

No.IV-17017/13/06-Prov.I
Ministry of Home Affairs

New Delhi , Dated 07.07.2006

To

The DGs: Assam
Rifles/BSF/CISF/CRPF/ITBP/NSG/SSB/BPR&D.

Subject: Finalization of QRs/Specifications for Weaponry/Security
Equipments

The committee comprising representatives from CRPF, BSF, CISF, NSG, SSB and ITBP held meeting on 09.03.2006, 10.05.2006 & 22.05.2006 under the chairmanship of DG-BPR&D and finalized the QRs of bodies in respect of the following Bus/Trucks for medium/heavy vehicles:-

- (a) LONG CHASSIS (BUS)
- (b) SHORT CHASSIS (MINI BUS)
- (c) TRUCK CHASSIS
- (d) AMBULANCE
- (e) WATER TANKER (6 KL/9KL)
- (f) TRUCK CHASSIS ONE TONNE (WINDOW GRILLE TYPE/CANVAS TOP)

2. These recommendations have been accepted by MHA. The QRs finalized by the above said committee and accepted by MHA in respect of the above equipments are enclosed herewith.

3. Henceforth, all the CPMFs should procure the above items required by them to meet their operational needs strictly as per the laid down QRs/specifications.

Yours faithfully,

Alok
(Alok Mukhopadhyay)
Under Secretary(Prov.I)

Copy to : DD(Procurement), MHA

- Copy for information to:
1. PS to JS(PM), MHA
 2. Dir(Prov), MHA

ANNEXURE B

QUALITATIVE REQUIREMENTS FOR BUS SHORT CHASSIS (MINI-BUS BODY)

1. C.R.C. STRUCTURE : The body frame construction would be done by using hollow square tubular section based on beam theory. Side structure welded with box type cross bearers to take divided load of body, which is mounted upon chassis framed by "U" clamps bolts with sunken type nuts. Roof frame construction would be done by using hat section.
2. EXTERNAL PANELING : Side panel would be provided with 1.00 mm thick Galvanised Iron one-piece rolled sheet prior to fitment.
3. INTERIOR TRIM : Interior Roof and Side panels will be of 6mm ply wood and POLY VINYL CHLORIDE (PVC) coated Galvanized Iron sheet
4. INSULATION : Suitable insulation material would be provided in both sides and roof between the exterior and interior. Special sound deadner pads will be used to reduce noise pollution.
5. FLOORING : The entire flooring would be in two layers i.e. in the bottom, covered by 12mm thick WATERPROOF PLYWOOD of good quality and finally the same should be finished with Chequered Plate AL 2.00 MM thick .

The floor would be fastened to the under frame members with step edge beading fixed with countersunk screws and nuts. The entire flooring would be dust, sound and leak proof.
6. SEATS : GANGWAY WIDTH: 355mm Approx.
Standard ABTS wall/floor mounted Passenger seats would be provided; Seating arrangements would be 2x2.
Seat pitch: as per layout attached.
The seats would be ergonomically designed to blend comfort with efficiency.
7. DOORS : A JK (Jack Knife) type Manual operated passenger door shall be provided. Pneumatic/ Power door operated by the driver through push button.
8. LUGGAGE BOOTH : The rear dickey box would be provided at the rear end of the body using maximum available space of length and width, which will be dust and leak proof. Vinyl mat to be provided inside the luggage boot.
9. HATRACK : A light luggage hat rack would be provided inside the passenger's saloon both sides.
10. DRIVER'S CABIN : Original factory built driver's cabin with standard fitments.
11. WINDSCREEN GLASS : The front windscreen would be a one-piece laminated

- curved glass would provide a neat ground clearance.
12. WIPERS : Heavy-duty pneumatic parallel movement with twin long blades on each side to be operated electrically.
 13. CURTAINS : A new style curtain fitment provisions would be made. The inside of the passenger saloon would exude a sober ambience.
 14. AERO-DYNAMIC FEATURES : The coach would have aerodynamic design so as to reduce air drag and to improve fuel economy.
 15. WINDOW GLASSES : Good quality and approved glasses, light green tinted toughened glass of reputed make. These glasses should have lock-cum-handle and sweep rubber fitted on an aluminium extrusion. The general window layout of the site will be one third fixed and two third sliding or as desired.
 16. FANS : Coach fans would be provided on every pillar in the saloon.
 17. PAINTING :
 - a) Complete structure is given protection coating to withstand corrosion.
 - b) All sheet metal component joints with structure would be sealed with forced drying non-cracking POLY VINYL CHLORIDE (PVC) sealants.
 - c) Special PU Paints (Dupont) should be used. Basic coating of itching priming to Galvanized and aluminium components to be given before painting.
 - d) Colour scheme as per user approvals.
 - e) Poly urithene baked paint system would be used.
 18. LUGGAGE CARRIER : Luggage carrier would be provided on the roof and most modern detachable staircase will be fitted.
 19. BONNET INSULATION : The bonnet will be insulated with sound deadner pads to reduce noise pollution in the driver cabin.
 20. FRONT AND REAR BUMPER : The bumpers should be curved out of 3mm to 4mm thick FRP and should be of most modern design.
 21. EXTERNAL ROOF : This is to be of 1mm thick rolled Galvanised Iron Sheet.
 22. FRONT SHOW : Elegant looking front show in Fibre Reinforced Plastic (FRP) material.
 23. CROSS BEARERS : Box type design for better stability and lower Centre of Gravity of the vehicle should be done.
 24. EMERGENCY DOOR : Manually operated with indicator

Construction details as per drawing enclosed

- Structure : Pre-Treated Cold Rolled Cast (CRC) tubular & Roll
 Hat : Sections .
- External paneling : Upper Stretched panel 1.0 mm thick
 Galvanized Sheet & 2.0mm thick
 Aluminum Skirt panels.

Front and rear bumpers	:	3mm to 4mm thick Fibre Reinforced Panel.
External roof	:	1mm thick GALVANISED IRON sheet
<u>Interior:</u>		
Internal side panelling	:	6.0 mm Ply wood & 0.7mm Galvanised Iron POLY VINYL CHLORIDE (PVC) Laminated Sheet.
Roof paneling	:	Ply. Wood & Galvanised Iron laminated sheet.
Floor	:	Aluminum Chequered plate 1.6mm, 12mm Waterproof plywood.
Passenger door	:	Center door JK (Jack Knife) Pneumatic/ Power door operated by the driver through push button.

Standard features:

1. Curtains.
2. Fully adjustable driver seat.
3. Heavy duty wash & wipe system.
4. Fire extinguisher.
5. Fog lamps.
6. Wheel caps.
7. Sunvisor.
8. Fans.
9. Hat racks.
10. Emergency exit door manually operated
11. First Aid Box
12. Toilet (in lieu of 4 seats in 2X2)

Optionals features:

1. Driver partition.
2. A.C. provision.
3. Luggage carrier.
4. Tinted glass.
5. TV VCR provision

Additional Fitment

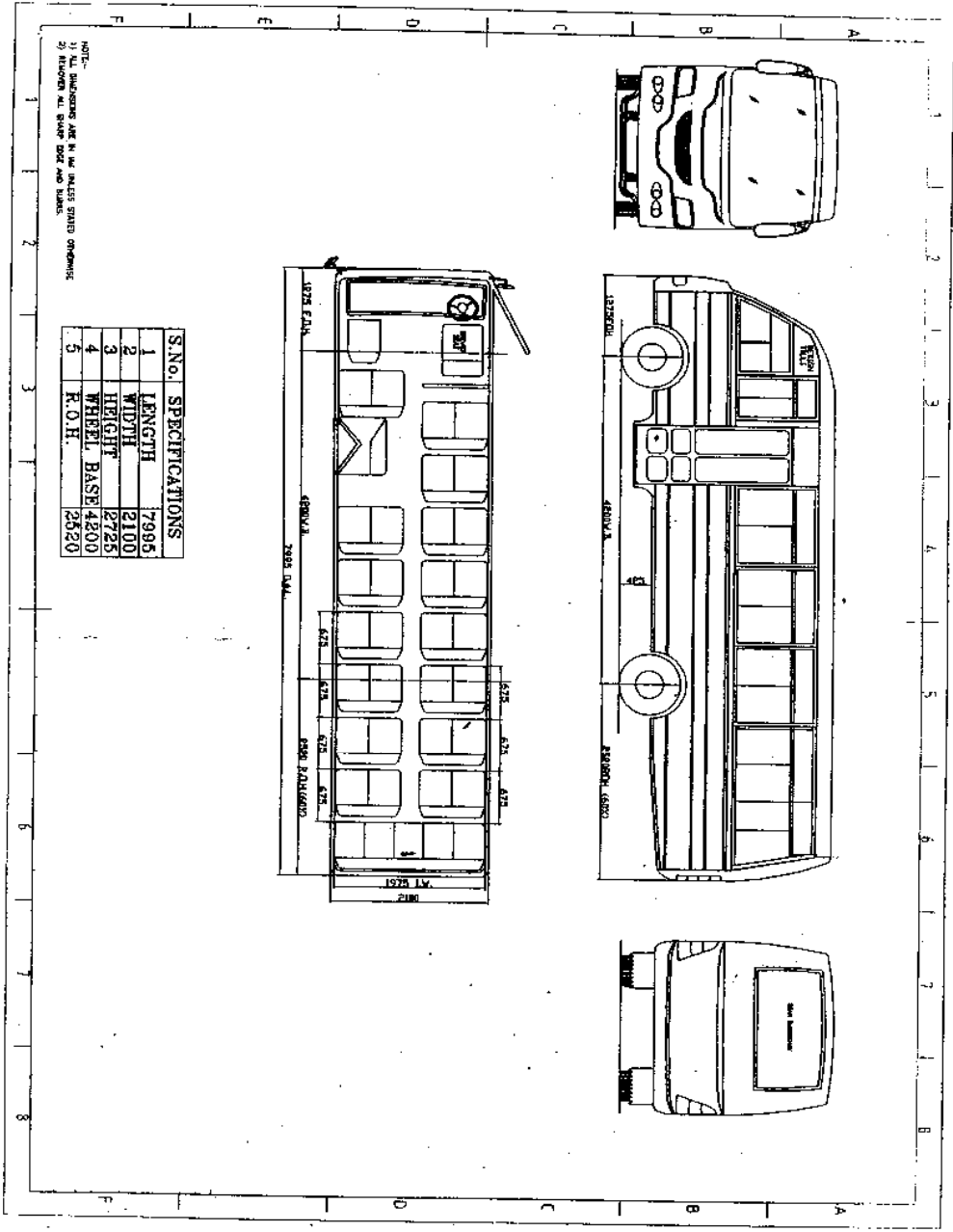
1. **Music** : One music system with FM facility with 4x2 speakers located in front and rear of bus body should be provided.
2. **Electric Buzzer**: One electric Buzzer located near the seat of driver and operated by at least four push buttons placed at suitable locations in passenger compartments should be provided.
3. **Drinking water**: A stainless steel drinking water of capacity 25 litres with tap and turn lock.
4. **Indicator space**: Prominent indicator space above the windshield should be provided to indicate destination or name of the Service.
5. **Bell Switch** : A bell switch positioned next to the door for prompting the driver to Stop the vehicle should be provided.

6. **Document Box:** A vehicle document box should be provided.
7. **Luggage cover:** Tarpaulin sheet to cover the roof luggage carrier.
8. **Parking:** The vehicle should have two parking chucks.

Modification for high altitude

1. Hot air blowers for body space heating .
2. Insulated water tank.
3. Windscreen defogger blower.
4. Electrical sump heater.
5. Antiskid chains & provision for fitment.
6. Radiator thermal bypass valve.

NOTE: Construction should be as per layout enclosed for details



MINUTES OF THE MEETING

MHA vide their U O note IV-17017/60/05-Prov.I dated 24-2-2006 has constituted a technical committee "Constitution of a Technical Committee for framing the QRs of bodies/bus/truck on medium and heavy category vehicle" of the following composition:

- | | | |
|----|-------------------------|----------|
| 1. | Director General, BPR&D | Chairman |
| 2. | ADIG(TPT), BSF. | |
| 3. | ADIG(MT), CRPF. | |
| 4. | DIG(Prov) ITBP. | |
| 5. | DIG(Adm), SSB. | |
| 6. | SSO (E), BPR&D. | Convener |

This final meeting of the committee was held in BPR&D Conference Hall on 22.5.2006 at 1100 hrs, Chaired by DG, BPR&D. The following officers/experts from CPMFs attended

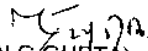
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|-----|---|
| I | Shri P. S. Sahrawat ADIG (Provisioning), CRPF, HQ |
| II | Shri L. M Dabral, Dy. Comdt. BSF |
| III | Shri N G Gupta, AIG(Prov), CISF |
| III | Shri G R Marwaha, SSB |
| IV | MAJ. Sunil Kaushik, NSG |
| V | Shri Manish Kumar, Dy. Comdt, ITBP |
| VI | Mrs Vanita Yadav, SSO |

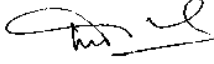
Shri R. C. Arora, Director (R&D) and Shri Sanjay Baniwal, Dy Dir (Dev) of BPR&D assisted the committee during their deliberations.

On the basis of detailed deliberations held in respect of each parameter, QRs were finalized for the following types of vehicles:-

- | | |
|----|--|
| A. | 6/9 KL WATER TANKER |
| B. | MINI BUS (SHORT CHASSIS) |
| C. | STANDARD BUS (LONG CHASSIS) |
| D. | HEAVY TRUCK |
| E. | TRUCK ONE TONNE (WINDOW GRILL TYPE/CANVAS TOP) |
| F. | AMBULANCE |


Agreed upon Qualitative Requirements are enclosed at Annexures A to F.


(N.G. GUPTA)
AIG (Prov) CISF



(L M DABRAL)
Dy. Comdt. BSF


(MANISH KUMAR)
Dy. Comdt. ITBP


(P-B SAHRAWAT)
ADIGP, CRPF


(MAJ. SUNIL KAUSHIK)
NSG


(G R MARWAHA)
SSB


(R C ARORA)
IG/BPR&D


(SANJAY BANIWAL)
DIG/DD, BPR&D


(VANITA YADAV)
SSO (E)


(N C JOSHI)
DG/BPR&D
CHAIRMAN