

TERMS OF REFERENCE FOR THE R&D PROJECT

1. Title: Study of the E-commerce Logistics operations and services parameters to frame guidelines and requirements for e-logistics service providers

2. BACKGROUND

2.1 E-logistics services involve the management of all the physical flows of an organisation that sells goods on an online platform (website, marketplace, etc.). It refers to the processes involved in storing and shipping inventory for an online store or marketplace and includes inventory management, pricing, packing, and shipping of online orders. E-logistics service providers handle all transportation requirements, from origin through delivery to final clients.

2.2 The rapid growth of e-commerce has revolutionized the way goods are bought and sold, creating new challenges and opportunities in the logistics industry. However, in the absence of Indian Standards, majority of the e-logistics service providers are following their own standard operating procedures/guidelines which is leading to inconsistent and non-uniform service quality, potential risks, and challenges for both e-logistics service provider and consumers.

2.3 To maintain uniformity/consistency in e-logistics services, it is important to conduct a study on current e-logistics service operations and key service parameters to establish Indian Standard(s) that promote professionalism, reliability, and transparency throughout the e-commerce logistics sector. As the demand for e-logistics services continues to grow globally, it becomes imperative to establish a robust framework that sets the benchmark for service excellence and customer satisfaction.

3. OBJECTIVE

To collect and analyse the information and data from primary and secondary sources in regard to the e-logistics operations and services to establish framework for e-logistics Service providers to improve the safety, efficiency, transparency, reliability and quality of services.

4. SCOPE

4.1 Undertake study of existing literature which includes published research papers, study conducted by any other organization, Standard Operating Procedures (SoPs)/guidelines, best practices, international standards/standards of NSBs of foreign country, if any.

4.2 Comparative analysis of information and data collected on parameters given in para **4.1**.

4.3 Identification of the e-logistics service providers w.r.t large, medium and small scale to study the following:

- a) Type/classification of services;
- b) Statutory and regulatory requirements;
- c) General requirements (such as agreement with e-commerce platform, resources/infrastructure, approvals);
- d) Methodology/processes and requirements for order processing;
- e) Requirements for warehousing and inventory management;
- f) Packaging and labeling requirements;
- g) Requirements and processes involved in shipping and transportation;
- h) Last-mile delivery;
- i) Policies for returns handling and reverse logistics of goods and articles;
- j) Training and competence of personnel;
- k) Roles and responsibilities of persons involved;
- l) Customer communication and tracking;
- m) Integration of technology in operations;
- n) Data security and privacy;
- o) Documentation requirements;
- p) Good practices, use of IT tools and technological advancement to handle services;
- q) Identification and Traceability Requirements;
- r) Documentation;
- s) Safety and Security of goods and personnel involved in providing services;
- t) Provisions for insurance and liability of goods;
- u) Key Performance Indicators (KPIs) for evaluation and improvement in services;
- v) Mechanism for customer feedback on quality of services
- w) Grievance redressal mechanism
- x) Sustainable practices adopted by the service provider

4.4 Conduct visits as per the sampling plan given below:

Type	Number of e-logistics service provider to be visited
Large Scale Service Providers	2
Medium Scale Service Providers	2
Small Scale Service Providers	2
Consumers (for Feedback on quality of services through structured questionnaire).	50

NOTE: Structured Questionnaire may be included via the 'Google Form' apart from the physical visit to the consumers mentioned above for wider consultation.

4.5 Prepare a comprehensive report covering the details mentioned in para from **4.1** to **4.4**.

5. METHODOLOGY

5.1 The study should follow a structured methodology that includes, but not limited to, the followings:

- a) Review of the literature as mentioned in para **4.1**.
- b) Collection of feedback from service providers and customers through circulation of structured questionnaire.
- c) Conduct visits as mentioned in para **4.4**. After identification of e-logistics service provider to be visited, take consent of BIS before proceeding further.
- d) Witness and observe the requirements given in para **4.3** during the visits.
- e) Focused group discussions after the visits to analyze and comparative analysis of the collected information and data.
- f) Prepare a report based on the findings and data collected as per para **4**.

6. DELIVERABLES

A analytical report containing information/data as mentioned in para **4** along with the evidence containing statements, questionnaire, details of interviews, outcome of consultation with experts and data collected during literature review and visits. Hard as well as soft copy of the report shall be submitted within the timeframe.

7. TIMEFRAME

The time frame of completing the study and submitting the report is 5 months from the date of the award of the project.

- a) Interim Report covering the review of the literatures, existing stipulations and visits plan for approval of BIS – within 1 months from the date of award of project from BIS.
- b) Report of site visits by end of 3 months from the date of award of project from BIS.
- c) Draft project report covering all the aspects of the ToR – By end of 4 months from the date of assignment received from BIS.
- d) Project shall clear all doubts on provisions of research including ToR and BIS guidelines before acceptance

8. SUPPORT FROM BIS

BIS will provide access to latest available editions of Indian standards and/ or international standards relevant to the project, on request.

9. NODAL PERSON

Mr. Shivam Soni, Scientist B & Member Secretary, SSD 18 may be contacted for more clarification on the R&D project (ssd@bis.gov.in)