy enclosed).

In response to the EOI, six applications were received (enclosed in original). Board constituted a committee to evaluate the offers received. Recommendations of the Committee have been accepted by Board & following guidelines are issued for installation of the system on Shatabdi trains.

- a) Broadly there are three basic features for on-board entertainment system viz. networking & communication, hardware and commercial marketing which the parties installing the system should possess.
- b) The parties installing the system will derive commercial gain not only through advertisements but also by providing value added services to rail users such as internet & voice service, satellite radio, booking of hotels, cabs etc.
- c) Flat, rugged and aesthetic anodized aluminum enclosures can be used for the safety of plasma TVs and other costly equipments to prevent theft. It is also possible to use 4 mm polycarbonate front cover to prevent vandalism.
- d) Variety of mounting options can be used to allow versatility in installation.
- e) 15", 17" 19" & 23" display options are available for use with wire/wireless technology.
- f) It is feasible to install display systems behind the Executive Class seats in place of breakfast tray in all the seats except the first row, where the screen can be mounted on the front wall.
 - i) Breakfast tray can be re-positioned at the same height & place with 'pull up and open mechanism'.
 - ii) Provision of water bottle & magazine holder can be made at suitable locations on the chair itself.
 - iii) Each seat can have a provision for housing the jack connection for head phones preferably near the seats' reclining handle.

- iv) Wiring can pass through the standard wire route on the side wall panel of the coach. There can be a jack mechanism from side wall to each seat. It can then pass through the square metal frame of each seat. Under no circumstances the aesthetic look of the interior of the coach should be compromised.
- g) For the Chair Car coaches:
 - i) Display system can be installed as under
 - (a) Two wall mounted display systems for the four front rows.
 - (b) Six roof mounted display systems to cover three rows each.
 - ii) Each seat can have a provision for housing the jack connection for head phones preferably near the seat adjustment handle and wiring can pass as in the case of executive class seats
 - iii) As there are various types of CC coaches, the system to be installed should be based on ergonomics, aesthetic design, convenient to use and be complaint free from users as well as from fellow passengers.
- h) A central control system in the power car can be installed or servers can be installed in each coach. Both the options may be incorporated in the technical bid.
- i) Jan Shatabdis may not be covered under the scope of the project.
- j) Instead of wireless technology proposed in the EOI, the firms may also be given the option for installation of the system with wiring for headphones.
- k) Instead of live TV programmes, the firms may set up their own ground stations for transferring data to the trains for telecasting live programmes with a minimum time lag for news updates, films, train information, advertisement etc.
- l) Five firms which fulfill the financial and technical criteria mentioned in the EOI have been shortlisted. These firms are:
 - i) M/s Kevin Infotech Pvt. Ltd. in consortium with M/s Focon Electronics Ltd.
 - ii) M/s Adlabs Films Ltd. in consortium with M/s Reliance Infocomm Ltd.
 - iii) M/s Nikhil Foot wears Pvt Ltd.
 - iv) M/s SES Technologies Ltd.
 - v) * M/s Autometers Alliance Ltd. (AAL) with M/s Whiteley Electronics Ltd (UK)

* Subject to submission of financial statement of M/s Whiteley Electronics Ltd for the period 05-06 duly fulfilling the required turnover criteria laid down in EOI and MoU for forming consortium with lead firm M/s Auto Alliance Ltd for this project.

Northern Railway may, however, re-examine the technical & financial details submitted by the above firms to ensure that the above firms fulfill the laid down criteria before inviting tenders.

- m) Tenders may be invited from these firms under a two packet system. The two packet system will have following broad components:
 - a. **Packet A:** Tender conditions containing the technical details such as:

- i) Project plan giving details of hardware such as type & size of display monitors, servers, type of headphones, type & quality of wiring, exact location of installation of equipments etc., type of coupling & connectors, modifications to chairs etc in both executive & CC coaches .
 - ii) Type of Technology offered for Networking & Communication.
 - iii) Connectivity with base stations etc. for displaying current status of train running & other passenger related information.
 - i) Marketing plan
 - ii) Additional services offered in addition to the scope in the EOI.
 - iii) Schematic diagram for installation of the system.
 - vii) Schedule of implementation.
 - viii) Entertainment/infotainment/advertisement module / facilities for on-board announcement.
 - ix) Security features of the installed equipments, insurance cover of the equipments & on board management of the system.
 - x) Maintenance schedule.
 - xi) Any other feature
 - b) **Packet B:** Financial bid containing the annual license fee payable for 5 years on yearly basis.
 - c) Contract Period will be of 5 years only.
 - d) The tender conditions may be firmed up after interaction with the firms and input from the Mechanical, Telecom & Electrical departments.
- n) Northern Railway may invite the tenders from the short-listed firms. Contract may be awarded for all the trains to the successful bidder. However, at the first instance the successful bidder should be asked to install the system on one train of Northern Railway and run it successfully as the system requires testing and feedback. On successful implementation, the contractor/ firm may be permitted to install the system on other Shatabdis. After awarding the contract, the respective zones/division carrying out the primary maintenance of Shatabdi trains should execute the agreement with the firm. The field level coordination with private operator for implementation should be done by the concerned Coaching Depot Incharge where the train is based for primary maintenance as the same will have direct interface with coach running and maintenance.
- o) The work of initial installation of the system and modification to seats, interior of the coaches, wiring etc. shall be carried out by the successful bidder in a minimum time frame in a planned cyclic manner utilizing the spare coaches.
- p) The electrical supply to LCD/Plasma monitor, audio system etc. should be operated at 110 V AC through a separate 415/110 Volt step down transformer. The transformer provided for complete system should be preferably under slung.
- q) The contractor will indicate total electrical load requirement per coach in their offer and cost of upgradation of power supply will be borne by the party.

- r) Provision of step down transformer, wiring in underframe and inside the coach and any other augmentation/modification necessary in electrical supply system will be in the scope of the contract. It shall be ensured by the contractor that all cables should run in proper conduit to ensure proper protection of cables.
- s) The contractor will also submit complete wiring diagram and complete electrical arrangement in their offer. The same should be approved by RDSO before doing necessary modification in existing coach. For provision of such arrangement in new coaches the complete electrical scheme should be approved by ICF/RCF.
- t) Roof mounted arrangement for the monitors, as proposed in AC Chair Car will have to be designed for required strength and the design will have to be either done by RDSO or approved by RDSO.
- u) It may be indicated clearly in the tender conditions that the contractor will bear the cost of complete modification work including the cost of upgradation of power supply, provision of transformer, wiring, any other modification necessary in electrical supply etc. involved in installation of the system and the electrical equipments and accessories may be procured from RDSO/PUs approved sources only. After completion of the contract period, the coaches should be restored to their original condition at the cost of the party
- v) The contractor should follow the code of practice of fire prevention for AC coaches issued by RDSO while doing necessary electrical works in the coach.

Railway may take necessary action to implement the on board audio/video information dissemination and entertainment system on the Shatabdi trains.

Please acknowledge receipt

(Ravinesh Kumar)
Director Traffic Commercial (G)
Railway Board

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- 1. FA&CAO, Northern Railway, New Delhi.
- 2. Director (Audit), Northern Railway, New Delhi

for Financial Commissioner, Railways

