Request for Proposal (RFP)

for

Selection of Agency for Design, Printing & Application of Vinyl film wrapping for Train for promotion of Bihar Tourism

Department of Tourism, Government of Bihar,
Old Secretariat, Patna-800015,
# Table of Contents

Fact Sheet ........................................................................................................................... 7

1. REQUEST FOR PROPOSAL .......................................................................................... 8
   1.1 Structure of the RFP ................................................................................................. 8
   1.2 Obtainability of RFP Document ................................................................................ 8

2. BACKGROUND INFORMATION .................................................................................... 8

3. INSTRUCTIONS TO BIDDERS .................................................................................. 9
   3.1 Submission Procedure ............................................................................................. 9
   3.2 Number of proposals ............................................................................................... 9
   3.3 Proposal preparation cost ....................................................................................... 9
   3.4 Right to accept or reject ......................................................................................... 9
   3.5 Clarifications ........................................................................................................... 10
   3.6 Amendments to RFP .............................................................................................. 10
   3.7 Language and Currency ......................................................................................... 10
   3.8 Validity of Proposal ............................................................................................... 11
   3.9 Bid Security ........................................................................................................... 11
   3.10 Bidder’s responsibility ......................................................................................... 11
   3.11 Correspondence/ Enquiry ...................................................................................... 12
   3.12 Format and Signing of Proposal ........................................................................... 12
   3.13 Proposal due date .................................................................................................. 12
   3.14 Test of Responsiveness ......................................................................................... 12
   3.15 Confidentiality ....................................................................................................... 13
   3.16 Clarifications ........................................................................................................ 13
   3.17 Modification/Substitution/Withdrawal of Proposal ............................................... 13
   3.18 Proposal Evaluation .............................................................................................. 13
   3.19 Declaration of Successful Bidder .......................................................................... 13
   3.20 Notifications ......................................................................................................... 14
   3.21 DOT’s right to accept or reject proposal ............................................................... 14
   3.22 Performance Bank Guarantee (PBG) .................................................................. 14

4. CRITERIA FOR EVALUATION .................................................................................... 15
   4.1 Pre-Qualification .................................................................................................... 15
4.2 Financial Bid .......................................................................................................................... 16
4.3 Final Evaluation ....................................................................................................................... 16
4.4 Award of Contract .................................................................................................................. 16
4.5 Notification of Award ............................................................................................................ 16
5. SCOPE OF WORK .................................................................................................................... 17
5.1 MAIN TASKS ....................................................................................................................... 17
6. PENALTY STRUCTURE .......................................................................................................... 19
7. PAYMENT SCHEDULE ........................................................................................................... 19
ANNEXURE 1: LETTER OF SUBMISSION ................................................................................. 20
ANNEXURE – 2: LIST OF SIMILAR WORK ................................................................................. 21
ANNEXURE – 3: FORMAT FOR FINANCIAL PROPOSAL .......................................................... 22
ANNEXURE – 3.1: FINANCIAL BID FORM ............................................................................... 23
ANNEXURE – 4: DECLARATION FOR NOT BEING BLACK-LISTED ........................................ 24
APPENDIX 1: RDSO’S SPECIFICATION NO. RDSO/2010/CG 08 ........................................... 25
DISCLAIMER

1. While this Request for Proposal document (“RFP”) has been prepared in good faith, neither the DOT nor its employees or advisors make any representation or warranty, express or implied, or accept any responsibility or liability, whatsoever, in respect of any statements or omissions herein, or the accuracy, completeness or reliability of Information, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this RFP, even if any loss or damage is caused by any act or omission on their part.

2. This document is not transferable, and this RFP does not purport to contain all the information that each Bidder may require and accordingly is not intended to form the basis of any investment decision or any other decision to participate in the bidding process for the selection of the Successful Bidder for this Project. Each Bidder should conduct his own investigations and analysis and check the accuracy, reliability and completeness of the information in this document and obtain independent advice from appropriate sources.

3. Though adequate care has been taken while preparing this Bid Document, the Bidder shall satisfy himself that the document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately.

4. The DOT may modify, amend, reject or supplement this RFP document in accordance with norms and procedures and as per the requirement of the project. The DOT reserves the right to waive any irregularity in the proposal (RFP) and the DOT makes it clear that the RFP is not an offer/Agreement.

5. Neither the DOT nor its employees shall be liable to any Bidder or any other person under any law including the law of Agreement, tort, the principles of restitution or unjust enrichment or otherwise for any loss, expense or damage which may arise, or be incurred, or suffered, in connection with this RFP document, or any matter that may be deemed to form part of this RFP document, or the award of the Agreement, or any other information supplied by the DOT or their employees or consultants or otherwise arising in any way from the selection process for the award of the Agreement for the Project.

6. The DOT is not bound to accept any or all the Proposals. The DOT reserves the right to reject any or all the Proposals without assigning any reasons. No Bidder shall have any cause for action or claim against the DOT or its officers, employees, successors or assignees for rejection of his bid. The RFP submitted by the bidder will be the property of the DOT.
## Glossary

<table>
<thead>
<tr>
<th>Abbreviation/ Terms</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorized Signatory</td>
<td>The bidder’s representative / officer vested (explicitly, implicitly, or through conduct) with the powers to commit the authorizing organization to a binding agreement. Also called signing officer/authority having the Power of Attorney (PoA) from the competent authority of the respective Bidding firm.</td>
</tr>
<tr>
<td>Bid</td>
<td>A formal offer made in pursuance of an invitation by a procuring entity and includes any tender, proposal or quotation in electronic format</td>
</tr>
<tr>
<td>Bid Security/ Earnest Money Deposit (EMD)</td>
<td>A security provided to the procuring entity by a bidder for securing the fulfilment of any obligation in terms of the provisions of the bidding documents.</td>
</tr>
<tr>
<td>Bidder</td>
<td>Any person/ firm/ agency/ company/ contractor/ vendor participating in the bidding process with the procurement entity</td>
</tr>
<tr>
<td>Bidding Document</td>
<td>Documents issued by the procuring entity, including any amendments thereto, that set out the terms and conditions of the given procurement and includes the invitation to bid</td>
</tr>
<tr>
<td>Bid</td>
<td>A formal offer made in pursuance of an invitation by a procuring entity and includes any tender, proposal or quotation in electronic format</td>
</tr>
<tr>
<td>Bid Security/ Earnest Money Deposit (EMD)</td>
<td>A security provided to the procuring entity by a bidder for securing the fulfilment of any obligation in terms of the provisions of the bidding documents.</td>
</tr>
<tr>
<td>Bidder</td>
<td>Any person/ firm/ agency/ company/ contractor/ vendor participating in the bidding process with the procurement entity</td>
</tr>
<tr>
<td>Bidding Document</td>
<td>Documents issued by the procuring entity, including any amendments thereto, that set out the terms and conditions of the given procurement and includes the invitation to bid</td>
</tr>
<tr>
<td>Competent Authority</td>
<td>An authority or officer to whom the relevant administrative or financial powers have been delegated for taking decision in a matter relating to procurement. Director, Department of Tourism in this bidding document.</td>
</tr>
<tr>
<td>Contract</td>
<td>“Contract” means a legally enforceable agreement entered into between the Procuring entity and the selected bidder(s) with mutual obligations.</td>
</tr>
<tr>
<td>DoT</td>
<td>Department of Tourism</td>
</tr>
<tr>
<td>LD</td>
<td>Liquidated Damages</td>
</tr>
<tr>
<td>LoI</td>
<td>Letter of Intent</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Notification</strong></th>
<th>A notification published in the Official Gazette</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PAN</strong></td>
<td>Permanent Account Number</td>
</tr>
<tr>
<td><strong>PQ</strong></td>
<td>Pre-Qualification</td>
</tr>
<tr>
<td><strong>Procurement Process</strong></td>
<td>The process of procurement extending from the issue of invitation to Bid till the award of the procurement contract or cancellation of the procurement process, as the case may be</td>
</tr>
<tr>
<td><strong>Project Period</strong></td>
<td>The project period will be 3 months starting from the Actual Date of Work Started / Agreement</td>
</tr>
<tr>
<td><strong>Purchaser/ Tendering Authority/ Procuring Entity</strong></td>
<td>Person or entity that is a recipient of a good or service provided by a seller (bidder) under a purchase order or contract of sale, also called buyer. DoT in this BID document.</td>
</tr>
<tr>
<td><strong>Services</strong></td>
<td>Any subject matter of procurement other than goods or works and includes physical, maintenance, professional, intellectual, consultancy and advisory services or any service classified or declared as such by a procuring entity</td>
</tr>
<tr>
<td><strong>Service Level Agreement (SLA)</strong></td>
<td>Service Level Agreement is a negotiated agreement between two parties wherein one is the customer and the other is the service provider. It is a service contract where the level of service is formally defined. In practice, the term SLA is sometimes used to refer to the contracted delivery time (of the service) or performance.</td>
</tr>
<tr>
<td><strong>State Government</strong></td>
<td>Government of Bihar (GoB)</td>
</tr>
<tr>
<td><strong>GST</strong></td>
<td>Goods and Service Tax</td>
</tr>
<tr>
<td><strong>WO/ PO</strong></td>
<td>Work Order/ Purchase Order</td>
</tr>
<tr>
<td><strong>Selected Agency/ Selected Bidder/ Service Provider</strong></td>
<td>Agency selected for implementation of project</td>
</tr>
</tbody>
</table>
## Fact Sheet

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Particular</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RFP Reference Number</td>
<td>TDRT/50020/01-2020/02</td>
</tr>
<tr>
<td>2</td>
<td>Date for Issue of RFP</td>
<td>27th January 2020</td>
</tr>
<tr>
<td>3</td>
<td>Project Period</td>
<td>1 month starting from the date of start of work/Effective date of Contract</td>
</tr>
<tr>
<td>4</td>
<td>Bid Procedure</td>
<td>Two Part (Technical &amp; Financial), Open Competitive Bid</td>
</tr>
<tr>
<td>5</td>
<td>Bid Validity</td>
<td>3 months/90 days from the bid submission deadline</td>
</tr>
<tr>
<td>6</td>
<td>Date &amp; Time for Pre-bid Meeting</td>
<td>3rd February 2020; 11:00 AM</td>
</tr>
<tr>
<td>7</td>
<td>Last Date &amp; Time for receipt of queries for Pre-bid Meeting</td>
<td>3rd February 2020; 03:00 PM</td>
</tr>
<tr>
<td>8</td>
<td>Date for Release of responses to Pre-bid queries / Revised RFP</td>
<td>4th February 2020; 05:00 PM</td>
</tr>
<tr>
<td>9</td>
<td>Last Date &amp; Time for Submission of Proposals</td>
<td>12th February 2020; 3:00 PM</td>
</tr>
<tr>
<td>10</td>
<td>Date &amp; Time for opening of Technical Proposal</td>
<td>12th February 2020; 4:00 PM</td>
</tr>
<tr>
<td>11</td>
<td>Date &amp; Time for opening of Financial Bids</td>
<td>13th February 2020; 11:00 AM</td>
</tr>
<tr>
<td>12</td>
<td>Declaration of Successful bidder and release of work order</td>
<td>14th February, 2020</td>
</tr>
<tr>
<td>13</td>
<td>Bid Document Fee</td>
<td>INR 1,000</td>
</tr>
<tr>
<td>14</td>
<td>Earnest Money Deposit</td>
<td>INR 1,00,000</td>
</tr>
</tbody>
</table>
| 15     | Address for Bid Submission                                      | Director, Department of Tourism Government of Bihar, Old Secretariat. Patna-800015  
email - directortourismbihar@gmail.com  
Tel.- +91 0612 2217045 |
| 16     | Website                                                         | www.bihartourism.gov.in                                              |
1. REQUEST FOR PROPOSAL

DOT invites detailed proposals (Qualification, Technical and Financial Proposals together referred to as “RFP”) from capable agencies. The bids comprising mandatory compliance along with technical bids and price bids shall be submitted in two separate envelopes. The Scope of Services forming part of the Assignment has been set out hereunder in this document. The Proposals would be evaluated on the basis of the evaluation criteria set out in this RFP (“Evaluation Criteria”) to identify the successful Bidder for the Assignment (“Successful Bidder”).

1.1 Structure of the RFP

DOT intends to follow a ‘two stage’ bid process for selection of the successful agency under ‘LCS (Least Cost Based Selection) Method’, as outlined in this RFP.

The Bidders would need to submit, within the Proposal Due Date as prescribed under the “Fact Sheet” of this RFP; Technical and Financial Proposal in the prescribed formats. DOT would evaluate all the Submissions in accordance with the evaluation criteria as set out in the RFP to select a qualified bidder.

1.2 Obtainability of RFP Document

The RFP would be available at the website www.bihartourism.gov.in. It may be noted that all subsequent notifications, changes and amendments in the assignment/documents would be posted only on the website.

2. BACKGROUND INFORMATION

Department of Tourism, Government of Bihar is responsible for promoting the tourism in Bihar. Bihar Tourism since its inception has been working towards the development and promotion of tourism in the State. State of Bihar is one of the most favored tourist destinations in India for both domestic & International traffic. Bihar, being a premier tourist destination, attracts tourist for its religious destinations, history, art and culture. Tourism has emerged as a major industry and has immense employment potential for the state.

The land of Bihar has been blessed by being home to the birth place of religions namely Sikhism, Jainism and the land where Buddha attained enlightenment, the holy land of Bihar is truly marvelous. To showcase these offerings to the tourists visiting Bihar, various tourist circuits have been identified and developed in the State. Among these the important circuits include the Buddhist circuit, Ramayana circuit, Sufi circuit, Jain circuit, Shiv/ Kawariya circuit and Gandhi circuit.

The State aims to reach out to different parts of the country about the tourism potential and opportunities that the state has to offer. In this context, Department of Tourism has plans to use railways as a medium of branding and outreach. Branding on wheels, Railways offers comprehensive publicity to the Department of Tourism. It gives the opportunity to connect with the public who are travelling with the railways. Branding on railways also connects with the people waiting at the platform for their friends or relatives. DOT therefore invites applications from interested and eligible bidders for the design of Vinyl wrapping of Train no. 12142 from Patna to Mumbai.
3. **INSTRUCTIONS TO BIDDERS**

3.1 **Submission Procedure**

A. **Technical Bid**

Bidders shall submit physically their bid in a sealed envelope super-scribed with due date, time, project and nature of bid.

**PART 1** - Bid security and RFP Document Fee in a separate sealed envelope superscripted with the Tender Document number. Please enclose **RFP document fee of Rs 1,000 (Rupees One Thousand) and EMD of Rs. 1,00,000 (Rupees One Lakh only)**. The RFP document fee should be in the form of Demand Draft drawn in favor of Director Tourism payable at Patna. The EMD should be drawn in the form of Demand Draft drawn in favor of Director Tourism, payable at Patna.

**PART 2** - One copy of **TECHNICAL BID** complete with all technical and commercial details except the prices.

*Note: Filling up prices in Part 2 will render the Bidder disqualified.*

The envelopes containing Part 1 and Part 2 of offer should be enclosed in a larger envelope duly sealed. All pages of the offer must be signed.

B. **Financial Bid**

i. Bidder shall submit the **FINANCIAL Bid** in a separate envelope.

ii. Services offered should be strictly as per specifications mentioned in this Tender Document.

iii. Once quoted, the Bidder shall not make any subsequent price changes, whether resulting or arising out of any technical/commercial clarifications sought regarding the bid, even if any deviation or exclusion may be specifically stated in the bid. Such price changes shall render the bid liable for rejection.

iv. Bidder shall quote the prices of services as mentioned valid for 90 days

3.2 **Number of proposals**

Each Bidder shall submit only one (1) Proposal, in response to this RFP. Any Bidder who submits or participates in more than one Proposal shall be disqualified.

3.3 **Proposal preparation cost**

The Bidder shall be responsible for all costs associated with the preparation of its Proposal and its participation in the bidding process. DOT will not be responsible or in any way liable for such costs, regardless of the conduct or outcome of the bidding process.

3.4 **Right to accept or reject**

- DOT may reject a proposal at any stage if it is found that the firm recommended for award has indulged in corrupt or fraudulent activities in competing for the contract in question, and may also
declare a firm ineligible or blacklist the firm, either indefinitely or for a stated period of time, if at any time it is found that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, the contract.

- Notwithstanding anything contained in this RFP, DOT reserves the right to accept or reject any Proposal and to annul the bidding process and reject all Proposals at any time, without any liability or any obligation for such acceptance, rejection or annulment, without assigning any reasons.
- DOT reserves the right to reject any Proposal if at any time if a material misrepresentation made by a Bidder at any stage of the bidding process is discovered.

3.5 Clarifications
A prospective Bidder requiring any clarification on the RFP may notify DOT in writing to Director, DOT within such date as specified in RFP Time Schedule. At its sole discretion, DOT may upload its response to such queries on the website: www.bihartourism.gov.in

Bidders requiring specific points of clarification may communicate with DOT during the specific period using the following format. The queries can be submitted by email at: directortourismbihar@gmail.com with name of assignment as the subject, in the following format:

<table>
<thead>
<tr>
<th>Bidders Request for Clarification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Organization submitting request</td>
</tr>
<tr>
<td>Address:</td>
</tr>
</tbody>
</table>

3.6 Amendments to RFP
i. At any time prior to the Proposal Due Date, as indicated in the RFP Time Schedule, DOT may, for any reason, whether at its own initiative or in response to clarifications requested by a bidder, amend the RFP by the issuance of Addenda. Such Addenda would be posted only on the website www.bihartourism.gov.in

ii. In order to afford Bidders reasonable time to take the Addendum into account, or for any other reason, DOT may, at its discretion, extend the Proposal Due Date.

3.7 Language and Currency
The Proposal and all related correspondence and documents shall be written in English language.
Supporting documents and printed literature furnished by the Bidder with the Proposal may be in any other language provided that they are accompanied by an appropriate translation in English language. Supporting materials that are not translated into English may not be considered. For the purpose of interpretation and evaluation of the Proposal, the English language translation shall prevail. The currency for this bid is Indian Rupee. All the quotes should be in Indian Rupees only.

3.8 Validity of Proposal
i. The Proposal shall be valid for a period not less than Three Months (90 days) from the Proposal Due Date ("Proposal Validity Period"). DOT reserves the right to reject any Proposal that does not meet this requirement.
ii. Prior to expiry of the Proposal Validity Period, DOT may request the Bidders to extend the period of validity for a specified additional period.
iii. The Successful Bidder shall, where required, extend the validity of the Proposal till the date of execution of the Agreement.

3.9 Bid Security
i. Proposals would need to be accompanied by a ‘Bid Security’ (EMD) for an amount of Rs. 1,00,000/- (Rupees One Lac only). The Bid Security shall be kept valid throughout the Proposal Validity Period and would be required to be extended if so, required by DOT.
ii. The Bid Security shall be in the form of a demand draft in favor of the ‘Director Tourism’, drawn on any scheduled Bank payable at Patna.
iii. The Bid Security shall be returned to the unsuccessful Bidders within a period of two (2) weeks from the date of signing of Agreement between DOT and the Successful Bidder.
iv. The bid security of the successful bidder will be returned to the successful bidder on the submission of the Performance Security as specified in the RFP document.
v. The Bid Security shall be forfeited in the following cases:
   a. If the Bidder withdraws its Proposal;
   b. If the Bidder withdraws its Proposal during the interval between the Proposal Due Date and expiration of the Proposal Validity Period; and
   c. If any information or document furnished by the Bidder turns out to be misleading or untrue in any material respect.
   d. If the bidder, after the award of work order, fails to submit the performance security within the stipulated time.

3.10 Bidder’s responsibility
i. The Bidder is expected to examine carefully the contents of all the documents provided. Failure to comply with the requirements of RFP shall be at the Bidder's own risk.
ii. It shall be deemed that prior to the submission of Proposal, the Bidder has:
   • Made a complete and careful examination of terms & conditions/ requirements, and other information set forth in this RFP document.
   • Received all such relevant information as it has requested from DOT; and
   • Made a complete and careful examination of the various aspects of the Assignment.
iii. DOT shall not be liable for any mistake or error or neglect by the Bidder in respect of the above.
iv. All taxes payable to government should be paid by the service provider as per applicable norms and procedure. DOT is nowhere liable and responsible for payment of such taxes. Only GST payment will be made by DOT as per applicable rates on the fee quoted by the agency.

3.11 Correspondence/ Enquiry
All correspondence/enquiries should be submitted to the following in writing by email/ fax/ registered post with name of assignment as the subject. The details are:

Director,
Department of Tourism, Government of Bihar,
Old Secretariat, Patna-800015
Email - directortourismbihar@gmail.com
Tel: +91 0612 2217045

3.12 Format and Signing of Proposal
i. Bidders would provide all the information as per this RFP and in the specified format. DOT reserves the right to reject any Proposal that is not in the specified format.
ii. The Proposal would include submissions to be made on the respective Proposal Due Date as set out in RFP Time Schedule.
iii. If the Proposal consists of more than one volume, Bidder must clearly number the volumes and provide an indexed table of contents.
iv. The Proposal and its copy shall be typed or printed, and the Bidder shall initial and number each page.
v. The person(s) signing the Proposal shall initial all the alterations, omissions, additions, or any other amendments made to the Proposal.

3.13 Proposal due date
i. Proposals should be submitted as per information provided in this RFP.
ii. DOT at its sole discretion; accept any Proposal(s) after Proposal Due Date. Any such Proposal/s accepted shall be deemed to have been received by the Proposal Due Date.

3.14 Test of Responsiveness
i. Prior to evaluation of Proposals, DOT will determine whether each Proposal is responsive to the requirements of the RFP. A Proposal shall be considered responsive if;
   • It is received on the respective Proposal Due Date;
   • It is accompanied with the ‘Cost of RFP Document’ and ‘Bid Security’ amount as set out in RFP Document.
   • It is signed, sealed, and marked as stipulated in RFP Document.
   • It contains the information and documents as requested in the RFP;
   • It contains information in the form and formats specified in the RFP;
   • It mentions the validity period as set out in this document;
   • It provides the information in reasonable detail. (“Reasonable Detail” means that, but for minor
deviations, the information can be reviewed and evaluated by DOT. DOT reserves the right to determine whether the information has been provided in reasonable detail or not;

- There are no inconsistencies between the Proposal and the supporting documents.

ii. A Proposal that is responsive is one that conforms to the preceding requirements without material deviation or reservation. A material deviation or reservation is one which,

- Affects in any substantial way, the scope, quality, or performance of the Assignment, or
- Limits in any substantial way, inconsistent with the RFP document, Dot’s rights or the Bidder's obligations under the Agreement, or
- Unfairly affects the competitive position of other Bidders presenting substantially responsive Proposals.

iii. DOT reserves the right to seek clarification or reject any Proposal which in its opinion is non-responsive and no request for modification or withdrawal shall be entertained by DOT in respect of such Proposal.

3.15 Confidentiality
Information relating to the examination, clarification, evaluation and recommendation for the Qualified Bidders would not be disclosed to any person not officially concerned with the process. DOT will treat all information submitted as part of the Proposal in confidence and will ensure that all those who have access to such material to treat it in confidence. DOT would not divulge any such information unless ordered to do so by any statutory authority that has the power under law to require its disclosure.

3.16 Clarifications
To assist in the process of evaluation of Proposals, DOT may, at its sole discretion, ask any Bidder for clarification on its Proposal or substantiation of any of the submission made by the Bidder.

3.17 Modification/Substitution/Withdrawal of Proposal
i. The Bidder may modify, substitute or withdraw its Proposal after submission, provided that a written notice of the modification, substitution or withdrawal is received by DOT before the Proposal Due Date. No Proposal shall be modified, substituted or withdrawn by the Bidder after the Proposal Due Date.

ii. The modification, substitution or withdrawal notice shall be prepared, sealed, marked and delivered in accordance with outer envelopes additionally marked “MODIFICATION”, “SUBSTITUTION” or “WITHDRAWAL”, as appropriate.

iii. Withdrawal of a Proposal during the interval between the Proposal Due Date and expiration of the Proposal Validity Period would result in forfeiture of the Bid Security in accordance with this RFP.

3.18 Proposal Evaluation
The Qualification Submissions of the Bidders would be checked for responsiveness with the requirements of the RFP and shall be evaluated as per the Criteria set out in this RFP.

3.19 Declaration of Successful Bidder
i. Upon acceptance of the Proposal of the tenderer technically qualified with LCS (Least Cost Based Selection) criteria, with or without negotiations, DOT shall declare the tenderer as the successful
bidder.
ii. In the event of more than one technically qualified bidder quoting the same amount as the least cost, the bidder with higher relevant project value will be adjudicated as the L1 bidder for award of the Project.

3.20 Notifications
DOT will notify the Successful Bidder by a Letter of Award (LoA) that its Proposal has been accepted.

3.21 DOT’s right to accept or reject proposal
i. DOT reserves the right to accept or reject any or all the Proposals without assigning any reason and to take any measure as it may deem fit, including annulment of the bidding process, at any time prior to award of the Assignment, without liability or any obligation for such acceptance, rejection or annulment.
ii. DOT reserves the right to invite revised Proposals from Bidders with or without amendment of the RFP at any stage, without liability or any obligation for such invitation and without assigning any reason.
iii. DOT reserves the right to reject any Proposal if at any time:
   • A material misrepresentation made at any stage in the bidding process is uncovered; or
   • The Bidder does not respond promptly and thoroughly to requests for supplemental information required for the evaluation of the Proposal.
iv. This would lead to the disqualification of the Bidder. If such disqualification / rejection occurs after the Proposals have been opened and the Successful Bidder gets disqualified/ rejected, then DOT reserves the right to:
   • Declare the L2 Bidder quoting the next least Cost as the successful tenderer and where warranted, invite such Bidder to match the cost quoted by the disqualified Successful Bidder; or
   • Take any such measure as may be deemed fit in the sole discretion of DOT, including annulment of the bidding process.

3.22 Performance Bank Guarantee (PBG)
The successful bidder shall furnish an unconditional and irrevocable bank guarantee / demand draft, in a format acceptable to DOT valid for the contract term, of a value equivalent to 10% of the contract value for a period of 18 months from the date of issue of Letter of Intent/ Work Order.
4. **CRITERIA FOR EVALUATION**

4.1 **Pre-Qualification**

Applicants who fulfill the pre-qualification criteria completely in all respects shall be selected for financial opening of bids. The Financial Proposals of those Applicants who have not been selected shall be returned unopened to the Applicants.

For a bid to be considered as responsive under this bid process, a bidder must meet the following criteria.

<table>
<thead>
<tr>
<th>#</th>
<th>Criteria</th>
<th>Basis of Evaluation</th>
<th>Documents Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Legal Entity</td>
<td>The Bidder can be an independent private legal entity incorporated / registered in</td>
<td>- Certificate of Incorporation of bidding entity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>India such as proprietorship firm, partnership firm, or a private limited company,</td>
<td>- GST Registration Certificate bidding entity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>government-owned entity</td>
<td>- Copy of PAN</td>
</tr>
<tr>
<td>2</td>
<td>Financial Strength</td>
<td>a. The bidder must have Average Annual Turnover of Rs. 1 Crore in last three financial</td>
<td>Certificate from the statutory auditor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>years ending at 31/03/2019.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. The bidder must have a positive net worth as on 31.03.2019</td>
<td>Certificate from the statutory auditor</td>
</tr>
<tr>
<td>3</td>
<td>Experience</td>
<td>a. The Bidder must be in operation for at least 3 (Three) years as on the bid due</td>
<td>— Self-signed undertaking stating total number of years of experience</td>
</tr>
<tr>
<td></td>
<td></td>
<td>date.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. The Bidder should have carried out at least 1 (one) similar work of vinyl</td>
<td>— Copy of work order of value not less than INR 15 lakh and proof of completion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wrapping of railway coaches in the last 5 (five) years with value of work not less</td>
<td>for completed project.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>than INR 15 lakh.</td>
<td>— For ongoing project, proof of completion of design, printing, application and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>maintenance for a minimum period of 6 (six) months must be submitted</td>
</tr>
<tr>
<td>4</td>
<td>Blacklisting/Debarring</td>
<td>The bidder should not be blacklisted by any Department / Agency / PSU in any State or</td>
<td>Self-declaration duly signed by authorized bid signatory for the bidder (ANNEXURE-4)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Central Government of India as on date of submission of bid</td>
<td></td>
</tr>
</tbody>
</table>
4.2 Financial Bid

A lump sum amount to be quoted by the service provider as per the Annexure 3 of RFP Document. Bidders found to be eligible as per Pre-Qualification criteria laid down in Section 4.1 shall be selected for financial evaluation.

i. Financial Evaluation

- The Financial Bids of only those Bidder, who are qualified under Pre-Qualification criteria laid down in Section 4.1 shall be selected for financial evaluation.
- Only fixed price financial bids indicating total price for all the deliverables and services specified in this bid document will be considered.
- The bid price will include all taxes and levies including GST and shall be in Indian Rupees and mentioned separately.
- Any conditional bid would be rejected
- Errors & Rectification - Arithmetical errors will be rectified on the following basis: “If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail”.
- The Bidder with lowest qualifying financial bid (L1) will be selected.

4.3 Final Evaluation

In the event of more than one technically qualified bidder quoting the same amount as the least cost, the bidder with higher relevant project value will be adjudicated as the L1 bidder for award of the Project.

4.4 Award of Contract

The Authority will award the Contract to the L1 Bidder whose bid has been determined to be substantially responsive and has been determined as the best bid, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily. The Authority shall however not bind itself to accept the best bid or any bid and reserves the right to accept any bid, wholly or in part.

4.5 Notification of Award

- Prior to the expiration of the validity period, Purchaser will notify the successful Bidder in writing or by fax or email, that its proposal has been accepted (Letter of Intent). The selected agency will be required to submit the performance security within 7 days of issue of LOI.
- In case the tendering process / public procurement process has not been completed within the stipulated period, the Purchaser, may request the Bidders to extend the validity period of their Proposal. The decision to extend the validity period of a Bidder’s Proposal shall be the bidder’s prerogative.
5. SCOPE OF WORK

After selection of Service Provider through this tendering process, the selected Service Provider will be required to deliver the services as per the requirements detailed in this section. Vinyl wrapping shall be applied to following train:

<table>
<thead>
<tr>
<th>Train Number</th>
<th>Train Name</th>
<th>Source</th>
<th>Destination</th>
<th>Total Coaches and Quantity (Tentative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13201/02</td>
<td>Rajendra Nagar Lokmanya Tilak Express (RJPB-LTT Exp)</td>
<td>Patna</td>
<td>Mumbai</td>
<td>24 coaches 23,280 square feet</td>
</tr>
</tbody>
</table>

The Total Quantity is tentative. Department of Tourism may at its discretion reduce/increase the quantities at the time of award of the work.

5.1. MAIN TASKS

Task 1
DESIGNING OF VINYL WRAPPING

DOT will provide the images and content to the service provider. However, the service provider will be responsible for developing the final design to be printed on Non-PVC Vinyl wrapping and applied on the coaches of the selected train. Specifications of the said Vinyl wrapping will be as per RDSO Specification RDSO/2010/CG-08. The Selected Agency must submit the design to DOT for approval within 7 days of issue of LOI.

TASK 2
PRINTING OF VINYL WRAPPING

The approved creative design will be printed on Non-PVC Vinyl wrapping for application on the coaches of the selected train. The Printing technology and material and resolution of the said Vinyl wrapping must comply with RDSO’s Specification RDSO/2010/CG 08.

Selected Bidder must print vinyl print only after assessment of actual length and width of the coach area below window level where vinyl shall have to be applied.

TASK 3
APPLICATION AND REMOVAL OF VINYL WRAPPING

After the completion of the Printing process, the selected bidder shall apply vinyl wrapping to the coaches of selected train within 30 (Thirty) days of receiving of LoI/Work Order. Vinyl wrapping shall be applied to the coaches of the selected trains in coordination with the Ministry of Railways and their authorized
representative.
In the process of application of vinyl wrapping, the selected agency shall be required to submit the approvals from authorized official of Indian Railways certifying that selected bidder has complied with the RDSO’s specifications in the application of vinyl wrapping.

Selected Provider shall apply vinyl film in such a way that complete scheme is covered on a coach without overlapping. Prior to application to all the trains, Service provider shall conduct prototype application and get it approved from the Authority.
Application of vinyl film shall not cause any damage to the coach. If any damage has been done to the coach, performance guarantee of the selected bidder of equivalent repair amount shall be forfeited.

Vinyl wrapping of rakes shall be conducted during primary maintenance at locations of primary maintenance depots. The time for primary maintenance is typically six (6) hours during which vinyl wrapping shall be carried out.

DOT will coordinate with Ministry of Railways or their authorized officials to offer space as available to the selected bidder for vinyl wrapping. All resources for application of vinyl wrapping such as skilled manpower, tools and other required materials shall be made available by the Selected Agency in adequate quantity at the stations where rakes offered for the said work. The Selected Bidder will be responsible for safety and security of its materials. No claims regarding compensation due to theft or loss of materials shall be entertained.

After end of tenure of the contract, Selected Agency shall safely remove vinyl wrapping without any damage to railway coaches. The same shall be safely disposed as per applicable guidelines and procedures and Service Provider shall not re-use the same vinyl wrapping to display at any other place or locations or for any other purpose under any circumstances.

**TASK 4**

**MAINTENANCE**

The agency must provide warranty of at least one year (12 months) of vinyl wrapping and will also be responsible for the maintenance of the same for this period.

If Railway conducts any maintenance activity of the coach and vinyl wrapping is damaged due to the same, Selected Bidder will repair or replace the said vinyl wrapping free of cost to DOT. However, Service Provider shall only conduct 10 replacements (10 entire coach vinyl film replacements) during the contract period.

The selected bidder should be ready with minimum of 10% spare quantity of total vinyl wrap surface area and the same to be maintained for the period throughout the year of warranty (One Year) which may be used for replacement whenever required due to defects arising during warranty.

DOT may, at its discretion, extend the tenure of the maintenance period. Payment will be made on rates discovered through the financial bid form on pro rata basis for additional term.
### 6. PENALTY STRUCTURE

<table>
<thead>
<tr>
<th>No.</th>
<th>Penalty Parameter</th>
<th>Penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Delay in completion of application of Vinyl wraps on selected trains within 30 days of issue of LoI/ Work Order</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Delay of more than 2 and up to 5 days</td>
<td>Rs. 10,000 per day</td>
</tr>
<tr>
<td></td>
<td>Delay of more than 5 and up to 20 days</td>
<td>Rs. 30,000 per day</td>
</tr>
<tr>
<td></td>
<td>Delay beyond 20 days</td>
<td>Contract may be terminated including forfeiture of performance security</td>
</tr>
<tr>
<td>2</td>
<td>Delay in replacement of vinyl wrapping in case of damage/ defect</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Delay of more than 2 and up to 5 days</td>
<td>Rs. 5,000 per day</td>
</tr>
<tr>
<td></td>
<td>Delay of more than 5 and up to 20 days</td>
<td>Rs. 10,000 per day</td>
</tr>
<tr>
<td></td>
<td>Delay Beyond 20 days</td>
<td>Rs. 30,000 per day</td>
</tr>
<tr>
<td></td>
<td>Delay Beyond 30 days</td>
<td>Contract may be terminated including forfeiture of performance security</td>
</tr>
<tr>
<td>3</td>
<td>Damage to the railway property or assets including railways coaches</td>
<td>3 times amount of repair as claimed by Ministry of Railways</td>
</tr>
</tbody>
</table>

### 7. PAYMENT SCHEDULE

<table>
<thead>
<tr>
<th>S. No</th>
<th>Stage</th>
<th>Timeline</th>
<th>Percentage of Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Application of vinyl wrapping</td>
<td>30 days from date of issue of LoI/ Work Order</td>
<td>60%</td>
</tr>
<tr>
<td>2</td>
<td>Quarterly payment for Maintenance services to be provided for a period of one year</td>
<td>Invoice to be raised every quarter</td>
<td>40% (10% every quarter)</td>
</tr>
</tbody>
</table>
ANNEXURE 1: LETTER OF SUBMISSION

(On the letterhead of the bidder)

To,
Director,
Department of Tourism, Government of
Bihar, Old Secretariat, Patna-800015

Sir,

Ref: RFP for Selection of Agency for Design, Printing & Application of Vinyl film wrapping for Train for promotion of Bihar Tourism

We have read and understood the Request for Proposal (RFP) in respect of the captioned Assignment provided to us by DOT.

We hereby agree and undertake as under:

a. Notwithstanding any qualifications or conditions, whether implied or otherwise, contained in our Proposal we hereby represent and confirm that our Proposal is unqualified and unconditional in all respects.

b. This Proposal is valid till ---------- (At least 3 Months/ 90 days from the Proposal Due Date). Please find enclosed herein with the Proposal the Demand Draft bearing number ---------- for Rs. 50,000/- (Rupees Fifty Thousand only) drawn in favor of the ‘Director Tourism’ payable at Patna towards the ‘Bid Security Amount’, dated this ............................day of.............................. 2020.

c. That as on the date of submission of this tender, there is no blacklisting order that bars us from working with any Government Agency / Department on account of deficiency inservice.

Name of the Bidder .......................... Date: -

Signature of Authorized Signatory
### ANNEXURE – 2: LIST OF SIMILAR WORK

<table>
<thead>
<tr>
<th>#</th>
<th>Name of Client</th>
<th>Location</th>
<th>Description of work</th>
<th>Value of Contract/Work in Rs.</th>
<th>Duration (Start date- Completion date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**
- Each of the listed works shall be supported with the copy of work order & other documentary evidences as per the eligibility and technical evaluation criteria.
- Non-disclosure of any information in the schedule will result in disqualification of the firm

Signature of the applicant/Authorized Representative of Agency with Seal/Stamp
ANNEXURE – 3: FORMAT FOR FINANCIAL PROPOSAL

(On the letter head of the bidder)  

To,

Director,

Department of Tourism, Government of
Bihar, Old Secretariat, Patna-800015

Sir,

Ref: RFP for Selection of Agency for Design, Printing & Application of Vinyl film wrapping for Train for promotion of Bihar Tourism

We are pleased to quote the fee as below. We have reviewed all the terms and conditions of the ‘Request for Proposal’ and confirm that, we would abide by all the terms and conditions. We hereby declare that there shall be no deviations from the stated terms in the RFP.

We further declare that, any State Government, Central Government or any other Government or Quasi Government Agency has not barred us from participating in any Bid.

Our Financial Quote for design printing & application of vinyl film wrapping for Train for promotion of Bihar Tourism is INR (in figures)_____________________ (INR in Rupees). This amount is inclusive of all tax (including GST). The financial quote is based on the indicative Total Quantity (square feet) provided in ANNEXURE 3.1: FINANCIAL BID FORM.

We abide by the above offer/quote and terms condition of the RFP, if the DOT Bihar selects us as the Selected Bidder/Agency. If our offer is accepted and if we fail to perform in the manner as specified in the RFP Document, the amount of Bid Security, as aforesaid, shall stand absolutely forfeited to the DOT Bihar without prejudicing the rights of the DOT Bihar to proceed further in any manner it deems fit.

Until a formal Agreement is prepared and executed between us, this bid, together with your LOI, shall constitute a binding contract between us.

We understand that you are not bound to accept the lowest or any bid that you may receive.

We declare that the information stated above and enclosed is complete and absolutely correct and any error or omission therein, accidental or otherwise, as a result of which our bid is found to be nonresponsive, will be sufficient for the DOT Bihar to reject our bid and forfeit our bid security in full.

Sincerely,

Name

Name of the Firm/Agency

Designation and Address

Mobile and Email

Signature of the applicant/ Authorized Representative of Agency with Seal/Stamp
### ANNEXURE – 3.1: FINANCIAL BID FORM

Financial Bid format for providing the total per unit cost for the services required by Department of Tourism, Government of Bihar is given in Table below. All taxes, GST, duties, fees, levies etc. has also been quoted separately as per the format provided.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Item Description</th>
<th>Unit Cost (in ₹) as per the specification given in the RFP (exclusive of all taxes)</th>
<th>Total Taxes (in %)</th>
<th>Total Unit cost (Inclusive of taxes)</th>
<th>Total Quantity (square feet) (Given number is indicative only)</th>
<th>Total Cost (in ₹ exclusive of all taxes)</th>
<th>Total Cost (in ₹ inclusive of all taxes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cost of per Square feet for design, printing and application of vinyl film wrapping</td>
<td>₱ 23,280</td>
<td>0%</td>
<td>₱ 23,280</td>
<td>23,280 square feet</td>
<td>₱ 23,280</td>
<td>₱ 23,280</td>
</tr>
<tr>
<td>2</td>
<td>Cost of per Square feet Maintenance for a period of one year of vinyl film wrapping</td>
<td>₱ 23,280</td>
<td>0%</td>
<td>₱ 23,280</td>
<td>23,280 square feet</td>
<td>₱ 23,280</td>
<td>₱ 23,280</td>
</tr>
</tbody>
</table>

**Note:**

1. Bidder shall quote cost of one (1) square foot (sq. ft.) for the vinyl wrapping which shall be inclusive of application/installation of wrapping on selected trains, its maintenance and all other such as costs, expenses, risks, overheads, profits etc. only excluding taxes. DOT will not reimburse any other charges apart from price quoted by the bidder.

2. Bidder must quote only one cost.

3. In case of any extension awarded to selected agency for maintenance or additional design, printing and application work, DOT will make the payment for such additional work at unit rates discovered above on pro rata basis.
ANNEXURE – 4: DECLARATION FOR NOT BEING BLACK-LISTED

(To be submitted on the Letter head of the Bidder)

To,

Director,

Department of Tourism, Government of Bihar,

Old Secretariat, Patna-800015

Dear Sir,

We confirm that our Company <name of company> as on date of submission of the proposal has not been blacklisted by any Private/Central /State Government/PSU or any other Organization and agencies in India or abroad for corrupt, fraudulent or any other unethical business practices.

Sincerely,

Name & Designation of the Authorized Signatory
APPENDIX 1: RDSO’S SPECIFICATION NO. RDSO/2010/CG 08
RDSO’s specification no. RDSO/2010/CG 08

INDIAN RAILWAYS

SPECIFICATION FOR FLEET GRAPHIC FILMS ON EXTERIOR
OF
INDIAN RAILWAY COACHES

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Month/Year of issue</th>
<th>Revision / Amendment</th>
<th>Page No.</th>
<th>Reason for Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>October, 2010</td>
<td>-</td>
<td>-</td>
<td>First issue</td>
</tr>
</tbody>
</table>

Issued By:

Research Designs and Standards Organization
Manak Nagar, Lucknow - 226011.
<table>
<thead>
<tr>
<th>Clause No.</th>
<th>DESCRIPTION</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scope</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>Area of Application on Coaches</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>General Requirements</td>
<td>11</td>
</tr>
<tr>
<td>4</td>
<td>Operating Conditions for Graphics</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>Technical requirements of Cast Vinyl Graphic Film</td>
<td>12,13</td>
</tr>
<tr>
<td>6</td>
<td>Characteristics of finished graphics prior to application</td>
<td>13,14</td>
</tr>
<tr>
<td>6.10</td>
<td>Marking of the product</td>
<td>14</td>
</tr>
<tr>
<td>7</td>
<td>Application of graphics</td>
<td>15</td>
</tr>
<tr>
<td>8</td>
<td>Removal of films</td>
<td>15</td>
</tr>
<tr>
<td>10</td>
<td>Testing the Vinyl Graphic film</td>
<td>15,16</td>
</tr>
<tr>
<td>11</td>
<td>Packing</td>
<td>16</td>
</tr>
<tr>
<td>12</td>
<td>Guarantee and replacement</td>
<td>16</td>
</tr>
<tr>
<td>13</td>
<td>Sketch showing Vinyl wrapping on side walls for ICF/RCF - AC/Non AC coaches</td>
<td>17</td>
</tr>
</tbody>
</table>
SPECIFICATION FOR FLEET GRAPHIC FILMS ON EXTERIOR OF
INDIAN RAILWAY COACHES

SCOPE

Fleet graphics films are being used for frequent changes to the livery of the vehicle bodies. This specification covers the technical requirements of fleet graphic films to be used for advertising on the exterior of Indian railway passenger coaches without causing any damage to the painted/primered/surface coated/metallic surface. The IR coaches are painted with either alkyd or PU top coat systems or epoxy primer with surfacer. The applicators should procure and use the films to this specification for application on IR coaches.

2.0 AREA OF APPLICATION ON COACHES

Area of application on coaches shall be the complete side panel excluding the doors & windows, barring areas carrying mandatory markings of coach. The upper edge of vinyl should not touch rain water gutter and should be terminated 20 mm below the rain water gutter level. The area of the sidewall is to be painted. Similarly door frame area should also be free from vinyl application and should be painted. The area of application is shown in RDSO drawing CG – 10076.

3.0 GENERAL REQUIREMENTS

3.1 The tenderer shall submit the following documents along with the tender for their offers to be technically evaluated:

Printed/published technical data/Material safety data sheet/brochure of the product in original (Base film/Inks/Edge Sealers) proposed to be used along with attested test certificate from a government-accredited laboratory for the tests mentioned in this specification. The tests may have been got done by the OEM from a Govt. accredited laboratory.

3.2 The tenderer should submit the following documentation along with sample before starting supply and application to the concerned rolling stock engineer:

Warranty card from manufacturer of graphic film in original quoting the tender number for which the PO (Purchase Order) has been received by advertiser, specifying all tests for durability and weathering and environmental exposure for the films used with photograph of applied graphic.

Work test certificate in original from the manufacturer of the film.

Manufacturer of base film and finished product (giving the manufacturing plant details).

Film material including production certificate of conformance.

Film color/pigmentation and/or print color.

Adhesive designation & group.

Sealing material and sealing method.
Thickness (adhesive, film, print, sealing) with production tolerances.

Characteristic values as specified in this specification.

The keeping of the specific values determined in the specification must be proved by presenting the test certificate from a government accredited laboratory.

The film removal procedure.

An undertaking to follow all safety precautions at the worksite.

3.3 The graphics to be reproduced in the vinyl graphic film shall be supplied by the tendering unit in “.cdr” format or in “.ai” format or any other suitable graphic printing software.

OPERATING CONDITIONS FOR GRAPHICS

4.1 Ambient conditions:

The graphics shall perform satisfactorily under the following climatic conditions:

Ambient temperature : -4°C to 70°C
Altitude : Sea level to 2500m
Max. Sun temperature : 70°C
Relative humidity : 40% to 100%

The rainfall is fairly heavy.

During dry weather, the atmosphere is likely to be dusty.

Temperature variations can be quite high in the same journey or short period of time.

Coaches operate in coastal areas with continued exposure to salt laden air.

Maintenance conditions:

The coach exteriors are cleaned with mildly acidic cleaning agents and using brushes with non-metallic bristles or automatic car washing plants.
TECHNICAL REQUIREMENTS OF CAST VINYL GRAPHICS FILM

The graphic film will consist of three layers namely the base film (PVC), adhesive layer and release liner. The completed film should be over laminated and edge sealed.

BASE FILM REQUIREMENTS

Base Film will be cast PVC film having thickness not more than 50 microns. Plasticizers and other additives materials must not emerge or exude. The films shall not include any materials having harmful effects on painted surfaces, human beings and environment.

The film shall be white in color with whiteness index of 100 to 90 as per test method ASTM E 313.

Thickness: The nominal thickness of the unprinted film including adhesive shall be between 0.070 mm to 0.090 mm. The test procedure for measuring thickness is ASTM D 3652.

REQUIREMENTS FOR ADHESIVIES

The adhesive shall stick, without the use of an activator such as solvents or heat, on any metallic and painted, primered, polished and clean surfaces, free from any grease or silicone without producing wrinkles, rolling up, tearing or detaching.

5.2.2 The adhesive should be of gray color acrylate base. The gray color adhesive will provide good hiding power so that color of the coach does not affect the printed graphic colors and they appear vibrant.

The adhesive should have features of controlled adhesive release which will protect the paint of the coach. After the release liner has been removed, the films having controlled release adhesive shall be able to slide freely on the substrate before its final installation. Film can be positioned and finally applied by squeezing out permanent adhesive using a nylon molded aqueeze without using any activator such as solvent or heat.

The graphics film should have inbuilt air channels in the adhesive layer to ensure release of air bubbles during application which will result in fast application and the same should be clearly marked on the backing liner as “controlled release type” or “with inbuilt air release channels.”

5.3 REQUIREMENTS FOR RELEASE LINER

5.3.1 The release liner protects the adhesive against dirt contamination and prevents the film from unintended agglutination.

The release liner will be paper, coated with polyethylene on both sides to have resistance to moisture and solvent during printing and application.

5.3.3 In addition, the adhesive power of the release liner shall not be so strong that the adhesive detaches on removal of the release liner.
REQUIREMENTS FOR PRINTING OF BASE FILMS TO CONVERT INTO GRAPHICS

5.4.1 Films shall be printed with digital printing technology with eco friendly low emission solvent inks.

5.4.2 The graphic has to be printed with printing resolution of the minimum of 720 dpi by 1440 dpi (dits/inch).

5.4.3 The printing inks shall be approved by the manufacturer of the graphics film and should carry a comprehensive warranty for minimum of 2 years against any kind of fading of colors and cracking.

5.5 REQUIREMENTS OF EDGE SEALING OF PRINTED GRAPHICS

Edge sealing is required on the edges of the vinyl to give protection against peeling off of the graphics film and preventing damages of the graphics film against vandalism.

The edge sealing material shall be clear acrylic/alkyd/PU resin applied on all the overlap joints of the film and end edges of the film with at least 10 mm footprint covering 5 mm on both the exposed edges. A slight change is expected in the gloss value at the joints where edge sealer is applied depending on the viewing angle.

The edge sealer should become water resistant within four hours of application.

REQUIREMENTS OF OVER LAMINATE

The surface of the graphic films shall be over laminated in an appropriate way in order to guarantee the resistance against operating stress and weather, acids, alkalis, salt solutions, scratch and tear from foreign objects.

The graphics film should have an over laminate supplied by the same manufacturer of the graphics film. The over laminate should be a PVC film with attractive gloss finish and should be UV stabilized, which is to be tested to ASTM G 152 for protection against deterioration and fading.

Over laminate should be applied on the printed graphics as per recommendation by the manufacturer of the graphics film after the printing has been done on the graphics film.

6.0 CHARACTERISTICS OF FINISHED GRAPHICS PRIOR TO APPLICATION:

Thickness:

The film thickness shall be not more than 0.150mm +/- 15%, with sealing and print color. The test procedure for measuring thickness is ASTM D 3652.

Gloss Value:

6.2.1 The minimum gloss value shall be 70 achieved at 60° measured by gloss meter as per ASTM D 523. Gloss value shall not drop below 50 at 60° measured by gloss meter as per ASTM D 523, at any point of time during the service life of eighteen months from the date of application.
6.2.2 For every tender, a control sample of size 8’ x 4’ appropriately numbered shall be preserved for comparing gloss values and colour properties of the finished coaches in service for that particular tender.

6.2.3 For each rake, gloss values for two coaches shall be measured and recorded after application on the coach. The spectro densito meter should be used for recording the colour characteristics. These values alongwith that of the control sample should be recorded on the quality check list for each rake.

Durability and Weathering Resistance:

The graphic films shall be durable and resistant to weathering for atleast 24 months in permanent outdoor – exposure. No kind of detachment, cracks, bubbles or similar effects shall occur during the applied state. The supplier shall submit proof of test from reputed independent laboratory (govt. accredited) of accelerated weathering, UV and environmental exposure as per ASTM G 152 using xenon arc/QUV panel machines at 0.63 nanometer UV A lamps, with 4 hour condensation and 4 hour UV exposure for min of 250 hrs. Post cycle specular gloss value, delta E color change, visual discoloration has to be reported. The color change should not be more than delta E=3, measured by approved spectro densito meter (The instrument measures color value).

Adhesive Power:

The films shall stick on any metallic and painted surface, free from grease and silicone, without producing wrinkle, rolling up, detaching or tearing. The adhesive power of at least 17N – 25N as per clause 9.1.

Flammability:

The graphic film should fall under min. class B when tested as per UIC-564-2OR Appendix 12.

Temperature Resistance:

The film shall be resistant to temperatures between -10°C and +100°C without any visible changes such as detachment cracks, bubble formation and color changes. This property is to be tested as per clause 9.3.

Dimensional stability:

The shrinkage of the graphic films after application shall not exceed 0.2%. This is to be tested as per clause 9.4.

6.8 Resistance to Detergents:

The graphic films shall be resistant to detergents used by the IR for exterior cleaning of the coaches. The surface of the sealed film shall not soften and the color and the adhesive power shall not change. The same applies to surface softening and to all kind of detachments (waves, bubbles etc.). This should be tested as per clause 9.5.
6.9 Wash and Attrition Resistance:

The graphic films shall not suffer any visible color and gloss changes, detachments, cracks, bubbles etc. during external coach washing in accordance with IR field practices. Furthermore, the films shall not expand. The graphic films along with over laminate shall not show any visible color and gloss changes when tested as per ASTM D 1044 using cleaning solution as per clause 9.5.

6.10 Marking of the Product:

6.10.1 For identification the box of the accepted finished products shall be clearly marked with capital letters having height of more than 50 mm either by printing, stamping or needle perforation.

6.10.2 The marking should consist of the date of manufacture (month and year for example 12/04) of the finished product as well as manufacturer of the base material (cast vinyl film).

6.10.2 To have proper traceability, one tile on each coach shall carry identification code of the OEM and applicator and the month & year of application. The codes shall be assigned by OEMs in consultation with RCF or any other railway agency as specified in the tender.

7.0 APPLICATION OF GRAPHICS

7.1 Applications of Graphics have to be done using recommended application tools as mentioned by the manufacturer of the graphic film. The applicator has to show experience/training certificate of doing similar application on any moving vehicle by the manufacturer of the graphic film.

7.2 Application of the graphic film has to be done on the surface without using any soap solution and water. (Dry application for faster application and also to protect the paint of the coach). The surface should be rubbed down by means of grade 220 emery paper and cleaned with a soft cloth before application of fleet graphic film.

7.3 The application tool should be a nylon molded squeeze with low friction sleeve, which will prevent scratches on the graphics, and a nylon rivet brush with wooden handle to apply graphics on the rivets.

8.0 REMOVAL OF FILMS

8.1 In case removal of vinyl film/residual adhesive film is required within the warranty period because of manufacturing/application/printing defects, the OEM will arrange to get the film replaced at no cost to the Railways.

8.2 The time taken for removal of previous graphic & application of new graphic films should not be more than eight hours per coach.

8.3 The removal of the applied film should not be tedious. The removal should be done using a hot air blower but the temperature should not exceed 70°C. In case any film or adhesive residue is observed after removal, it should be possible to remove the residue by use of ISO propyl alcohol and lint free cloth or other proprietary solution, by the OEM, without any surface damage. Within the warranty period, the removal has to be done by the OEM.
8.4 The removal should in no way damage the painted surface of the coach. The OEM shall be liable for damages evident after removal of the film. The coach should be returned in the same condition as it was handed over initially.

9.0 TESTING THE VINYL GRAPHIC FILM

Adhesive power:

The adhesive power shall be tested as per ASTM D 3330, procedure A for 180° peel strength on a standard test panel of Stainless Steel, conditioned as per ASTM D 4332 at a peel off velocity of 360mm/minute.

Controlled release adhesion:

This shall be tested visually for presence of air channels on the adhesive side of the base film after the removal of release liner.

Temperature resistance:

Two test specimens 25mm x 200mm are stuck onto test plates of stainless steel, polished to a completely plane surface and are subsequently stored at standard reference atmosphere. The specimens are subjected to temperature changes for seven cycles-each cycle comprising of 8 hours of -10°C and 16 hours of 100°C.

Dimensional stability:

Four 160 mm x 160 mm test specimens are stuck onto degreased and etched aluminum plates with the dimension of 150 x 150 x 8 mm and are stored for 72 hours in standard reference atmosphere. The projecting test specimen is then cut with a sharp knife (razor blade) along the test plate. Afterwards, the test specimens are stored for 48 hours at 70°C and are then cooled down for 2 hours in standard reference atmosphere of 23 +/- 1°C and 50% relative humidity. Measurement of the shrinkage at two measuring points in longitudinal and transverse directions should be done.
Resistance against detergents:

The test is to be carried out with two, test solutions.

Duration of test: 24 hrs.

<table>
<thead>
<tr>
<th>‘A’ Solution:</th>
<th>‘B’ Solution:</th>
</tr>
</thead>
<tbody>
<tr>
<td>40% phosphoric acid</td>
<td>10% Fatty alcohol polyethylene Glycol ether - 10%</td>
</tr>
<tr>
<td>15% emulsifying agent</td>
<td>Sodium cumene sulphonate (40% solution) - 5%</td>
</tr>
<tr>
<td>45% water (distilled)</td>
<td>NTA liquid (40% solution) Trilon A, BASF - 5%</td>
</tr>
<tr>
<td></td>
<td>Triethanolamine - 20%</td>
</tr>
<tr>
<td></td>
<td>Totally demineralized water - 60%</td>
</tr>
</tbody>
</table>

Emulsifying agent: Oleyl - stearyl alcohol mix (with iodine value 50) with 10-mol ethylene oxide.

Max. application concentration for test solution A and B 1:4 respectively.

Packing:

Cut films are to be dispatched, bundled up and securely packed in cardboard. Other graphics are to be rolled up on a cardboard roll/tube with the film side on the outside and shall be dispatched under safe transit.

Guarantee and replacement:

The time period of guarantee should be two years for stuck films for manufacturing, printing, application defects.

The supplier shall replace all the graphics rejected on final acceptance due to their non-compliance with the requirements and those product that show deficiencies during the time period of guarantee by products complying with the requirements within a period of four weeks.

The OEM shall be responsible for any quality related issues of the printing ink also.

The OEM of the film shall take responsibility for the manufacturing, printing, application and performance of the film and shall submit a performance bank guarantee with each tender, valid for two years from the date of application of graphic film.