



**General Bid Bulletin No. 9**  
**29 January 2021**

**IFB No. PB20-023-4**

**THE MALOLOS-CLARK RAILWAY PROJECT**  
**AND THE**  
**NORTH-SOUTH COMMUTER RAILWAY EXTENSION (NSCR-EX) PROJECT**  
**PACKAGE CP NS-02: ROLLING STOCK COMMUTER TRAINSETS**

**TO ALL PROSPECTIVE BIDDERS:**

This General Bid Bulletin is issued to amend/clarify certain provisions in the Bidding Documents for the abovementioned project. Please refer to the attached Annexes of this General Bid Bulletin duly approved by the end-user and co-implementer for details:

1. Annex "A" – **Answers to Queries from Prospective Bidders including Clarifications to the Bidding Documents;**
2. Annex "B" – **Revisions to the Bidding Documents**

All other portions of the Bidding Documents affected by these revisions, amendments and/or clarifications shall be made to conform to the same.

Revisions/amendments/clarifications made herein shall be considered an integral part of the Bidding Documents for this project.

For your information and guidance.

For the Bids and Awards Committee IV:

SIGNATURE REDACTED

**JOSEPH CONRAD D DUEÑAS**  
*Chairperson*

**MEMORANDUM:**

**TO :** THE CHAIRMAN AND MEMBERS  
Bids and Awards Committee IV

**THRU :** THE BAC SECRETARIAT

**FROM :** THE JOINT TECHNICAL WORKING GROUP (TWG) FOR CONTRACT  
PACKAGE NS-02

**SUBJECT :** GENERAL BID BULLETIN NO. 9

**DATE :** 27<sup>th</sup> January 2021

This Memorandum serves as an endorsement of the contents and attachments<sup>1</sup> of General Bid Bulletin No. 9, as prepared and recommended by the tender assistant, GCR Consortium, and endorsed by the Joint Technical Working Group (TWG) for Contract Package NS-02: Rolling Stock – Commuter Trainsets.

The TWG is respectfully submitting the contents of General Bid Bulletin No. 9, for the BAC's review and approval.

Respectfully Submitted By:

SIGNATURE REDACTED

**ENGR. NARCISO PRECLARO JR.**  
Primary Member

SIGNATURE REDACTED

**ATTY. CRESIELDA ECALNEA**  
Primary Member

SIGNATURE REDACTED

**MR. ROMMEL RIVERA**  
Primary Member

SIGNATURE REDACTED

**ENGR. ALFONSO ANDALEON**  
Primary Member

SIGNATURE REDACTED

**ENGR. WARREN ZINGAPAN**  
Primary Member

SIGNATURE REDACTED

**MR. WAN KHAIRUL ANUAR**  
Representative,  
Greater Capital Railway,  
Member

<sup>1</sup> Annex A and B, including its attachment, for GBB9 are attached to this Memorandum

# Annex A

# PACKAGE CP NS-02: ROLLING STOCK COMMUTER TRAINSETS

## General Bid Bulletin No. 9

### Annex A

Item No.	Volume Section No. Page No. Clause No. / Title Reference Text	Clarification Request	Proposed Revised Text (if any)	Response
1.	Volume I Part I Section VI BF-42 and BF-43 Schedule 1.4: Transportation, On-Site Assembling and Testing	<p>According to Item No. 2 of Annex B, GBB 8, requirement is revised that 1,500 km FFR shall be achieved during Integrated Testing and Commissioning, which was originally written as not ITC but Trial Operations. Following this instruction, Bidder would like to suggest to amend the Milestone No. 409 and relevant No.401 in Schedule 1.4 of Price Schedule as follows.</p> <p>Milestone No. 409: Completion of Integrated Testing and Commissioning, including 1500 km Fault Free Running for all 38 trainsets.</p> <p>Milestone No. 401: Transportation from the port of arrival to a designated Depot, assembling of the 1st to 5th trainsets of 8 cars, completion of the Site Acceptance</p>		<p>Milestone No.401 and No. 409 were amended.</p> <p>Addendum is issued. Please refer to the Annex B Attachment 1.</p>

# PACKAGE CP NS-02: ROLLING STOCK COMMUTER TRAINSETS

## General Bid Bulletin No. 9

### Annex A

Item No.	Volume Section No. Page No. Clause No. / Title Reference Text	Clarification Request	Proposed Revised Text (if any)	Response
		Tests and completion of all On-Site Testing and Commissioning and acceptance thereof by the Engineer - (total of 5 trainsets)		
2.	Volume II, Part 2, Section VI ERG-49 8.3 Performance Reports	According to Item No. 2 of Annex B, GBB 8, requirement is revised that 1,500 km FFR shall be achieved during Integrated Testing and Commissioning, which was originally written as not ITC but Trial Operations. Following this instruction, Bidder would like to suggest to amend d of Sub-Clause 8.3.2 of ERG as follows. "Individual train set FFR Integrated Testing and Commissioning performance".		Clause 8.3.2 item d amended to follow the bidder request.  Addendum is issued. Please refer to the Annex B Attachment 1.
3.	Volume II, Part II, Section VI ERT-4 1.2.8 Mock-up	1. It is Bidder's understanding that the mock-up stated in GBB No.8 Annex B Item No.5 as the amendment of Sub-clause 1.2.8.4 of ERT is an additional mock-up and is a separate one from mock-		1. Bidder understanding on additional scope for the mockup is not correct. The scope for the mockup are: 2 full scale, fully equipped driver`s cab and saloon mock-up with 10m length.

# PACKAGE CP NS-02: ROLLING STOCK COMMUTER TRAINSETS

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### Annex A

Item No.	Volume Section No. Page No. Clause No. / Title Reference Text	Clarification Request	Proposed Revised Text (if any)	Response
		<p>ups mentioned in Sub-clause 1.2.8.1, 1.2.8.2, and 1.2.8.3 of ERT. Thus, Bidder shall provide two "full size, fully equipped driver's cab and saloon mock-ups" and one "full-sized generic mock-up of half a car". Please confirm if Bidder's understanding is correct.</p> <p>2. GBB No.8 Annex B Item No.5 as the amendment of Sub-clause 1.2.8.4 of ERT states "The mock-up shall be delivered to the site on Q1 2022." However, it is difficult to fulfill this requirement since the Commencement Date is not determined, and time to prepare mock-up will change significantly depending on when Commencement Date will be. Based on our experience on mock-ups for past projects, the mock-up may be delivered to the site 12 months after</p>		<p>1 full sized generic mockup of half-length car. Clause 1.2.8.1 has been revised to update the wording on the mockup size.</p> <p>Addendum is issued. Please refer to Annex B Attachment 1.</p> <p>2. Bidder request is rejected. The details of mockup delivery can be discussed during contract negotiation.</p> <p>Referring to the bidder request for 7-meter length of the mockup for 10 months delivery period, it is possible to explore the option during the contract negotiation.</p> <p>No change will be done to the clause.</p>

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**Annex A**

<b>Item No.</b>	<b>Volume Section No. Page No. Clause No. / Title Reference Text</b>	<b>Clarification Request</b>	<b>Proposed Revised Text (if any)</b>	<b>Response</b>
		<p>Commencement Date. Therefore, Bidder would like Employer to revise the last sentence of Sub-clause 1.2.8.4 of ERT to "The mock-up shall be delivered to the site by 12 months from Commencement Date". Also, for reference Bidder may deliver mock-up by 10 months from Commencement Date if the length of the mock-up can be approximately seven (7) meters.</p> <p>3. It is Bidder's understanding that the condition of mock-ups' location stated in Employer's response in GBB No.8 Annex A Item No.1 also applies to the mock-up stated in Sub-clause 1.2.8.4 of ERT. Please confirm if Bidder's understanding is correct.</p>		<p>3. Bidder understanding is correct.</p>

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**Annex A**

<b>Item No.</b>	<b>Volume Section No. Page No. Clause No. / Title Reference Text</b>	<b>Clarification Request</b>	<b>Proposed Revised Text (if any)</b>	<b>Response</b>
4.	Volume II, Part II, Section VI ERT-54 7.3 Passenger Door, Operators and Controls	Sub-clause 7.3.7 of ERT states "Detection of small objects, hands, clothes shall be detected by sensitive edge door devices." It is Bidder's understanding that mechanism of "sensitive edge door device" is as follows. The device can detect opened/closed status from the stroke of		The bidder understanding is correct. In the event of an obstacle is detected by the door during the closure, the door mechanism will not proceed closing and re-open again.



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**Annex A**

<b>Item No.</b>	<b>Volume Section No. Page No. Clause No. / Title Reference Text</b>	<b>Clarification Request</b>	<b>Proposed Revised Text (if any)</b>	<b>Response</b>
		the door. If a object is caught in the door, the door actuator will detect it and notify the door control software. Bidder would like to confirm if the above understanding is correct. In addition, the above is service-proven design in Japan, and realized safety is well guaranteed.		
5.	Volume II, Part II, Section VI ERT-5 1.5 Route Data	It is Bidder's understanding that both rolling stock provided by the CP NS-02 contractor and the CP03 contractor will run with the same trainset operational scheduling on all of the following lines: Malolos-Clark Railway Project (MCRP), North South Commuter Railway Project (NSCR), and North South Railway Project-South Line (NSRP-South). Please confirm if Bidder's understanding is correct. If not, Bidder would like to know basic concept how such difference of		Bidder understanding is correct. Both CP NS-02 and CP 03 rolling stock will run in the same alignment and will have the same operational scheduling ultimately once the whole alignment open for revenue service.

**PACKAGE CP NS-02: ROLLING STOCK COMMUTER TRAINSETS**

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**Annex A**

<b>Item No.</b>	<b>Volume Section No. Page No. Clause No. / Title Reference Text</b>	<b>Clarification Request</b>	<b>Proposed Revised Text (if any)</b>	<b>Response</b>
		trainset operational scheduling will be made in order to confirm influence on the project.		

# Annex B

**PACKAGE CP NS-02: ROLLING STOCK COMMUTER TRAINSETS**  
**General Bid Bulletin No. 9**  
**Annex B**

ITEM NO.	REFERENCE/CLAUSE/ SECTION	REVISIONS / AMENDMENTS
<b>Volume I. Part 1 – Bidding Procedures</b>		
1.	Page BF-42 Schedule 1.4: Transportation, On-Site Assembling and Testing	<u>Revised milestone 401 for the following:</u>  Transportation from the port of arrival to a designated Depot, assembling of the 1st to 5th trainsets of 8 cars, completion of all On-Site Testing and Commissioning, and acceptance thereof by the Engineer - (total of 5 trainsets).
2.	Page BF-42 Schedule 1.4: Transportation, On-Site Assembling and Testing	<u>Revised milestone 409 for the following:</u>  Completion of Integrated Testing and Commissioning, comprising 1500 km Fault Free Running for all 38 trainsets.

**PACKAGE CP NS-02: ROLLING STOCK COMMUTER TRAINSETS**  
**General Bid Bulletin No. 9**  
**Annex B**

**Volume II. Part 2 – Employer Requirement**  
**Section VI**  
**1. Scope of Work**  
**2A) General Requirements (ERG)**  
**2B) Technical Requirements (ERT)**

ITEM NO.	REFERENCE/CLAUSE/SECTION	REVISIONS / AMENDMENTS
1.	Page ERG-49 Item 8.3.2 Item d.	<u>Revised item 8.3.2 with the following:</u>  d. Individual train set FFR Integrated Testing and Commissioning performance.
2.	Page ERT-4 Item 1.2.8.1	<u>Revised item 1.2.8.1 with the following:</u>  In order to evaluate the effectiveness of the driver's cab and saloon layout and function as specified in Sub-Clause 5.3 and 5.15 of the ERT, the Contractor shall develop the interior and exterior design of a full scale, fully equipped driver's cab and saloon mock-up. The driver' cab, saloon and exterior mock-up shall be fully equipped to show completely built interior and exterior condition. The entire design of the driver's cab, saloon and exterior shall be reviewed by the Engineer. The mock-up shall be strong enough to accommodate persons inside without the damage or deformation. It shall be constructed on a substantial platform, to facilitate transportation and to prevent damage (cracking) and distortion of the hardware.

# Annex B – Attachment 1

**Schedule 1.4 : Transportation, On-Site Assembling and Testing**

Milestone No.	Work Description (Milestone)	Unit	Quantity	Unit Rate/Price		Amount	
				Local	Foreign	Local	Foreign
401	Transportation from the port of arrival to a designated Depot, assembling of the 1st to 5th trainsets of 8 cars, completion of <del>the all On-Site Acceptance Tests and completion of all commissioning work</del> <u>Testing and Commissioning</u> , and acceptance thereof by the Engineer - (total of 5 trainsets).	sum	1				
402	Same as above but for the 6th to 10th trainsets of 8 cars - (total of 5 trainsets).	sum	1				
403	Same as above but for the 11th to 15th trainsets of 8 cars - (total of 5 trainsets).	sum	1				
404	Same as above but for the 16th to 20th trainsets of 8 cars - (total of 5 trainsets).	sum	1				
405	Same as above but for the 21st to 25th trainsets of 8 cars - (total of 5 trainsets).	sum	1				
406	Same as above but for the 26th to 30th trainsets of 8 cars - (total of 5 trainsets).	sum	1				
407	Same as above but for the 31st to 35th trainsets of 8 cars - (total of 5 trainsets).	sum	1				
408	Same as above but for the 36th to 38th trainsets of 8 cars - (total of 3 trainsets).	sum	1				
	(Payment for Milestones 401 to 408 above will be made upon completion of the transportation, on-Site assembling and testing of each trainset, in proportion to the total number of trainsets	-	-	-	-	-	-

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Milestone No.	Work Description (Milestone)	Unit	Quantity	Unit Rate/Price		Amount	
				Local	Foreign	Local	Foreign
401	Transportation from the port of arrival to a designated Depot, assembling of the 1st to 5th trainsets of 8 cars, completion of all On-Site Testing and Commissioning, and acceptance thereof by the Engineer - (total of 5 trainsets).	sum	1				
402	Same as above but for the 6th to 10th trainsets of 8 cars - (total of 5 trainsets).	sum	1				
403	Same as above but for the 11th to 15th trainsets of 8 cars - (total of 5 trainsets).	sum	1				
404	Same as above but for the 16th to 20th trainsets of 8 cars - (total of 5 trainsets).	sum	1				
405	Same as above but for the 21st to 25th trainsets of 8 cars - (total of 5 trainsets).	sum	1				
406	Same as above but for the 26th to 30th trainsets of 8 cars - (total of 5 trainsets).	sum	1				
407	Same as above but for the 31st to 35th trainsets of 8 cars - (total of 5 trainsets).	sum	1				
408	Same as above but for the 36th to 38th trainsets of 8 cars - (total of 3 trainsets).	sum	1				
	(Payment for Milestones 401 to 408 above will be made upon completion of the transportation, on-Site assembling and testing of each trainset, in proportion to the total number of trainsets required.)	-	-	-	-	-	-



Milestone No.	Work Description (Milestone)	Unit	Quantity	Unit Rate/Price		Amount	
				Local	Foreign	Local	Foreign
	required.)						
409	Completion of <del>Trial Operations of Integrated Testing and Commissioning</del> , comprising 1500 km Fault Free Running for all 38 trainsets.	sum	1				
	(Payment for Milestone 409 will be made upon completion of the Trial Operations for each trainset, in proportion to the total number of trainsets required.)	-	-	-	-	-	-
410	Completion of In-service Operations, comprising 10,000 km or 2 months of continuous Fault Free Running for all 38 trainsets, and obtaining the Performance Certificate from the Engineer for the entire fleet of 38 trainsets.	sum	1				
	(Payment for Milestone 410 will be made only after the Performance Certificate for the entire fleet of 38 trainsets has been issued by the Engineer.)	-	-	-	-	-	-
411	Other obligations with regard to the transportation, on-Site assembling and testing that are considered necessary to comply with the Contract but which are not covered in other Schedules and the above Milestone items.	sum	1				
	Note: The Bidder may sub-divide the above Milestones and/or add appropriate proposed Milestones.	-	-	-	-	-	-
<b>Total for Schedule 1.4</b>							

Milestone No.	Work Description (Milestone)	Unit	Quantity	Unit Rate/Price		Amount	
				Local	Foreign	Local	Foreign
409	Completion of Integrated Testing and Commissioning, comprising 1500 km Fault Free Running for all 38 trainsets.	sum	1				
	(Payment for Milestone 409 will be made upon completion of the Trial Operations for each trainset, in proportion to the total number of trainsets required.)	-	-	-	-	-	-
410	Completion of In-service Operations, comprising 10,000 km or 2 months of continuous Fault Free Running for all 38 trainsets, and obtaining the Performance Certificate from the Engineer for the entire fleet of 38 trainsets.	sum	1				
	(Payment for Milestone 410 will be made only after the Performance Certificate for the entire fleet of 38 trainsets has been issued by the Engineer.)	-	-	-	-	-	-
411	Other obligations with regard to the transportation, on-Site assembling and testing that are considered necessary to comply with the Contract but which are not covered in other Schedules and the above Milestone items.	sum	1				
	Note: The Bidder may sub-divide the above Milestones and/or add appropriate proposed Milestones.	-	-	-	-	-	-
<b>Total for Schedule 1.4 (Carried forward to Grand Summary)</b>							

Note: In case of more than one foreign currency, the Bidder shall split the column Foreign Currency in two.

to improve both current and future systems.

- 8.1.9 With regard to Safety, it is expected that certification shall be achieved through supplier-based information via application of cross references to previously certified acceptances from a reputable body (e.g., train operators, national railways authorities, independent accredited safety bodies, etc.) of similarly supplied Rolling Stock equipment, with a product-generic safety case application to be made based on existing safety certification.

## 8.2 Performance Assurance Plan (PAP)

- 8.2.1 Within the SAMP, the Contractor shall provide a Performance Assurance Plan (PAP) for the Engineer’s review. The PAP shall describe the activities that the Contractor proposes to carry out during the life cycle of the design, implementation and operation of the Rolling Stock, and shall demonstrate compliance with the Employer’s Requirements, achievement of a TOC for each train set, and a Performance Certificate for the total fleet (38 train sets).

## 8.2.2 Performance Acceptance Criteria (PAC)

- 8.2.2.1 Each train set shall achieve:
- a. **Integrated Testing and Commissioning**– 1,500 km FFR.
  - b. **Trial Operation (selected trainset)** – No major fault
  - c. **In-service Operations** - 10,000 km or two (2) months of continuous in-service operational FFR.
- 8.2.2.2 The train fleet (38 train sets) as a whole shall achieve:
- a. **MDBF** – In service operational faults, MDBF no less than 50,000 km causing a delay greater than 5 minutes.
  - b. **OMTTR** – Operational Mean Time To Restore (OMTTR) capital components; the train sets shall be restored to operational order in an OMTTR of 15 minutes.
  - c. **CMTTR** – Corrective Mean Time To Repair (CMTTR) capital components shall not be greater than 4 hours.

## 8.3 Performance Reports

- 8.3.1 The Contractor shall provide Performance Reports to support the applications for Rolling Stock TOC for each train set and the Performance Certificate for the fleet (38 train sets).
- 8.3.2 The Rolling Stock TOC Performance report shall be issued for each train set prior to operational acceptance and shall provide:
- a. Technical design justification of performance;
  - b. Cross reference to Rolling Stock performance in a similar application;
  - c. The design prediction for MDBF, OMTTR and CMTTR of all capital components; and
  - d. Individual train set FFR ~~trial-operations~~ Integrated Testing and Commissioning performance.
- 8.3.3 The Rolling Stock Performance report shall be issued progressively on a monthly basis, shall be finalized at the end of DNP, and shall provide:
- a. In-service FFR operational performance of individual train sets;

to improve both current and future systems.

- 8.1.9 With regard to Safety, it is expected that certification shall be achieved through supplier-based information via application of cross references to previously certified acceptances from a reputable body (e.g., train operators, national railways authorities, independent accredited safety bodies, etc.) of similarly supplied Rolling Stock equipment, with a product-generic safety case application to be made based on existing safety certification.

## **8.2 Performance Assurance Plan (PAP)**

- 8.2.1 Within the SAMP, the Contractor shall provide a Performance Assurance Plan (PAP) for the Engineer’s review. The PAP shall describe the activities that the Contractor proposes to carry out during the life cycle of the design, implementation and operation of the Rolling Stock, and shall demonstrate compliance with the Employer’s Requirements, achievement of a TOC for each train set, and a Performance Certificate for the total fleet (38 train sets).

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- a. Technical design justification of performance;
  - b. Cross reference to Rolling Stock performance in a similar application;
  - c. The design prediction for MDBF, OMTTR and CMTTR of all capital components; and
  - d. Individual train set FFR Integrated Testing and Commissioning performance.
- 8.3.3 The Rolling Stock Performance report shall be issued progressively on a monthly basis, shall be finalized at the end of DNP, and shall provide:
- a. In-service FFR operational performance of individual train sets;
  - b. In-service operational performance of the fleet (38 train sets) MDBF; and

### 1.2.8 Driver’s Cab and Saloon Mock-up

- 1.2.8.1 In order to evaluate the effectiveness of the driver’s cab and saloon layout and function as specified in Sub-Clause 5.3 and 5.15 of the ERT, the Contractor shall develop the interior and exterior design of a full **scalesize**, fully equipped driver’s cab and saloon mock-up. The driver’s cab, saloon and exterior mock-up shall be fully equipped to show completely built interior and exterior condition. The entire design of the driver’s cab, saloon and exterior shall be reviewed by the Engineer. The mock-up shall be strong enough to accommodate persons inside without the damage or deformation. It shall be constructed on a substantial platform, to facilitate transportation and to prevent damage (cracking) and distortion of the hardware.
- 1.2.8.2 The Contractor shall make two leading car Mock-up whose length is 10m. These Mock-up shall be shown to Philippine people in several public spaces. The Contractor shall pay the transfer fee of these Mock-up from Japan to the above public space and some public space to another public space.
- 1.2.8.3 The contractor shall be responsible for the arrangement and the cost of moving the mock-up around the designated areas nominated by the Client for 12 times over 18 months period of times.
- 1.2.8.4 The contractor shall deliver a full-sized generic mock-up of half a car which will be used for public view. This mock-up does not have to identical to cars being supplied but shall provide an indication of the layout and quality of finished to be expected in the final product. This mock-up shall be delivered to a designated location for 6 times in Manila which shall be advised by the Engineer. The mockup shall be delivered to the site on Q1 2022.

## 1.3 Basic Train Formation

### 1.3.1 Basic Car Configuration

- 1.3.1.1 The Rolling Stock shall consist of 8 cars. The schematic diagram of train configuration is shown in Appendix A.
- 1.3.1.2 Under emergency conditions and/or train recovery, one train must be capable of operating with another train coupled to it for hauling (pushing or pulling).
- 1.3.1.3 The mass (tare weight) of the 8-cars trainset shall be 270 tons or less. Weight balance, lower center of gravity, etc., shall be taken into consideration.

### 1.3.2 Power and Auxiliary Electric System Configuration

- 1.3.2.1 The motor car shall be powered with one (1) power conversion equipment driving four AC motors each for the propulsion and the trailer car shall be supplied with a primary inverter to serve the auxiliary loads.
- 1.3.2.2 The simplified block diagram explaining this is shown in Appendix A for reference.

### 1.3.3 Rolling Stock Gauge

- 1.3.3.1 The car body and installed equipment in static mode shall not exceed the Rolling Stock Gauge in the following conditions:
- On a level, tangent track, the Rolling Stock is in a stopped state with the car body and bogies center lines aligned with the track center line;
  - The load condition is between the empty condition and the crush load condition; and
  - The car body and bogies are not tilting due to passengers or loaded material.

### 1.2.8 Driver’s Cab and Saloon Mock-up

- 1.2.8.1 In order to evaluate the effectiveness of the driver’s cab and saloon layout and function as specified in Sub-Clause 5.3 and 5.15 of the ERT, the Contractor shall develop the interior and exterior design of a full scale, fully equipped driver’s cab and saloon mock-up. The driver’s cab, saloon and exterior mock-up shall be fully equipped to show completely built interior and exterior condition. The entire design of the driver’s cab, saloon and exterior shall be reviewed by the Engineer. The mock-up shall be strong enough to accommodate persons inside without the damage or deformation. It shall be constructed on a substantial platform, to facilitate transportation and to prevent damage (cracking) and distortion of the hardware.
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