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Draft Indian Standard

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संपर्क रहित वितरण सेवाएँ — दिशानिर्देश

CONTACTLESS DELIVERY SERVICES — GUIDELINES

ICS 03.100.10; 55.020

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FOREWORD

(Formal clause will be added later)

Contactless delivery services have made a substantial contribution to the health and safety of consumers and couriers during the COVID-19 pandemic. This service model minimizes physical contact between consumers and delivery personnel during the process of delivering goods or services.

This standard is formulated to improve transparency and understanding between consumers and delivery service providers and to enable couriers provide better value for consumers and reduce risk in the delivery service process. Additionally, it would enhance the effectiveness of the delivery industry and accelerate the development of the profession by proposing ways to improve quality, professionalism and ethical behaviour, as well as the introduction of new techniques in delivery services.

This standard is based on good practices from the delivery industry including recommendations and guidelines to use contactless delivery services. It covers the role and responsibilities of platform service provider, consignor, courier as well as the service process quality control and improvement.

The standard is applicable to all couriers, delivery service providers, consumers, merchants, and delivery platforms. While formulating this standard, the assistance has been taken from International Workshop Agreement IWA 36 Guidelines for Contactless Delivery Services.

For the purpose of deciding whether a particular requirement of this standard is complied with the final value, observed or calculated, expressing the result of a test or analysis shall be rounded off in accordance with IS 2: 1960 'Rules for rounding off numerical values (revised)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

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CONTACTLESS DELIVERY SERVICES — GUIDELINES

1 SCOPE

This standard covers general principles, roles and responsibilities, delivery methods, service processes, quality control and improvements to be put in place to execute contactless delivery services.

This document applies to:

- a) instant delivery, which generally applies to the retail, catering and medical sectors (including online food delivery, grocery delivery and medical supplies delivery);
- b) last-mile delivery with intermediate transfer, which generally applies to express and e-commerce fields (referring to the last-mile delivery of parcels); and
- c) goods being picked up from shipper or where the shipper books the goods via Smart Locker

NOTE – This document does not apply to cold chain logistics.

2 TERMS AND DEFINITIONS

For the purposes of this document, the following terms and definitions apply:

2.1 Consignee – Any person, organization or government which is entitled to take delivery of a consignment.

2.2 Consignor — Any person, organization or government who prepares a consignment for transport.

2.3 Consumer – Person who initiates the delivery service order request to the platform, the merchant or the consignee and who receives the order.

2.4 Contactless Delivery — Delivery of goods to the consumer or recipient or picking up of goods from the shipper or merchant without direct contact or human involvement throughout the delivery process, in order to reduce the risk of occupational exposure of the courier and to ensure the safety of the consumer and the courier.

NOTES

- 1 Delivery without direct contact generally refers to courier delivery.
- 2 Delivery without human involvement generally refers to autonomous last-mile delivery.

2.5 Courier — Individual who delivers the goods to the Consignee on behalf of the delivery service platform operator or delivery service provider.

NOTE — Courier is also the person who picks the goods from the Shipper. Courier does not include Autonomous delivery or pick up equipment

2.6 Delivery Service Platform Operator — Organization or legal entity that operates a delivery service platform.

2.7 Delivery Service Provider — Company or organization that provides delivery services.

Example:

Delivery service platform operator; merchant on the delivery service platform; door to door express; related delivery equipment operator.

2.8 Distribution Location — Last-mile delivery hub that integrates the functions of receiving, temporary storage, distribution and special operations and that ships goods out to the final destination.

2.9 Goods — Items, materials or documents that, upon the placement of a purchase order, are being manufactured, processed, handled or transported within the supply chain for delivery to a consumer.

2.10 Instant Messaging — Communication between two or more people on the internet by means of real-time text messages, files, voice, call and video.

2.11 Last-Mile Delivery — Final step in the journey of goods from the distribution location or merchant to the consumer.

2.12 Merchant — Individual or organization that supplies goods for consumers online in the instant delivery sector.

NOTES

1 The merchant can use the delivery service of the platform to deliver the goods to the consumers. It can also deliver the goods to the consumers itself.

2 For example, the online food delivery segment includes the categories ‘merchant-to-consumer delivery’ and ‘platform-to-consumer delivery’. Merchant-to-consumer delivery means that the merchant will pick up the goods and directly deliver them to the consumer. Platform-to-consumer delivery means that the platform will pick up the goods from the merchant and deliver them to the consumer.

2.13 Order — Transaction information or delivery service demand information for online-purchased goods.

2.14 Parcel — Physical package that is mailed or shipped.

2.15 Smart Locker — Self-service equipment located in a publicly accessible area, used by the delivery service provider to deposit goods or parcels and accessible to the consumer to take collection of the goods or parcels.

NOTES

1 Smart lockers generally include smart parcel lockers and smart food lockers.

2 A smart food locker is an intelligent service facility that provides short-term access services for food and catering in the context of online food delivery.

3 GENERAL PRINCIPLES

3.1 Avoidance of Physical Contact

Physical contact should be avoided between couriers and consignee/consignor/merchants.

3.2 Integrity

Delivery services are conducted in an honest, respectful and courteous manner, taking into account the interests of consignee/consignor/merchant, and are communicated accurately.

3.3 Capability

Couriers should receive training for delivery services including contactless delivery services and the training must be captured in the form of certification.

3.4 Health, Safety and Environment

The health and safety of consumers and couriers and their environmental expectations should be given priority at the operational level.

3.5 Confidentiality and Privacy

Personal information should be treated in a confidential manner, respecting the privacy of the consumer. Privacy and data security can be subject to legal requirements.

3.6 Visualization and Traceability

Health information and the real-time location information of the courier should be visualized and traceable wherever possible. Visualization and traceability can be subject to legal requirements.

4 ROLE AND RESPONSIBILITY

4.1 Delivery Service Platform Operator

4.1.1 Delivery service platform operators should offer consumers the option or reminder of contactless service when they place orders and indicate the service procedures and corresponding service prices.

4.1.2 Delivery service platform operators should tell consumers exactly what to expect when their order reaches their designated location, as well as the safety measures the couriers will take to effect contactless delivery. There should be a capability within the platform or an opportunity for consumers to indicate contactless delivery instructions or arrangements.

4.1.3 Delivery service platform operators should have a functional online payment system. Payments may be completed upon confirmation of the order or when the delivery has been made.

4.1.4 Delivery service platform operators should manage proof of delivery digitally.

4.1.5 Delivery service platform operators should establish facilities and equipment management systems to meet the requirements of contactless delivery services and privacy, safety and health requirements.

4.1.6 Delivery service platform operators should establish a contactless delivery management system in accordance with the requirements of **7.1.1**.

4.1.7 During epidemics and seasons prone to infectious diseases, consumers should be reminded to use contactless delivery services when accepting orders.

4.2 Merchant/Consignor

4.2.1 Merchants/consignor should have a corresponding contactless delivery service system, including, but not limited to, staff, facilities and equipment, measures and service procedures.

4.2.2 The person who handles food for delivery should meet the local corresponding health requirements.

4.2.3 Merchants/consignor should give proper training to their courier to enable them to do contactless delivery.

4.2.4 Packing requirement for goods should depend on both long distance and short distance to avoid risk of damaging and contamination.

4.3 Courier

4.3.1 Couriers should be aware of the safe handling of the goods. Health and security can be subject to legal requirements.

NOTE – The use of protective equipment's including regular hand cleaning and sanitising, the proper wearing of gloves and a face mask when delivering the goods during the pandemic.

4.3.2 Couriers should receive training for delivery services including contactless delivery services and the training must be captured in the form of certification.

4.3.3 Couriers should perform health monitoring (temperature monitoring, contagious infection) before starting the delivery process as per the health and safety requirements notified by the government during the pandemic.

4.4 Related Delivery Equipment Operator

Relevant delivery equipment operators should obtain corresponding business licenses.

5 DELIVERY METHODS

5.1 General

The delivery service provider should choose the appropriate delivery method based on consumers' requirements, according to the characteristics of each delivery method, combined with factors such as the type of goods, delivery distance and delivery location.

5.2 Courier Delivery

5.2.1 Depending on consumer requirements and availability of designated locations, after communicating with consumers, the couriers should deposit the goods in an agreed designated location, so that goods can then be picked up by consumers themselves or via a representative.

5.2.2 There are two types of designated locations:

- a) Doorstep/door, lobby or another pick-up point; and
- b) Alternative fulfilment methods, for example smart lockers.

NOTE — Smart lockers allow goods to be picked up in a dedicated space. Smart lockers can only be opened by consumers/consignee with the corresponding order access code. Once they take the goods, the process is complete.

5.3 Autonomous Last-Mile Delivery

5.3.1 There are following three scenarios for the autonomous last-mile delivery:

- a) Delivery drones;
- b) Delivery robots; and
- c) Driverless or self-driving vehicles.

Autonomous last-mile delivery should follow the applicable regulatory requirements

5.3.2 Delivery drones should deliver goods by air either bringing them down or dropping the goods.

5.3.3 Delivery robots, which are equipped with 3D sensors and a camera, use ultra-violet light to disinfect after every trip.

5.3.4 Driverless or self-driving vehicles are artificial intelligence (AI) enabled and operated remotely, passing along main roads or other designated streets.

6 SERVICE PROCESS

6.1 Instant Delivery

6.1.1 Courier Delivery

6.1.1.1 Placement of an order by the consumer

The consumer can directly require a contactless delivery service upon placing an order. The consumer can specify the goods deposit location in the remarks or communicate with the

courier to request contactless delivery after the order is accepted and specify the goods deposit location.

Order information should include, but not be limited to, the following:

- a) Delivery service time;
- b) Basic information, for example the category, mass and quantity of the goods;
- c) The geographical location and contact information of the consumers (including order initiators and recipients).

6.1.1.2 *Reception and preparation of the order by the merchant*

Once the merchant receives the order, the consumer should be notified of the order information.

After receiving the order, the merchant should immediately prepare the order and arrange delivery, as well as adopt safety protection measures for the delivered goods.

If the food is delivered, the merchant should seal the food container or packaging to prevent intentional or accidental opening during the delivery process and meet the requirements of the contactless delivery service system.

6.1.1.3 *Acceptance of the order by the courier*

After the courier accepts the order delivery information, if the consumer chooses to use contactless delivery, the courier should contact the consumer through instant messaging or telephone to confirm the deposit location of the ordered goods. If the consumer does not choose to use contactless delivery, contact should be made with the consumer to recommend the use of a contactless delivery service and to determine the deposit location of the ordered goods.

After the platform receives the order information from the courier and confirms that the courier's order is valid, it should inform the courier and the consumer of the successful order matching information. The platform should provide the consumer with key information (for example the name of the courier, contact information) and related delivery fees and payment methods.

The platform should set up automatic order cancellation rules. For orders that are not answered by merchants or couriers within a certain period, the platform can automatically cancel orders.

6.1.1.4 *Collection of the goods by the courier*

Couriers should collect the goods at the contactless pickup location designated by the merchant according to the order information and deliver the goods based on the requirements for contactless delivery service after confirming that it is correct.

6.1.1.5 *Completion of the delivery by the courier*

The courier/ can inform the consumer/consignee of the upcoming arrival through instant messaging.

The courier should put the goods in the location designated by the consumer and inform the consumer by instant messaging or telephone that the delivery has been completed. The courier should advise the consumer to collect the goods as soon as possible.

The courier should use instant messaging to take photos containing the goods and clarify the location information of the goods. The courier should send the photos to consumers to inform and confirm the delivery of the goods. Privacy and data security requirements for clicking a photo shall be subject to legal requirements.

If a smart locker is used, after the goods are put in the smart locker, the courier should immediately send the pick-up information (including any smart locker access code) to the consumer via text or instant message.

Where contactless delivery is done through OTP process, the delivery is completed once the OTP is shared by consignee.

6.1.1.6 *Reception of the goods by the consumer*

After being notified by the courier that the goods have been deposited, the consumer goes to the designated location to pick them up. This completes the delivery service.

NOTES

1 Annex A provides examples of the contactless delivery service process.

2 For online food delivery, Fig. 2 illustrates the specific service process when using smart food lockers.

6.1.2 *Autonomous Last-Mile Delivery*

6.1.2.1 After communicating with consumers, the delivery service provider should confirm the delivery time and delivery location with consumers who choose to use autonomous last-mile delivery.

6.1.2.2 The relevant operators should load the goods or parcel(s) that need to be delivered, advise the consumer of the start of the delivery of the order and indicate the estimated delivery time and location.

6.1.2.3 Autonomous delivery vehicles deliver goods to the designated location via the established route and inform the consumer of their arrival.

6.1.2.4 The consumer picks up the goods at the designated location.

6.1.2.5 The autonomous delivery vehicles return via the established route. This completes the delivery service.

6.2 Last-Mile Delivery With Intermediate Transfer

6.2.1 *Courier Delivery*

After receiving the delivery order, the courier should go to the distribution station to pick up the parcel(s). The courier should avoid direct contact with the driver and the staff to the extent possible at the distribution station. The delivery should be completed in accordance with **6.1.1.3** to **6.1.1.6**.

6.2.2 *Autonomous Last-Mile Delivery*

The process is the same as in **6.1.2**.

7 QUALITY CONTROL AND IMPROVEMENT

7.1 Delivery Platform

7.1.1 *Quality Control System*

The platform should establish a complete quality control system to guarantee courier service quality, including, but not limited to, the following:

- a) Couriers management (for example, courier tracking, operation guidance and training);
- b) Daily order completion monitoring;
- c) Unexpected abnormal data monitoring;
- d) Project implementation control;
- e) Risk management and data control;
- f) Key performance indicator management;
- g) Sanitization of the package before deposit in the locker in case of pandemic.

7.1.2 *Information Service and Protection*

7.1.2.1 The platform should have information service functions supporting the implementation of a contactless delivery service. These functions should include, but not be limited to, the following:

- a) Selection of delivery method;
- b) Tips for contactless delivery;
- c) Settings of remarks column;
- d) Instant messaging;
- e) Confirmation of delivery completion.

7.1.2.2 An information security protection system should be established to strengthen the protection of personal information security and privacy as per the applicable legal requirements.

7.1.3 *Intelligent Devices*

The platform should have facilities and equipment to meet the demand for contactless delivery service for couriers and consumers. Platforms should preferably have intelligent devices for example intelligent dining cabinets, containers, driverless or self-driving vehicles, drones and other intelligent devices. The facilities and equipment should be properly selected and used as required.

7.1.4 *Ongoing Evaluation and Improvement*

There should be a management system to handle complaints from consumers and couriers, on the premise of safeguarding the interests of both parties. Further improvement should be made on the basis of feedback from both parties after handling.

7.1.5 *Exception Handling*

The service should have provision for collecting exceptions (for example damaged, lost and incorrect delivery of the goods) experienced with reference to goods received by the consignee.

Handling methods for exceptions include, but are not limited to, the following:

- a) Corresponding processing procedures, mechanisms and guarantee measures;
- b) Assistance of the consumer service department in contacting the courier for confirmation;
- c) For related verified issues such as product loss and incorrect delivery, provision of resolution by the platform;
- d) Establishing a safeguard mechanism for the rights and interests of consumers, couriers, distributors and merchants.

7.1.6 *Visualization and Traceability*

The following tools may be used to assist in the visualization and traceability of the health and safety process.

- a) Merchant safety cards: The health information of commodity contacts (including packers, couriers, etc) is recorded on the merchant safety card.
- b) Courier safety cards: The courier safety card shows the body temperature of the courier and the disinfection information of the delivery equipment.

Visualization and traceability is subjected to legal requirements.

7.2 Couriers

7.2.1 *Service Specification*

Couriers should comply with the management and control requirements for the integrity of goods, the punctuality and accuracy of delivery, and standard operation during the stages of the contactless delivery service on the platform.

7.2.2 *Service Method*

7.2.2.1 Couriers and consumers should agree on the service method on the platform. Couriers should actively recommend consumers to use contactless delivery services.

7.2.2.2 During the pandemic, couriers should clean and disinfect the delivery boxes or bags before going to work every day. Couriers should clean delivery boxes or bags in time after contamination and disinfect if necessary.

7.2.3 *Emergency Response*

During the delivery process, in case of unexpected situations (for example community closure, road blocking), after taking self-protection measures, the courier should contact the delivery service platform/ head of the distribution station/ consumer service department, in order to confirm whether to terminate or continue the delivery task, depending on the actual situation.

ANNEX A

(Informative)

EXAMPLES OF CONTACTLESS DELIVERY SERVICE PROCESSES

A-1 GENERAL SERVICE PROCESS OF INSTANT DELIVERY

Fig. 1 shows an example of a contactless delivery service process delivered by a courier in instant delivery.

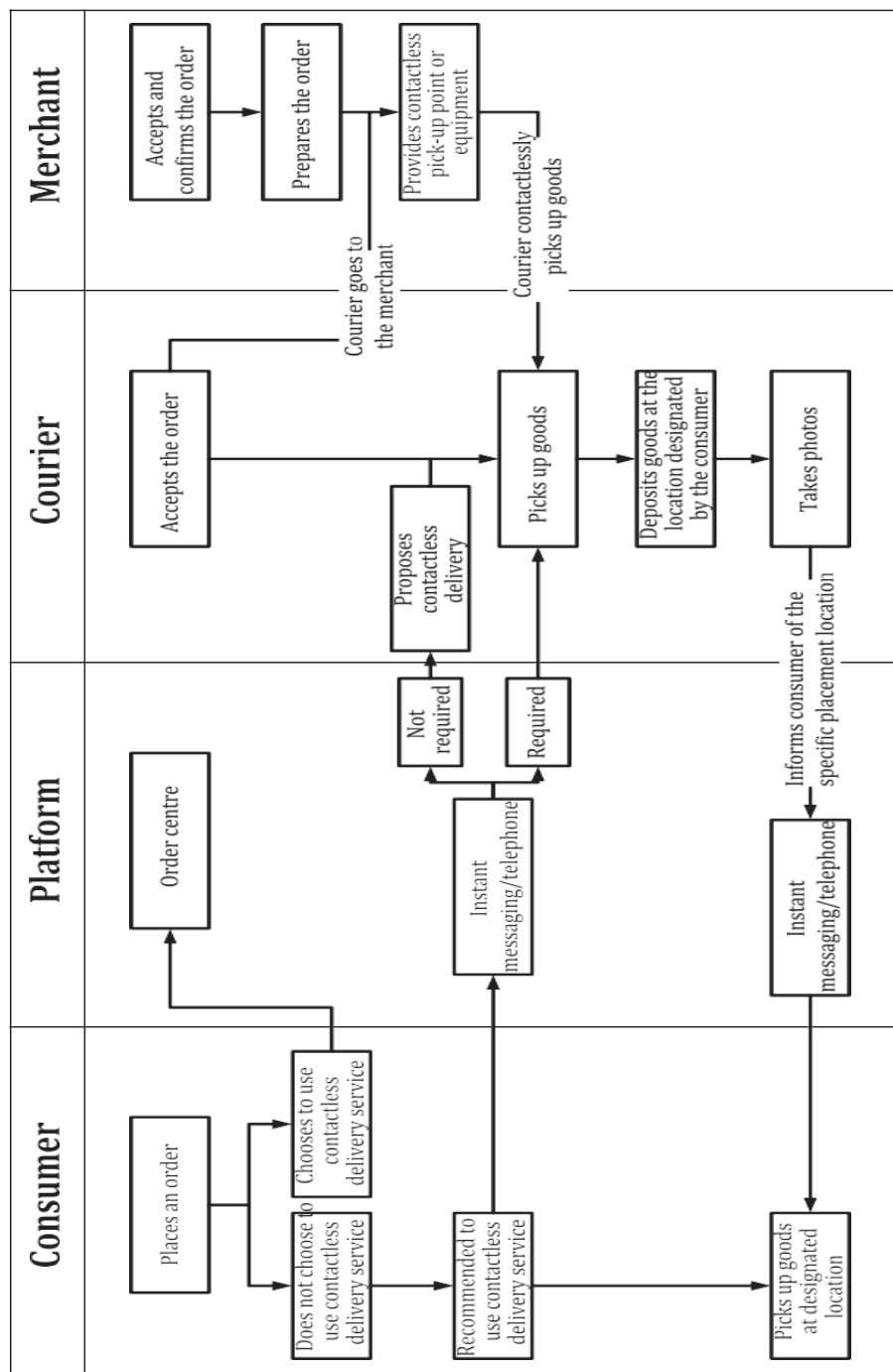


FIG. 1 EXAMPLE OF GENERAL SERVICE PROCESS OF INSTANT DELIVERY

A-2 SERVICE PROCESS USING A SMART FOOD LOCKER

Fig. 2 shows an example of a contactless delivery service process that uses a smart food locker in online food delivery.

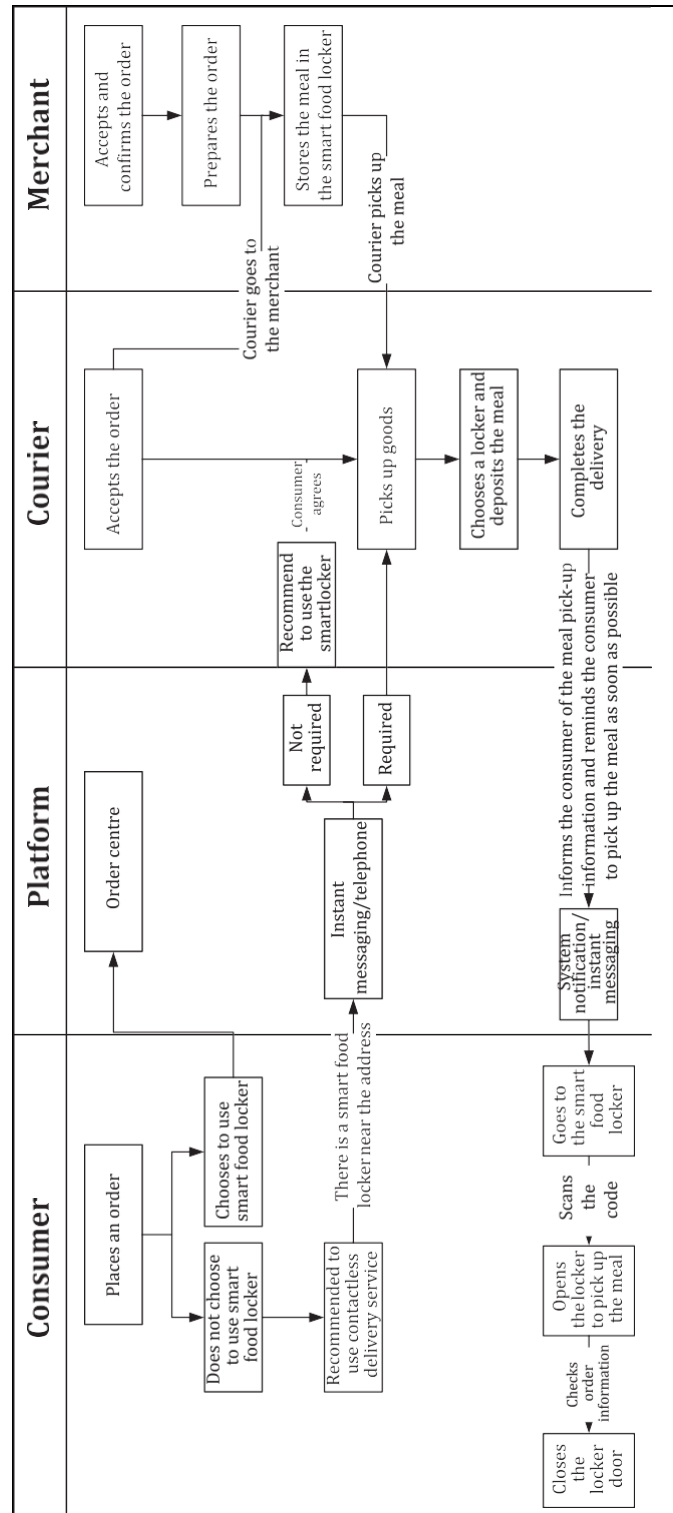


FIG. 2 EXAMPLE OF SERVICE PROCESS USING A SMART FOOD LOCKER