مشروع مواصفة قياسية عربية موحدة



المنظمة العربية للتنمية الصناعية والتقييس والتعدين

مركز المواصفات والمقاييس

مشروع مواصفة قياسية عربية موحدة

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Halal Supply Chain Management System - Part 1: Transportation - General Requirements

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Halal Supply Chain Management System – Part 1: Transportation – General Requirements

The Standards and Metrology Institute for Islamic Countries l'Institut de Normalisation et de Métrologie pour les Pays Islamiques معهد المواصفات والمقابيس للدول الإسلامية

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FOREWORD

The Standards and Metrology Institute for Islamic Countries (SMIIC) as an intergovernmental organization, aims to set common standards to be implemented across the Organisation of the Islamic Cooperation (OIC) region and the world where the Institute aims to ensure the protection of consumers and the interoperability of products, and also to strengthen marketplace position of the OIC Member States in the global economy while fostering innovation and free trade initiatives.

This standard was developed by the SMIIC Technical Committee on Halal Supply Chain (TC 10) and adopted by SMIIC.

OIC/SMIIC 17 consists of the following parts, under the general title Halal supply chain management system:

Part 1: Transportation – General requirements

Part 2: Warehousing – General requirements

Part 3: Retailing – General requirements

Compliance with this standard does not of itself confer immunity from legal obligation.

This standard is based on sources of Islamic Rules. In this standard, Islamic Rules refer to those commonly accepted rules and schools of the Islam, regardless of variations in different countries.

INTRODUCTION

The halal supply chain links producers of products, goods and/ or cargo with consumers. The pipeline provides assurance that products, goods and/ or cargo delivered from one custodian to another is in accordance with halal requirements, thus preserving the halal integrity of the products, goods and/ or cargo.

The halal supply chain is translated into a set of management system requirements standards which comprise of the following:

- Transportation
- Warehousing
- Retailing

The implementation of these standards is consistent with the principles of the other related halal standards.

Figure 1 shows the relationship between the elements within the halal supply chain.

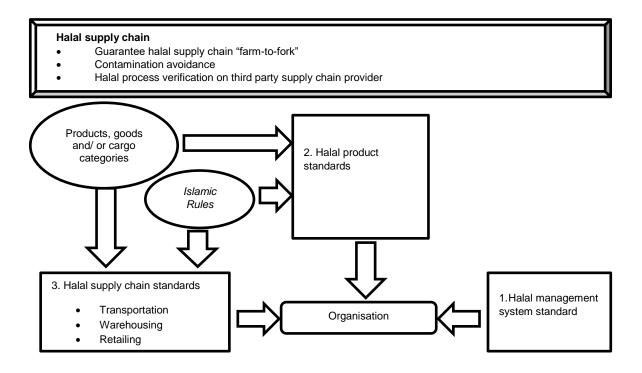


Figure 1 – Elements of the halal supply chain management system

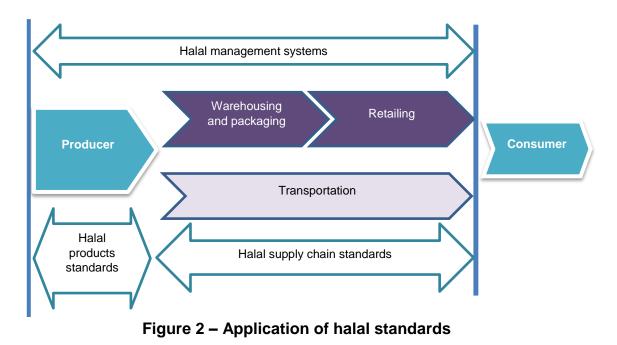


Figure 2 shows the application of various standards within the halal value supply chain.

HALAL SUPPLY CHAIN MANAGEMENT SYSTEM – PART 1: TRANSPORTATION – GENERAL REQUIREMENTS

1 SCOPE

1.1 General

This standard specifies supply chain management system requirements for assurance of the halal integrity of products, goods and/ or cargo being handled through various modes of transportation.

1.2 Application

1.2.1 This standard consists of requirements which are industry specific and is intended to be applicable to such organisations, regardless of type, size, products, goods and/ or cargo being transported. It specifies the framework for an organisation to establish a supply chain management system based on halal requirements in meeting customer and applicable regulatory requirements.

1.2.2 It is also intended for use by:

- manufacturers/producers;
- suppliers
- collection and distribution centres; and
- storage operators.

2 NORMATIVE REFERENCES

The following normative references are indispensable for the application of this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the normative references (including any amendments) applies.

- OIC/SMIIC 1, General Requirements for Halal Food

3 TERMS AND DEFINITIONS

For the purposes of this standard, the terms and definitions given in OIC/SMIIC 1 and the following shall apply.

3.1

adulterant

non-*halal and*/or detrimental (*mudhorat*) substances that are intentionally added which render the product as non-*halal*

3.2

affected product

product which halal status is affected

backhaul

return movement of a means of transport which has provided a transport service in one direction

3.4

chilled temperature

temperature ranging from 1 °C to 10 °C

3.5

competent authority

organisation/ agency which is legally authorised by the government to carry out task according to specified rules and requirements

3.6

consignee

party described in the transport document to whom the products, goods and/ or cargo are to be delivered

3.7

consignment

separately identifiable amount of products, goods and/ or cargo transported or available to be transported and specified in one transport document

Note 1 to entry: Consignment is part of the hierarchy of terms: goods item, shipment, cargo, and load.

3.8

consignor (shipper)

individual or organisation that prepares or instructs the preparation of a delivery document by which a carrier is directed to transport products, goods and/ or cargo from one location to another

3.9

consolidation

grouping together of smaller consignments of products, goods and/ or cargo into larger consignment for carriage as a larger unit

3.10

contaminant

non-halal and/ or detrimental (*mudhorat*) substances that are unintentionally added which render the product as non-halal as declared by Islamic Rules

3.11

contaminated product

product which its halal status is void by the presence of potential adulterant/ contaminant

contamination

state of being contaminated by adulterant, contaminant and/ or precursor which affects the halal status

3.13

custodian

individual or entity authorised with and in lawful possession of the consignments

Note 1 to entry: Also known as bailment.

3.14

equipment

equipment for moving products, goods and/ or cargo by loading and unloading, carrying them and delivering them to their destination

Note 1 to entry: Also refer to transport equipment, materials handling equipment and other means of transport.

3.15

freight forwarder

party / intermediary that collects shipment from shippers, consolidates these shipments into consignments as well as to provide advice and documentation arrangement of the consolidated shipment to a destination where the next party delivers the shipment to the consignee

3.16

frozen product

product that for one continuous period, from the time of preparation until sale, has been maintained at a temperature below minus 18 °C and has not been thawed before sale

3.17

halal

matters that are lawful and permitted in Islam based on the Islamic Rules

3.17.1

non-halal (haram)

matters that are unlawful and prohibited in Islam based on the Islamic Rules

3.18

halal assurance system

a set of procedures used by an organization / company to achieve the objective of maintaining a comprehensive halal assurance

3.19

halal control point

point, step or procedure at which controls can be applied and contamination can be prevented or eliminated

halal integrity

quality of being honest and transparent in halal management and matters

3.21

halal management system

integrated management system developed, implemented and maintained by an organisation to manage products and services in order to maintain halal integrity through internal halal control system or halal assurance system

3.22

halal supply chain

value supply chain management system that conforms to the halal principles

3.23

infrastructure facilities

place, premises, plant, buildings, ports or depot where the means of transport belonging to a particular organisation are parked, stored and serviced when not in use

3.24

Islamic rules

what Allah legislates for Muslims which derive its rules from the Holy Quran and the honourable Prophet Mohammed (peace be upon him), practices (Sunnah)

3.25

means of transport

particular vessel, vehicle, or other devices used for the transport of products, goods, cargo or persons

3.26

mode of transport

transportation unit travelling via land, sea/ inland waterway or air

3.27

najis

thing that is abominable in itself from the point of view of Islamic Rules with such substances as:

a) pigs, dogs and all their derivatives;

b) carrion or halal animals that are not slaughtered according to Islamic Rules;

c) any liquid and objects discharged from the orifices of human beings or animals such as urine, excrement, blood, vomit, pus, ova, sperm, amniotic fluids and placenta

3.28

non-conformance

absence of, and/ or the failure to implement and maintain, one or more system requirement, or situation which would, on the basis of available objective evidence or evaluation, raise doubt to halal perspectives

outsource

subcontractor/outsourced service provider in transportation activities

3.30

potential adulterant

non-halal or detrimental (*mudhorat*) substances that are intentionally added which may render the product as non-halal

3.31

potential contaminant

non-halal or detrimental (*mudhorat*) substances that are unintentionally added which may render the product as non-halal

3.32

potential precursor

result of activity(s) or substance(s) not intended as part of the product that may affect the halal status and intended use of the product

3.33

precursor

result of activity(s) or substance(s) not intended as part of the product that affects the halal status and intended use of the product

3.34

proof of delivery

confirmation of time (date) and location of receipt of delivered consignment (cargo) by a person authorised by the consignee to do so. Electronic links or other similar means of confirming collection/ delivery status should also be recognised where available and appropriate

3.35

qualified personnel

meeting the standards, requirements and training for a position

3.36

validation

process of establishing evidence that provides assurance that a product, service, or system accomplishes its intended halal requirements

3.37

value supply chain

system of organisations, people, technology, activities, information and resources involved in moving a product or service from supplier to the customer

Note 1 to entry: The products pass through all activities of the supply chain and add value at each activity.

verification

Halal quality process that is used to evaluate whether or not a product, service, or system complies with regulations, specifications, or conditions imposed at the start of a development phase

3.39

window delivery time

specific period of time within which the customer prefers to receive their delivery

4 REQUIREMENTS

4.1 Requirements related to Islamic Rules

The organisation shall ensure that the implementation of this standard is in accordance with Islamic Rules requirements and/ or Islamic Rules practices of the recipient and/ or importing country.

4.2 Management responsibility

4.2.1 Halal policy

4.2.1.1 The management of the organisation shall define and document its policy and commitment with regards to identification, evaluation and controls related to halal integrity.

4.2.1.2 The management shall:

- a) define the scope of the halal management system. The scope shall specify the processes and location of processes/ activities which are covered by the system from the beginning to the end of the processes related to transportation of products, goods and/or cargo transport chains activities;
- b) ensure that its policy is relevant to and in compliance with halal requirements;
- c) ensure that the policy with regards to the halal objective is understood, implemented and maintained at all levels of the organisation;
- d) review the results of the risk management activities at defined intervals to ensure continuing suitability and the effectiveness of the risk management process;
- e) ensure that appropriate communication processes are established within and outside the organisation to ensure the effectiveness of the halal management system; and
- f) provide suitable praying area for *Muslim* workers.

4.2.2 Organisation

4.2.2.1 Responsibility and authority

4.2.2.1.1 The management shall establish an internal halal committee which consist of Muslim personnel who are responsible to ensure the effectiveness in implementation of halal management system.

4.2.2.1.2 Organisation shall:

- a) appoint internal halal committee whose tasks, responsibilities, and authority shall be defined, documented and communicated to ensure the effective operation of the halal management system;
- b) ensure halal leader and/ or halal executive and internal halal committee members are formally trained in halal principles and its application;
- c) ensure that sufficient resources (i.e. manpower, facility, financial and infrastructure) are provided in order to implement the halal management system.
- d) ensure all activities are properly recorded. All documents and records shall be maintained and traceable.

4.2.2.2 Internal halal committee

4.2.2.2.1 A multi-disciplinary internal halal committee shall be set up to develop, maintain and review the Halal Risk Management. The committee shall have the knowledge and experience with regard to organisation's processes and halal principles and its applications.

4.2.2.2.2 The internal halal committee shall have clearly defined responsibility and authority including to:

- a) ensure that the halal leader and/ or halal executive as reference point on halal matters for the organisation;
- b) monitor, identify and record any problems with regard to the processes and the halal management system;
- c) report any problems encountered related to the implementation of halal supply chain to the halal leader for further action.
- d) ensure that the halal management system is established, implemented and maintained in accordance with this standard;
- e) organise and coordinate the halal activities;
- f) perform verification and validation activities on the halal supply chain;
- g) initiate corrective actions and controls to the processes including product recall and

withdrawals until the deviation or the unsatisfactory condition related to halal requirements have been corrected;

- h) initiate preventive action to prevent recurrence that will affect the halal status; and
- i) report on the suitability and effectiveness of the halal management system for management review.

NOTE The internal halal committee can be a newly established committee or part of an existing committee in an organisation.

4.3 Halal management system requirements

4.3.1 General

4.3.1.1 The organisation shall identify, document and ensure overall source(s) that could affect the halal integrity as well as control to prevent any non-halal product reaching the end user or consumers.

4.3.1.2 The organisation shall ensure the documentations established are in compliance with the requirements laid down in this standard.

4.3.1.3 Where the organisation incorporates the documentation of the halal management system in an existing management system, their relationship shall be clearly described in the existing management system documentations.

4.3.2 Procedures of the halal management system

4.3.2.1 The organisation shall establish documented procedures and a Halal Risk Management Plan to ensure consistency and compliance to the requirements of this standard and the organisation's stated policy and objective of halal principles.

4.3.2.2 The organisation shall take into considerations all current issues and developments related to halal principles, fatwa, including relevant regulatory requirements in establishing and maintaining the documentations.

4.3.3 Validation

4.3.3.1 The objective of the validation is to ensure that all Halal Control Points identified are complete and correct and that they will be effectively controlled under the proposed Halal Risk Management Plan.

4.3.3.2 Validation shall be carried out on the following, but not limited to:

- a) Halal Risk Management Plan;
- b) changes in the operation (incoming materials, processes, packaging, equipment, etc.) that could adversely affect the halal integrity of the products being handled;
- c) control measures; and
- d) corrective actions.

4.3.4 Halal Risk Management Plan

The organisation shall establish a Halal Risk Management Plan according to the principles outlined below:

4.3.4.1 Identification of halal potential adulterant, contaminant and/ or precursor

4.3.4.1.1 All known or foreseeable potential adulterant, contaminant and/ or precursor associated with the processes in both normal and fault conditions that are likely to occur within the scope of halal management system shall be identified. This includes previously recognised incidences and sequences of events that may affect the products, goods and/ or cargo status.

4.3.4.1.2 The basis of identification shall take into consideration the core purpose of the processes, inter phases to and from the processes, process flows, operations, establishment and facilities layout.

4.3.4.1.3 The potential adulterant, contaminant and/ or precursor identified shall be recorded.

4.3.4.1.4 For any potential adulterant, contaminant and/ or precursor identified, the likelihood and severity/ impact of occurrence of the potential adulterant, contaminant and/ or precursor shall be evaluated and recorded.

4.3.4.1.5 The risk for potential adulterant, contaminant and/ or precursor shall be ranked. Identification of potential adulterant, contaminant and/ or precursor shall be based on the requirements described in 5.1, 5.2 and 5.3.

An example of a typical Halal Control Point analysis worksheet format is given in Table A in Annex A. For determination of likelihood, severity and risk ranking, the Tables B.1, B.2 and B.3 in Annex B may be referred.

4.3.4.2 Determination of control measures

4.3.4.2.1 Based on the result of the evaluation, taking into consideration the risk decisions outlined in Table B.4 (Annex B), suitable control measures for each potential adulterant, contaminant and/ or precursor shall be determined.

4.3.4.2.2 The control measures shall prevent or eliminate the contamination suitable to the halal perspectives.

4.3.4.2.3 If there is no suitable method available to prevent or eliminate the potential adulterant, contaminant and/ or precursor, the processes shall be modified to suit the intended purpose.

4.3.4.2.4 The organisation shall implement the control measures identified and recorded in the Halal Risk Management file.

4.3.4.2.5 The control measures shall be verified for effectiveness and the results of verification shall be recorded in the Halal Risk Management file.

4.3.4.3 Determination of Halal Control Point

4.3.4.3.1 The determination of a Halal Control Point should be facilitated by the application of the Halal Control Point Risk Matrix (see Table B.3, Annex B). The process steps in which the potential adulterant, contaminant and/ or precursor evaluated as high and significant shall be determined as a Halal Control Point.

4.3.4.3.2 Documentation shall be made available to provide evidence for determination of Halal Control Point.

4.3.4.4 Determination of monitoring system for Halal Control Point

4.3.4.4.1 A monitoring system shall be established for each Halal Control Point identified. The monitoring system shall consist of planned measurements or observations to maintain the halal integrity status of the products, goods and/or cargo being handled, detect non-implementation of control measures and possible product contamination to be controlled and dealt with in a timely manner; to prevent contamination reaching the end user.

4.3.4.4.2 The monitoring system shall comprise of, but not limited to, what is being monitored, monitoring method, monitoring frequency, personnel responsible for monitoring and evaluating the monitoring result, location of monitoring, etc.

4.3.4.4.3 Monitoring result shall be recorded. Where possible, when monitoring results indicate trends towards non-implementation or ineffectiveness of control measures, appropriate process adjustments shall be taken before a deviation occurs and recorded.

4.3.4.5 Determination of corrective actions for Halal Control Point

4.3.4.5.1 The organisation shall document the corrective actions taken when monitoring result shows that control measures are not implemented or ineffective to eliminate or prevent the contamination.

4.3.4.5.2 Corrective actions shall ensure the halal integrity of the products, goods and/or cargo or process is protected, the control measures are being re-implemented as planned and the products, goods and/or cargo during which period the control measures are not implemented are handled according to procedures established.

4.3.4.6 Determination of verification procedures

4.3.4.6.1 The organisation shall establish and maintain documented procedures for verification activities.

4.3.4.6.2 The organisation shall carry out verification activities which include the following:

- a) review of Halal Risk Management Plan;
- b) assessment of all control measures;

- c) analysis of (near) recalls and product disposition due to non-implementation of control measures;
- d) compliance of the process flow diagrams and layout with documented situation;
- e) analysis of customer and consumer complaints related to halal integrity;
- f) evaluation of Halal Risk Management Plan with applicable legislation and authority
- g) review of gaps between current and desired level of knowledge, awareness and training of staff with respect to halal knowledge; and
- h) consistency of current documentation.

4.3.4.6.3 The organisation shall plan the verifications based on the state and the importance of the activities and shall be performed by qualified personnel. The verification shall include what is being verified, method of verification, frequency, person responsible for verification and periodical audit.

4.3.4.6.4 Records of verification activities shall be maintained.

4.3.4.7 Documentation system and management of records

4.3.4.7.1 Documentation system

4.3.4.7.1.1 The organisation shall establish and maintain documentation for Halal Risk Management System and relevant documentations to ensure conformity with the requirement of this standard and the applicable legislations and regulations.

NOTE Documentation should be appropriate to the nature, size and complexity of the processes.

4.3.4.7.1.2 A documented procedure shall be established to define the controls needed:

- a) to approve documents prior to issue;
- b) to review and update as necessary and re-approve documents;
- c) to ensure changes and the current revision status of documents are identified;
- d) to ensure that relevant versions of applicable documents are available at points of use;
- e) to ensure documents remain legible and readily identifiable;
- f) to ensure that documents of external origin are identified and their distribution controlled;

- g) to prevent unintended use of obsolete documents, and to apply suitable identification to them if they are retained for any purpose; and
- h) to observe proper placement and storage of documents which contain Quranic elements.

4.3.4.7.2 Control of records

4.3.4.7.2.1 Records shall be established and maintained to provide evidence of conformity to the requirements and effective implementation of Halal Risk Management System.

4.3.4.7.2.2 Records shall remain legible, identifiable and retrievable.

4.3.4.7.2.3 The organisation shall define the control needed for the identification, storage, protection, retrieval, retention time and disposition of records.

4.4 Halal Risk Management Plan Summary

The application of halal principles can be summarised in a Halal Risk Management Plan Summary.

Refer to Table C (Annex C) for a typical example of Halal Risk Management Plan Summary.

4.5 Information and communication system

The organisation shall provide information and communication systems to support its operations and to interchange information with other service providers (including freight forwarders) and customers.

5 PRELIMINARY STEPS TO ENABLE RISK MANAGEMENT PROCESS

The organisation shall consider the following during the establishment of the Halal Risk Management Plan.

5.1 Process characteristics

5.1.1 All inbound and outbound transportation services shall be described in documents to the extent needed to conduct the risk analysis, including the following, as appropriate:

- a) biological, chemical and physical characteristics;
- b) description of containers and equipment (trucks, vans, etc.) if applicable;
- c) mode of transportation;
- d) placement, stacking and storage conditions;
- e) conduct check list prior to dispatch and receiving;

- f) handling and distribution activities; and
- g) acceptance criteria or specifications appropriate for the transportation services.

5.1.2 The information shall be kept updated.

5.2 Process flow diagrams

5.2.1 The organisation shall prepare a complete flow of diagrams of the process(s) covered by the Halal Risk Management Plan. The process flow diagram shall provide a schematic overview of the operation and provide the basis for evaluating the possible introduction, occurrence or increase of the potential contamination.

5.2.2 Flow diagrams shall be clear, accurate and sufficiently detailed. Flow diagrams shall include the following but not limited to:

- a) the sequence and interaction of all steps in the operation;
- b) any agent or outsourcing parties;
- c) where inbound and outbound products, goods and/ or cargo as well as intermediate products, goods and/ or cargo are released;
- d) where human handling is involved; and
- e) where Halal Control Points.

5.2.3 The flow diagrams shall be verified on-site by the internal halal committee, other than the person(s) who prepares them. Verified flow diagrams shall be maintained as records.

5.3 Layout plan

5.3.1 All facilities, such as process(s) sites, storage areas and personnel facilities shall be depicted in the plant layout. Construction and layout shall permit adequate maintenance and cleaning.

5.3.2 In the layout plan the items to be indicated shall include:

- a) the areas where cross contamination of and incidental contact with in-process and finished products by inbound materials, raw materials, processing aides such as chemicals, additives, lubricants, packaging, pallets, containers, etc. can occur;
- b) the routing of inbound materials, intermediate materials, finished products, goods and/ or cargo, personnel, etc.;
- c) the areas and facilities for personnel use; and
- d) other facilities such as quarantine area, receiving areas, sorting areas, sanitary facilities, pest control stations, waste disposal areas, lighting, etc.

5.4 Chain of custody

5.4.1 Verification of the consignments of products, goods and/ or cargo transferred from a custodian shall be done by the next custodian of the consignments.

5.4.2 Validation on the next custodian's compliance to this standard shall be done to ensure the halal integrity of the consignments.

5.4.3 Identification of stakeholder and user of the process

5.4.3.1 The stakeholders of this standard include organisations involve in the delivery of halal products, goods and/ or cargo throughout the supply chain.

5.4.3.2 The organisation shall ensure that the outsourcing party is informed of the halal status of the consignment and its requirements.

5.4.3.3 The transfer processes and activities of the halal products, goods and/ or cargo to the next custodian shall be documented and attested.

5.4.4 Goods in transit

5.4.4.1 Where there are specific environmental conditions defined and agreed as part of the arrangements, it is the responsibility of the organisation to ensure that there are effective management systems and controls to demonstrate and prove compliance to halal requirements. In addition, there shall be adequate records available to prove compliance with any statutory conditions relevant to the nature of the consignment and modes of transport.

5.4.4.2 This requirement is applicable but not limited to:

- a) temperature;
- b) humidity;
- c) air pressure;
- d) controlled environment;
- e) drop and shock;
- f) compression loading;
- g) vibration; and
- h) orientation, segregation and separation of products, goods and/ or cargo.

5.4.4.3 The organisation and its service providers shall provide adequate facilities to ensure the integrity of halal products, goods and/ or cargo received is not compromised deteriorate or suffer loss or damage during times of storage including temporary storage in transit.

5.4.4.4 They shall also ensure that suitable and secure facilities are provided, where appropriate to the nature of the products, goods and/ or cargo to be transported in accordance with the requirements of the consignor and/ or the consignee.

5.4.4.5 The organisation shall provide suitable means of transporting consignment throughout the transport chain, including equipment and resources as necessary to maintain the integrity of the halal principles.

5.4.5 Preparation and dispatch

5.4.5.1 The organisation shall ensure that details of all agreements with the next custodian relating to the preparation, loading, stowing, securing and dispatch of all packed goods and/ or cargo are available to the personnel responsible for this part of the service performance. This information should contain all relevant aspects such as loading information, sequence of loading, window delivery time, accompanying documentation and product identification. Where appropriate, there should be clear methods of identification which maintain traceability of product and load/shipment details.

5.4.5.2 The organisation shall also ensure the transport operations including agents and/ or outsourcing parties in accordance with legal and halal requirements.

5.4.6 Loss/ damage

5.4.6.1 The organisation shall ensure that any loss or damage to the consignment throughout the transportation process be identified and the next custodian informed accordingly. Loss/damage found shall be documented.

5.4.7 Documentation

5.4.7.1 The organisation shall ensure that the implementation of proper documentation and the availability of required documents (e.g. bill of lading, advance shipping notice, packing list, air way bill or delivery order) to verify the nature of the consignment, type of load, the destination and the mode of transport. Any discrepancy arising shall be recorded together with corrective actions taken.

5.4.7.2 It is also the responsibility of the organisation to ensure that there is evidence of collection and delivery (proof of delivery) confirmed by persons authorised to provide such confirmation on behalf of the next custodian or consignee.

5.4.8 Agents/ Outsourcing parties

The organisation shall monitor the performance of its agents and/ or outsourcing parties to ensure compliance with halal requirements. These transport services include (but not limited to); delivery and pick up, backhaul and consolidation consignment.

6 OPERATIONS OF THE HALAL RISK MANAGEMENT PLAN

6.1 Transportation of products, goods and/ or cargo chain services and related activities

Typical activities of the above (as per Figure 3) may include the following:

- a) customers instruction;
- b) identification and segregation of non-halal products;
- c) incoming products, goods and/ or cargo subject to integrity checks;
- d) products, goods and/ or cargo transfer to warehouse;
- e) unload products, goods and/ or cargo at receiving area;
- f) appropriate storage location according to type of products, goods and/ or cargo;
- g) storage at ante room (for ambient products, goods and/ or cargo);
- h) maintenance of transports including temperature controlled truck;
- i) sorting of products, goods and/ or cargo according to customer's sales order (SO);
- j) outsources monitoring;
- k) customs' or authorities' inspection; and
- I) others.

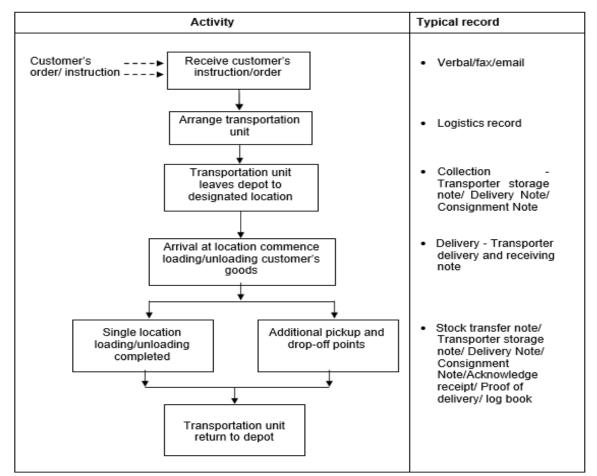


Figure 3 – Typical element and flow of transportation of products, goods and/or cargo chain services and related activities

6.2 Records to be maintained

Records of transportation of products, goods and/ or cargo transport chain services activities shall be maintained as evidence for the operation of the Halal Risk Management system.

6.3 Control of non-conformity

6.3.1 Handling of contaminated and affected products, goods and/ or cargo

6.3.1.1 Procedures and records to be maintained

A documented procedure shall be established and records maintained to define handling, control and disposal of contaminated and affected products, goods and/ or cargo resulting from handling under conditions where the control measures are not implemented or ineffectively implemented, to prevent the contaminated and/ or affected products, goods and/ or cargo from being released to end user. Records related to handling of contaminated and/ or affected products, goods and/ or cargo shall be maintained.

6.3.1.2 Disposition of contaminated and/ or affected products, goods and/ or cargo

6.3.1.2.1 The contaminated and/ or affected products, goods and/ or cargo shall be isolated and referred to the internal halal committee for decision. All decisions for disposition shall be recorded together with information on the nature of contamination, its cause(s) and consequences including information needed for traceability purposes related to the contaminated and/ or affected products, goods and/ or cargo, and referred to the relevant parties.

6.3.1.2.2 The disposition of the contaminated and/ or affected products, goods and/ or cargo shall be carried out under strict supervision, or referred to the rightful owner.

6.3.2 Handling of doubtful products, goods and/ or cargo

6.3.2.1 Products, goods and/ or cargo handled under conditions where control measures are not implemented or ineffectively implemented, which have not been confirmed as contaminated or affected, are considered as doubtful products, goods and/ or cargo.

6.3.2.2 The products, goods and/ or cargo handled under conditions where control measures are not implemented shall be evaluated with respect to the cause(s) of contamination and the impact of the contamination in terms of halal perspective.

6.3.2.3 Such products, goods and/ or cargo shall be isolated and quarantined for further action. The evaluation shall be recorded.

6.3.2.4 Evaluation for release of doubtful products, goods and/ or cargo

Each lot of doubtful products, goods and/ or cargo shall only be released when the following conditions apply:

- a) evidence other than the monitoring system demonstrates that the control measures have been effective;
- b) evidence shows that the effect of the control measures for that particular products, goods and/ or cargo complies with halal requirements; and
- c) the results of sampling, analysis and/ or other verification activities demonstrate that the doubtful lot of products, goods and/ or cargo complies with the halal requirements.

6.3.2.5 If the doubtful products, goods and/ or cargo released are subsequently determined to be non-halal, the organisation shall notify relevant interested parties for appropriate action.

6.3.3 Corrective actions

6.3.3.1 A documented procedure shall be established and maintained to specify appropriate actions to identify and eliminate the cause of cross contaminated or affected products, goods and/ or cargo to prevent recurrence and to bring the process

or system back into control after the non-conformity is encountered. These actions include:

- a) reviewing of non-conformities;
- b) reviewing of trends in monitoring results that may indicate trend of loss of control;
- c) determining the cause(s) of non-conformities;
- d) evaluating the need for action to ensure that non-conformities do not recur;
- e) determining and implementing the actions needed;
- f) recording the results of corrective actions taken; and
- g) reviewing corrective actions taken that they are effective.

6.3.3.2 Corrective actions shall be recorded.

6.4 Isolation and notification

6.4.1 In the event to facilitate complete and timely isolation and notification of lots of products, goods and/ or cargo which have been identified as cross contaminated or affected during handling, top management of the organisation shall appoint personnel having the authority to execute the isolation and notification.

6.4.2 The organisation shall establish and maintain documented procedures for isolation and notification of products, goods and/ or cargo.

6.4.3 When establishing the procedure, the organisation shall consider the degree of detail regarding traceability in the handling processes.

6.4.4 Isolated products, goods and/ or cargo shall be secured or held under supervision and handled according to 6.3.

6.4.5 The cause, extent and result of an isolation shall be recorded and reported to top management as input for the management review.

6.4.6 The organisation shall verify and record the effectiveness of the isolation and notification procedure.

6.5 Communication

The management shall ensure that appropriate communication processes are established within the organisation and to the external interested parties with regards to the effectiveness of the halal management system. The use of information and communication technology (ICT) system as mode of communication should be encouraged within the organisation.

6.6 Traceability

6.6.1 The organisation shall establish and apply a traceability system that enables the identification of products, goods and/ or cargo in the transportation chain services.

6.6.2 The traceability system shall enable the identification of the inbound products, goods and/ or cargo for the processing stages from the immediate suppliers and the distribution routes and destination of the products, goods and/ or cargo.

6.6.3 The organisation shall define the retention period for the traceability records of products, goods and/ or cargo. The records maintained shall be in accordance with the statutory and regulatory requirements and customer requirements.

6.7 Control of monitoring and measuring equipment

6.7.1 The organisation shall establish and maintain a documented procedure for the control of measuring equipment and methods used in the monitoring of the halal management system (e.g. halal risk assessment, Halal Control Point(s), validation and verification activities). The measuring equipment shall be calibrated or verified at specified intervals prior to use against measurement standards traceable to national or international measurement standards.

6.7.2 Where no such standard exists, the basis used for the calibration or verification shall be documented.

6.7.3 Methods used in connection with monitoring, validation and verification of cross contamination shall be appropriate, and ensure that reproducible and repeatable results are obtained.

6.7.4 Records of the results of calibration and/ or verification shall be maintained.

6.8 Emergency preparedness

The management shall establish, implement and maintain procedures to manage potential emergency situations resulting in contamination including incidents and which are relevant to the role of the organisation. The organisation need to identify certain measures of control to be adopted to reduce the impact of such disaster.

6.9 Outsourced service providers/ subcontractors control

6.9.1 Where the organisation outsources any process that affects the halal requirement, the organisation shall ensure control of such processes. Control of such outsourced processes shall be in accordance with the halal management system.

6.9.2 The organisation shall evaluate and select outsourced service providers/subcontractors based on their ability to supply products or services in accordance with the halal requirements. Criteria for selection and evaluation of outsourced service providers/subcontractors shall be established. Records for selection and evaluation of outsourced service providers/subcontractors shall be maintained

6.9.3 The organisation shall re-evaluate the outsourced service providers/ subcontractors to ensure compliance with halal requirements. Any corrective action arising from the re-evaluation shall be recorded.

7 GENERAL REQUIREMENTS FOR PREMISES, INFRASTRUCTURE, FACILITIES AND PERSONNEL

7.1 Transport location

The organisation should consider potential source of contamination when deciding on the location of the vehicle to protect halal integrity. The vehicle should mitigate or be located away from the following:

- a) environmentally polluted areas and industrial activities which pose a serious threat;
- b) areas subject to flooding;
- c) pest infestation areas; and
- d) areas where wastes, either solid or liquid, cannot be removed effectively.

7.2 Premises design and layout

7.2.1 Where appropriate, the design and layout of the premises should permit good hygiene practices, including protection of products, goods and/ or cargo against cross-contamination between and during operations. Construction and layout of the infrastructure facilities shall permit adequate maintenance and cleaning.

7.2.2 Internal structure of the premises should be soundly built from durable materials and be easy to maintain, clean and where appropriate able to be disinfected or perform cleaning process according to Islamic Rules.

7.2.3 Where required, appropriate area for eating and drinking shall be allocated to the personnel. The area shall be well-maintained and kept in good condition to prevent pest access and harbourage.

7.3 Facilities, equipment and materials

7.3.1 Containers for products, goods and/ or cargo, should be specifically identifiable, suitably constructed and where appropriate, made of impervious materials. They should be properly secured to prevent malicious or accidental contamination to the products, goods and/ or cargo being handled.

7.3.2 The organisation shall provide hygiene facilities to ensure appropriate degree of personnel hygiene can be maintained and to avoid contaminating the products, goods and/ or cargo. The facilities shall be suitably located and designated. Facilities shall include:

a) adequate means of hygienically washing and drying hands, including wash basins and a supply of water and sanitisers, and the provision of advisory signs;

- b) adequate number of lavatories of appropriate hygienic design; and
- c) adequate changing facilities and locker rooms for personnel.

7.3.3 The management shall ensure that all equipment used in the transport chain activities meet specified requirements and are appropriately designed, constructed, and installed to facilitate maintenance, adjustment, cleaning and use.

7.3.4 Where a material present could reasonably be expected to have an adverse effect on halal requirements of products, goods and/ or cargo, the management shall establish and maintain procedures for the handling of such material.

7.3.5 Drainage and waste disposal systems

7.3.5.1 Floors and drainage system shall be suitably constructed to allow proper flow of water and waste so that the risk of contaminating the products, goods and/ or cargo being handled is avoided. Drains should be equipped with strainer to ensure solid waste is removed and appropriately treated in accordance with environmental requirement before discharge. Drainage system shall be maintained to ensure free flow of water.

7.3.5.2 External drainage systems shall be constructed to prevent access of pests. Fixtures, piping and ducts shall not cause condensation or leakage which could contaminate the products, goods and/ or cargo.

7.3.5.3 Adequate waste disposal systems should be established and a proper collection system of waste out of the premises should be designed to prevent accumulation of waste.

7.3.5.4 Liquid waste, if any should be handled in a manner that it will not pose threat to the environment.

7.4 Personnel hygiene, health status and cleanliness

7.4.1 Personnel health status

The organisation shall ensure that personnel who directly or indirectly come in contact with the products, goods and/ or cargo or processes likely to contaminate the products, goods and/ or cargo being handled follow certain guidelines:

- a) Health status: Personnel with known, or suspected to be suffering from, or carrier of a disease or illness likely to be transmitted through handling and contact with products, goods and/ or cargo, shall declare their health status. Any person so affected shall immediately report illness or symptoms of illness to the management.
- b) Medical examination: Personnel should carry out medical examination if clinically or epidemiologically indicated.
- c) Illness and injury: Personnel with serious medical conditions that require any need for medical examination/ treatment and/ or possible exclusion from the operation processes should report to the management for further action.

7.4.2 Personnel cleanliness

7.4.2.1 Personnel involved in the handling process shall maintain a high degree of personnel cleanliness.

7.4.2.2 Personnel with cuts and wounds, if allowed to continue working, shall ensure that the cuts and wounds be covered by suitable waterproof dressings.

7.4.2.3 Personnel should observe a proper hand washing technique before start of handling activities, immediately after using the lavatories and after handling raw or contaminated products, goods and/ or cargo which could result in contamination of other products, goods and/ or cargo.

7.4.2.4 If the personnel have come into contact with non-halal products, goods and/ or cargo, the personnel shall wear proper attire before handling the products, goods and/ or cargo and should perform the cleaning process according to Islamic Rules when needed.

7.4.3 Personnel conduct

7.4.3.1 Personnel shall refrain from behaviour that could result in contaminating the products, goods and/ or cargo being handled such as smoking, spitting, chewing or eating/ drinking, and sneezing or coughing over protected and unprotected products, goods and/ or cargo during the handling process.

7.4.3.2 Personnel shall also not bring into handling process areas any personal effects that could cause contamination to the products, goods and/ or cargo.

7.4.4 Visitors

Visitors to the handling process areas shall adhere to all personnel hygiene provisions.

7.5 Environment, perimeter and grounds

7.5.1 Where environmental conditions could reasonably be expected to have an adverse effect on products, goods and/ or cargo quality, the organisation shall establish and maintain procedures to adequately control these environmental conditions. Environmental control system(s) shall be periodically inspected to verify that the system, including necessary equipment, is adequate and functioning properly. These activities shall be documented and reviewed.

7.5.2 The perimeter and grounds surrounding the organisation's premises should be kept and maintained in a manner that contamination to the handling process is avoided.

7.6 Maintenance of equipment

7.6.1 Equipment shall be well-maintained and kept in good condition to:

- a) facilitate all sanitation procedures including cleaning process according to Islamic Rules;
- b) function as intended particularly at critical process steps; and

c) prevent contamination of products, goods and/ or cargo from non-halal material and dangerous or hazardous materials.

7.6.2 The management shall establish cleaning and maintenance schedules for equipment (including temperature control equipment) to ensure that operating specifications are met. Maintenance activities shall be recorded.

7.6.3 The management shall conduct periodic inspections in accordance with established procedures to ensure adherence to applicable equipment maintenance schedules. The inspections shall be recorded.

7.7 Cleaning and sanitation

7.7.1 The organisation shall establish and maintain a procedure to outline suitable cleaning methods and materials depending on the nature of the organisation's business. The procedure shall describe the cleaning and disinfection programs to be undertaken to ensure that all parts of the premises are appropriately clean and in accordance with the halal requirements. The cleaning program shall include the cleaning of the cleaning tools and cleaning process according to Islamic Rules where required.

7.7.2 Cleaning activities shall be continually and effectively monitored for their suitability and effectiveness. The evidence of monitoring shall be recorded.

7.7.3 Cleaning chemicals shall be free from najis and shall be handled and used carefully and in accordance with manufacturer's instruction and stored separately from products, goods and/ or cargo, in clearly identified containers to avoid the risk of contamination.

7.7.4 All transport vehicles shall be adequately maintained and cleaned after delivery.

7.8 Cleaning process according to Islamic Rules

The organisation should ensure that cleaning process according to Islamic Rules is performed depending on the nature of najis. Cleaning process according to Islamic Rules as Annex D may be used.

7.9 Training of personnel

7.9.1 The organisation shall develop training program including halal related training to ensure personnel involved in the operation are trained and/ or instructed to a level appropriate to the operations to be performed.

7.9.2 The training program shall identify and fulfil the need for training taking into consideration the level of education, skill, competency and experience of the personnel and the task to be performed.

7.9.3 The need for training shall be reviewed at appropriate intervals.

7.9.4 The organisation shall perform assessments of the effectiveness of training programs.

7.9.5 Managers and supervisors should have the knowledge on halal principles for effective operations of the system.

7.10 Contamination control

7.10.1 Physical, chemical and biological control

The organisation shall establish a system to prevent contamination of products, goods and/ or cargo by physical, chemical and biological adulterants/ contaminants which could render the products, goods and/ or cargo to become non-halal.

7.10.2 Pest control

The organisation shall employ all measures to avoid creating an environment conducive to pests. The organisation shall immediately deal with pest harbourage without adversely affecting the products, goods and/ or cargo being handled.

8 MAINTENANCE OF THE HALAL SUPPLY CHAIN

8.1 Internal halal audit

8.1.1 The organisation shall establish and maintain documented procedures for conducting audits at planned intervals to determine whether the halal management system:

- a) conforms to the requirements of this standard and to the halal management system requirements established by the organisation; and
- b) is effectively implemented, maintained and updated

8.1.2 Audit findings including corrective actions taken shall be recorded and maintained.

8.2 Management review

8.2.1 Top management shall review the continuing suitability, adequacy and effectiveness of the halal management system at defined intervals. The review shall include identifying and assessing the changing needs of the business in relation to the halal management system, and the opportunities for improvement. The review shall take into consideration the stakeholders and Islamic Rules requirements, and the organisation's halal policy and objectives.

8.2.2 Records from the management review shall be maintained.

8.3 Handling of complaints and feedback

The organisation shall establish a procedure to define requirements for handling customer complaints and feedback. The procedure shall include requirements for:

a) reviewing complaints and feedback to determine the causes;

- b) evaluating the need for actions to be taken;
- c) determining and implementing the actions needed;
- d) recording the results of actions taken; and
- e) reviewing the effectiveness of actions taken.

8.4 Responsiveness to change

8.4.1 The organisation shall ensure that its halal management system is maintained and updated in response to anticipated and actual changes in the organisation operations, human resources, customer/ sector usage and groups, regulatory and/ or Islamic Rules requirements and any other internal and/ or external changes which might have an impact on the halal operations.

8.4.2 These changes shall be documented and executed by internal halal committee. All changes shall be communicated to the relevant parties.

Annex A (informative) Typical example of a Halal Control Point analysis worksheet

1	2	3		4		5	6
Process steps	List potential adulterant, contaminant /precursor	Rationale for inclusion or exclusion as a potential adulterant, contaminant/	severity/	of the likelih impact of po ant, contamin precursor	otential nant/	Control measures	Is this process step a Halal Control Point? (Yes/No)
			Likelihood	Severity/ Impact	Risk ranking		

Table A – Typical example of a Halal Control Point analysis worksheet

Annex B

(informative)

Reference tables for determination of likelihood, severity and risk ranking

Likelihood	Description
Likely	The possibility of halal status affected expected to occur in most circumstances. Common or repeated occurrence, has happened before several times.
	The possibility of halal status affected might occur sometimes.
Moderate	Known to occur, happened before.
Unlikely	The possibility of halal status affected could occur in exceptional circumstances.
Officery	Practically impossible.

Table B.1 – Halal Control Point likelihood ranking

Table B.2–Halal Control Point severity/impact ranking

Halal Severity/ Impact	Description							
Critical	 The potential adulterant/ contaminant (non-halal materials or detrimental (<i>mudhorat</i>) substances) affects the totality of halal status of the products, goods and/ or cargo and the <i>halal</i> status of the products, goods and/ or cargo could not be salvaged. Release of the products, goods and/ or cargo will result in loss of trust from customers, public and authorities. May cause great impact for future business transactions. 							
Moderate	The potential adulterant/ contaminant (non-halal materials or detrimental (<i>mudhorat</i>) substances) affects the halal status of the products, goods and/ or cargo but the halal status of the products, goods and/ or cargo still could be salvaged. May result in delay of delivery or shipment and potential loss of future contracts, possible loss of public trust.							
Insignificant	No impact on the halal status of the products, goods and/ or cargo.							

Likelihood	Severity/ impact							
	Insignifica	Modera	te	Critical				
Likely	ly Moderate		Significant	7	High	9		
Moderate	Low	2	Moderate	5	Significant	8		
Unlikely	Low	1	Low	3	Moderate	6		

Table B.3 – Halal Control Point risk matrix

Table B.4 – Halal decision rules for risk ranking

Ranking levels	Likelihood	Impact	Code	Risk decision with regards to halal control measures			
9	Likely	Critical	High	The organisation needs to review the incidence in a detailed manner to find the root cause of the problem. All precautionary measures shall be taken to resolve the problem identified. Monitoring and verification activities towards control measures shall be conducted in accordance with the scheduled plans. All staff shall be briefed to keep informed on the matter.			
8	Moderate	Critical		The organisation shall take all precautionary measures to resolve the problem identified. Monitoring			
7	Likely	Moderate	Significant	and verification activities towards control measures shall be conducted in accordance with the scheduled plans.			
6	Unlikely	Critical					
5	Moderate	Moderate	Moderate	The organisation shall monitor and verify control measures in accordance with the scheduled plans.			
4	Likely	Insignificant					
3	Unlikely	Moderate					
2	Moderate	Insignificant	Low	The organisation maintains the implementation of control measures in accordance with scheduled plans.			
1	Unlikely	Insignificant					
NOTES:							

1. Organisation means the top management, halal leader and all staff.

2. The process step(s) with ranking of "high" and "significant" should be considered as Halal Control Point.

Annex C (informative) Typical example of a Halal Risk Management Plan Summary

HCP No.	Process step	Monitoring			Corrective	Verification (What, How	Records		
		What	How	Frequency	Who	action	Frequency, Who)		
Prepared by:				Approved by:					
Name and Position:									
Date:					Name and Position				
					Date:				
					6				

Table C – Typical example of a Halal Risk Management Plan Summary

Annex D (informative) Method of cleaning according to Islamic Rules

D.1 General requirements

The najis, whether visible ('ainiah) or invisible (disappeared or dried up etc.) is named hukmiah. To cleanse najis:

- a) it is required to wash seven times, one of which shall be water mixed with soil;
- b) the first wash shall be to clear the existence of najis, even if a few washes are needed. The water from first cleaning shall not remain behind and the next wash shall be counted as the second wash;
- c) the amount of soil used is just enough to make a suspension; and
- d) the usage of product containing soil is permitted.

D.2 Conditions of the soil

The conditions of the soil are:

- a) free from najis;
- b) not musta'mal soil [which had been used for dry ablution (tayammum)] except after subject to heavy rain.

D.3 Conditions of the water

The conditions of the water are:

- a) shall be potable
- b) shall not be still
- c) not musta'mal and
- d) free from najis

NOTE *Musta'mal* water is the water that is less than two *qullah* (approximately 192 L) that had been used for cleansing.

Bibliography

[1] MS 2400-1, Halal supply chain management system – Part 1: Transporting – General requirements

[2] MS 2400-2, Halal supply chain management system – Part 2: Warehousing – General requirements

[3] MS 2400-3, Halal supply chain management system – Part 3: Retailing – General requirements

[4] ISO 22000, Food safety management systems - Requirements for any organisation in the food chain

[5] ISO 22005, Traceability in the feed and food chain - General principles and basic requirements for system design and implementation

[6] ISO 13485, Medical devices - Quality management systems - Requirements for regulatory purposes

[7] ISO 14971, Medical devices - Application of risk management to medical devices