

PR.SB.02 APPLICATION REVIEW AND CONTRACTING PROCEDURE

A) DOCUMENT APPROVALS

No	Definition	Action	Created By	Date
1	Document approved	Approval	Sevda Büyükbaltaçı	29.09.2023
2	Translation approved	Approval	Ayça ÇİLO	28.09.2023
3	Translation approved	Approval	Ayça ÇİLO	20.09.2023

B) REVISION HISTORY

No	Definition	Reason	Approval Date	Release Date
19	The halal surveillance audit period has been increased from 6 months to 12 months in the very high risk category	halal certification surveillance period	29.09.2023	29.09.2023
18	Audit Durations related to the customer satisfaction management system are defined.	improvement	10.04.2023	10.04.2023
17	Transferred to IQMemo program.	Switching to new program	02.02.2023	02.02.2023

5.Aim and Scope

5.1.Purpose

The purpose of this procedure is to ensure that applications or requests received for the purpose of documenting management systems are met accurately and quickly, and to determine the principles for preparing offers by examining service requests in terms of sector, scope, company specific requests, geographical location, availability and resource requirements.

5.2.Scope

This procedure covers the whole process of meeting the demands in order to obtain a certificate for the purpose of certification, renewal, scope enlargement, scope restriction or transfer of the documents received and transformed into contracts in respect of Management System Certification activities.

Audits of ISO 13485 Medical Quality Management System shall be outside the scope of this procedure.

6.Definitions

Management System: One of the Quality, Environment, Energy, Occupational Health and Safety, Customer Satisfaction, Information Security and Halal, Food Safety Management Systems.

QMS: Quality Management System

EMS: Environmental Management System

FSMS: Food Safety Management System

CSMS: Customer Satisfaction Management System

OHSMS: Occupational Health and Safety Management System

EMS: Energy Management System

ISMS: Information Security Management System

BCMS: Business Continuity Management System

Conformity Assessment Activity: It refers to the activity that provides proof that the specified requirements (specified need or expectation) related to a product, system, person or organization, which is the result of a transaction, are fulfilled.

Notified Body: It is the CAB appointed by the authorized body of Turkey or a European Union (EU) member country to carry out Conformity Assessment Activities within the scope of ISO 17021-1, in line with the principles determined in the relevant legislation.

Accreditation: It is a part of Conformity Assessment and is a tool that ensures trust and credibility in reports and certificates issued by accredited conformity assessment bodies.

Audit: It is the Conformity Assessment Activity carried out for Certification Services.

Audit Team Member: Refers to the personnel assigned for the Conformity Assessment Activity (Auditor, Technical Expert, Observer, Witness Auditor, etc.).

7.Responsibilities

Receiving proposal requests and ensuring the necessary communication with candidate customers, writing the proposals in computer environment, sending them to the customer and following up, finalizing them, Planning and Operations Coordinator, In Halal certification activities, product category, risk class, employee and HACCP number taking into account the parameters that affect the audit period in line with the inspection period requirements specified in the OIC / SMIIC 2: 2019 standard, the inspection period for the relevant certification scope is calculated by the Halal Certification Technical Officer. Qualified auditors who's assigned by Department Manager in the standard subject to the proposal from determining the audit periods subject to the proposal and evaluating resource requirements,

The Department Manager is responsible for the approval of proposals.

8.Method

8.1 Receiving the Requests

Certification requests for management system are received from customer in writing. In case the information contained in the request letter is insufficient or the request is received by telephone; company name, address, telephone, name of the contact person by fax, etc. are received from the candidate customer requesting system certification and such information is recorded and the request is verified. FR.SB.01 Certification Application Form is filled in according to the information received by or from the prospective customer. This information shall be taken as a basis for giving offer to the candidate customer. (FR.SB.01 ANNEX 2 Energy management application form annex FR.SB.01 ANNEX 3 Information security management system application form annex, FR.SB.01 ANNEX 5 Halal Food Application form annex) This information is taken as basis when submitting a proposal to the prospective client.

8.2 Review of Proposal Request

Employee being responsible for preparing the offer should have knowledge of the customer product, process and organization, related EA sector code in which candidate customer is included. If the relevant EA code is at high risk level, support from an auditor or technical expert assigned in the code designated shall be received mandatorily; but if it is at medium and low risk level, such support shall be received when necessary.

In addition to the EA sector in accordance with the scope of the document requested, class of said EA sector shall be determined as at least 3 digits from the NACE code list.

The staff reviewing the ISO 22000 Requests shall obtain the opinion of an ISO 22000 auditor assigned in the relevant category..

The staff reviewing the Halal Food Certification Requests receives opinion from a Halal Food auditor assigned in the relevant category.

While reviewing ISO 50001 requests, opinions are received from an ISO 50001 auditor assigned to the relevant technical field.

Personnel in charge of reviewing ISMS requests should be familiar with the Sector Code of the prospective customer and the product, process and organization of the customer. Where necessary, support is received from an auditor or Technical expert assigned in the designated code.

Sector defined in the Procedure of PR.SB.06 Information Security Classification of Business Types and Specialization Categories and Specialization Category in addition to the sector is determined in accordance with the scope of the document requested for ISMS.

Related responsible person shall evaluate whether the content of the request is answered in such a manner that it covers all questions on the basis of the following issues;

- Company name, address, information about the branches, if any,
- The standard scope in which it is included
- Product and process variety,
- Whether there is an integrated management system,
 - Integration Level,
 - Whether there is an activity excluded from the scope and if any, legitimacy of its justification,
 - Conformity of the activities within the scope of the application in terms of legal legislation and whether or not there is an expert to be assigned in this field. If accreditation is required, which accreditation body is preferred within the scope of our authorities,
 - If there are facilities or activities in more than one geographical region, determining the location, number, distance, etc.,
 - If the company is certified by another organization, name of the certification body, type of the certificate and validity date of the certificate,
 - Related sector codes determined by EA (European Accreditation Association),
 - Relevant sector codes set forthby NACE (European Union),
 - Category code (for FSMS and Halal Certification Audits),
 - Infrastructure information for Information Systems (for ISMS),
 - How long the system has been implemented in the company,
 - Information about system documents,
 - Information about the implementation of the system,
 - Appropriateness of the date stipulated for certification,
 - ISMS Industry and Expertise Category,
 - Complexity of ISMS (e.g. critical information, risk status of ISMS, etc.);
 - Business type (s) performed within the scope of ISMS;
 - Previous performance of ISMS;
 - The nature and extent of the technology used to implement different components of ISMS (e.g., number of different information technology platforms, number of differentiated networks);
 - The scope of outsourcing and arrangements for third parties utilized within the scope of ISMS;
 - Scope of information system improvements;
 - Number of sites and number of disaster recovery center sites;
 - Number of the Employees,
 - Number of employees working efficiently,
 - Number of employees per shift or season if there is a shift or seasonal production,
 - Total number of employees within the scope of the document requested, number of employees in each audit area,
 - Information about the processes outsourced in the activities requested for certification,
 - Information regarding utilization of consulting for the management system.
 - Additional FR.SB.01 Annex 2 is required for energy management system applications.
 - ENVER DATA of the relevant prospective client is requested for energy management system applications.
 - FR.SB.01 Annex 5 is requested for Halal Certification Audits
 - For halal certification audits, the legal status/organization, issues on raw materials, process lines, FSMS, namely information about HACCP activities are requested

Note: In order to perform an effective audit, at least 1 normal working hours shift and at least 1 non-normal working hours shift must be audited in the first certification cycle. During the surveillance audits in the cycles after the first certification cycle, SZUTEST may decide not to audit the shift outside of normal working hours, based on

the known (development) level of the OHSYS of the client organization.

For ISO 45001, the effective number of staff is the all personnel (permanent, temporary and part-time employees) involved in certification scope activities, including employees in every shift. If contractors are included in the scope of certification, top contractor/subcontractor personnel, who perform the work or work related activities that are under the control or influence of the organization's OHS Management Systems performance, will be included.

In the event that the information contained in the request is missing or the answers are not clear enough, the candidate contacts with the customer representative and ensures that the necessary information is received. Additional information or changes received by telephone shall be noted on FR.SB.01 Certification Application Form completed by the candidate customer and then, recorded and initialed together with the date and relevant reason.

The competence analysis required for each technical field related to EMS certification activities is checked for availability and, in particular, the competence for the following activities is verified;

In the reviews regarding EnMS Certification activities, the technical field is determined by using FR.SB.89 ISO 50001 Category list, and opinions are received from the assigned auditor-lead auditor or technical expert in the relevant field.

- Typical environmental assessment and identified associated impacts of the technical areas (EA codes) in which activity is being carried out, and technical site assessment related to FR.221 Technical Area Competence Form prepared for high- and medium-risk EA groups is made.
- The fact that the qualifications we need for certification have been identified means that said qualifications have been defined in terms of environmental assessment and associated impacts in technical areas.
- Analysis to identify specific requirements for application review of ISMS certification activities shall be carried out through the information provided in the annex to FR SB 01 ANNEX 3 information security management system over FR SB 02 Annex 1 ISMS application review form and then, recorded.
- For customers for whom Halal certification requests are received, general information about the company is obtained with FR.SB.01 Certification Application Form. In addition to this document, details of product classes and contents are requested and recorded with the FR.SB.01 Annex-5 form, which is specific to Halal certification. In the light of the information obtained through the application forms, the Halal food technical officer will determine the products within the scope of certification as defined in OIC / SMIIC 2: 2019 Annex A, Table A.1 and PR.SB.02 Application Evaluation Procedure the product category of the candidate customer is determined by considering the category classes. Beyond this, based on the product variety registered with FR.SB.01 ANNEX-5 and the OIC/SMIIC 2:2019 standard, the risk classes of the products defined in Table B.2 of PR.SB.02 Application evaluation procedure in article 8.5.5.1 are determined by the technical officer. Halal Certification technical officer, taking into account the parameters affecting the audit period such as the product category, risk class, number of employees and HACCP mentioned above, in line with the audit period requirements specified in the OIC / SMIIC 2: 2019 standard, the audit period for the relevant certification scope by the technical responsible is calculated. Factors affecting the inspection period and the relevant table are defined in Table B.1 of the PR.SB.02 Application evaluation procedure article 8.5.5.1. Detailed information affecting the determined audit period and duration are recorded with the FR.SB.02 Audit Program form along with other corporate information regarding the candidate client company information. Based on the determination of the audit period, the certification service contract is submitted with the FR.SB.03 Certification Proposal form. During the application evaluation phase, the list of raw materials, intermediate products and / or additives that affect the halalness of the products to be included in the certification scope is requested and the origin of these inputs is verified. If an additive used in any stage of the production process or an intermediate product that supports the process is used, the halalness of these additives, also verified with the FR.SB.127 Additive Conformity Checklist. MSDS forms of the products in question, HACCP plans based on production, test / analysis reports on food compliance of primary packaging materials that come into contact with the product at any stage of production are requested. If there is an input / additive that causes doubt about the halalness of the product, product determination / analysis reports for these products are requested and a decision is made regarding the compliance of the final product with Halal requirements. During the application, the verification of all legal documents received together with the technical documents is recorded with FR.SB.02 ANNEX-3 Halal Certification Pre-Assessment form, and it is ensured that the necessary documentation is recorded. For customer profiles involved in batch based production, FR.SB.124 Halal Party Goods Conformity Halal Slaughter Report is filled and the product details to be included in the certification are recorded.

In case there is no accreditation within the scope requested, the candidate customer is informed about the matter. If the prospective customer agrees on certification without accreditation, an unaccredited offer may be submitted provided that it is specified in the letter of tender.

If the prospective customer requests accreditation, it is determined that in which period of time said prospective customer shall request certification audit and offer shall be prepared in line with the accreditation to be included in the scope provided that it is specified in the Offer in the event that it meets for the extension of the scope in the sector where there is no accreditation.

The availability of the staff to be included in the Certification Committee is reviewed for compliance and impartiality during assessment of the certification request.

Likewise, the audit team that is likely to take part in the audit is reviewed in terms of qualification.

Periods and fees are calculated in accordance with the Audit Period Determination and Pricing Instruction.

Evaluations regarding review of request for the offer, reasons for the increase and decrease of time, planned audit dates and necessary information during three-year document validity are recorded in FR.SB.02 Audit Program. FR.SB.02 Audit Program should be prepared in such a manner that it includes 3-year Certification cycle of the customer.

As a result of the application reviews of the candidate customers whose certification application requests are received; In case of rejection of the application, the reasons for the rejection of the application are recorded in the FR.SB.02 Audit Program. Notification that the application has been rejected is sent to the prospective customer by e-mail.

8.3 Preparation of Offer

In the event that the evaluation is positive, the offer shall be prepared by the Planning and Operation Coordinator to the prospective customer within three days at the latest and submitted with FR.24 General Conditions Text and FR.SB.02 Audit Program. At the stage of preparation of halal certification proposals, FR 24 (HALAL) Halal Certification General Conditions Text is sent along with the FR.SB.02 Audit program. Once the offer is approved and signed by the customer, the offer shall become a contract. With the contract signed, the following shall be requested to be sent to SZUTEST;

- Tax Plate
- Photocopy of Trade Registry Gazette
- Authorized signatory signing the contract
- Current SSA payroll (In cases where the current SSA Payroll cannot be obtained, a stamped statement showing the number of employees should be sent. In surveillance or re-certification audits, the FR.SB.67 Amendment Form should be sent with a stamp and signature.)
- The firm's manual and procedures. (Stage 1 audit is planned and on-site document review is performed regardless of the risk group of the companies that have electronic documentation and cannot be supplied before the audit.)
- Documents proving that the requirements of the sector-specific legislation are fulfilled (Document, permit, license, etc.)

8.4 Certification Activities Based on Application Evaluations

8.4.1 Certification Audit

Stage 1 Audit ;

These are the audits carried out within the scope of desk job and/or on site in order to plan the second stage audits by understanding the content of the management system established in line with the policy and objectives of the audited entity.

Stage 1 audit is the audit performed to check whether the company to be audited and certified is ready for Stage 2 audit.

During the application, the critical code is determined by the application reviewer. Stage 1 audits are carried out at the desk/on the site in accordance with the critical codes defined in Turkak R 40.05 Annex A, Annex B Tables.

PR.SB.02 Application Evaluation And Contracting Procedure A, Annex B, Annex D Tables are defined.

- The conditions when Stage 1 audit is required to be carried out at the client's workplace;
 - o For ISO 9001, 14001, 45001: Audits in critical codes
- The conditions when Stage 1 audit is required to be carried out desk-bound (without going to the client's workplace);
 - o Audits without a critical code

Halal Certification audits are carried out as Stage I and Stage II (Certification). Stage I audits can be carried out at the desk or on the site of the organization, depending on the standard applied and the risk group of the applicant organization. In the categories A, B, G, H, I, J and K of the categories specified in the TS OIC SMIC 2 standard, the 1st stage of the audit does not have to be on-site audit. However, the decision to conduct the audit on site is entirely up to the audit team. In categories C, D, E, F, L, M and N, the 1st stage of the audit must be on-site inspection. Stage I and Stage II (Certification) audits can be planned to follow each other. However, if a nonconformity is detected during the Stage I audit, the Stage II (Certification) audit is not carried out until the end of the prescribed period for closing the detected nonconformity.

In OIC SMIC 2 Halal certification audits, for those in the low and medium risk groups, Stage I audits can be performed at the desk in all certification audits.

Halal Certification Stage I audits can also be performed in the field with the approval of the relevant certification unit when find it necessary by the lead auditor.

For Halal certification, a Stage 1 audit may be conducted at the applicant's site, depending on the complexity of the manufacture or service. If any nonconformity is detected during the Stage I audit conducted at the desk, the pre-planned Stage II (Certification) audit is not carried out. The report prepared, together with the Nonconformity Reports, is submitted to the Decision Committee within 15 days at the latest.

Stage 2 Audit:

It is the inspection where the activities of the organization are evaluated on site (where the work / service is performed) covering all applicable clauses of the relevant standard.

8.4.2 Surveillance Audit

Surveillance audits shall be carried out once in each calendar year, except for the re-certification year, in order to monitor that the activities are carried out in accordance with the system requirements in a certified system. The first surveillance audit to be carried out after the first certification shall be planned not to exceed 12 months as from the date of certification.

When determining the frequency of surveillance audits, matters such as season or the fact that management systems certification is for a specified period of time (e.g., temporary construction site) shall be taken into account.

2. Deferral requests from the entities in writing for surveillance audit may be accepted provided that the justification is provided.

In Halal Certification, by taking into account the complaints received regarding the halal product / service, periodic surveillance activities are carried out to check whether the halal product / service continues to comply with the requirements of the certification. **Surveillance audits that will be conducted related with Halal Certification activities will be planned not to exceed 12 months. The evaluation of risk classes of relevant product categories is determined by the technical responsible. In case of a complaint regarding the certification scope of the relevant customer an unannounced audit will be planned by technical responsible immediately.**

8.4.3 Recertification Audit

In the event that surveillance inspections are positive, the documents shall be valid for a period of three years from the date of issuing the document. Before expiry of

three years, it must be ensured that the current system meets the requirements of the relevant standard for the renewal of the certificate. Certificate renewal audits shall be performed to cover at least site inspections for this purpose. In order that the audit is carried out for certificate renewal, such audit should be carried out within the certificate validity period and if there is any major nonconformity, it must be eliminated within the certificate validity period.

If the recertification audit cannot be completed before the validity period of the certificate or if it cannot be verified that preventive and corrective action have been taken for any major nonconformity, recertification should not be proposed and the validity of the certificate should not be extended. Customer should be informed.

At the end of the certification period, the certification body may activate the certificate for a period of 6 months provided that outstanding re-certification activities have been completed, otherwise at least one Stage 2 audit must be carried out. The valid date on the certificate should be the re-certification date or later and the validity period should be based on the previous certification cycle.

Stage 1 audit shall not be performed in the certificate renewal audits and certification audits to be carried out within 6 months in case nonconformities cannot be eliminated; however, if there is a significant change in respect of the management system, the customer or the scope of the management system (such as changes in the legislation), the requirement of a separate Stage 1 audit shall be evaluated by the Department Manager.

8.4.4 Scope Extension Audit

Scope extension audit shall be carried out if the entity certified makes a request on this matter by extending its form and/or activity scope. The audit period varies depending on the scope of the request.

8.4.5 Transfer Audit

Transfer Audits are carried out to confirm the validity of the relevant certificate to ensure that the management system certificate issued by a certification body is transferred to SZUTEST. The evaluation of certificate transfer as transfer audit shall be subject to the following conditions;

- Transfer audits apply to documents issued by certification bodies accredited by an accrediting body that has signed IAF MLA contract.
- The certificate must be active for transfer audit. Transfer audits cannot be carried out for pending documents
- The validity of the certificate issued by the previous conformity body is checked and it is verified whether the total remaining usage time allows the transfer. Under normal conditions, this period is minimum 6 months.
- In the case of certification issued by the CB, which terminates its commercial activity or whose accreditation is terminated, suspended or withdrawn, the transfer must be completed within 6 months or on the expiry date of certification (whichever comes first).
- Non-conformities reported to the client by the previous certification body must be closed before transfer audit is carried out.
- The transfer application of the client is reviewed with FR.SB.91. If there is no obstacle, the contract is signed and documentation is requested from the company.
- The review prior to transfer should be performed by qualified personnel.

In addition to the documents (quality manual, procedure, etc.) requested before the certification audit, the audit report prepared by the previous certification body is also requested and all documents are examined.

- If sufficient information is not provided in the review before the transfer, additional transfer file examination and/or additional transfer audit should be performed for the issues that remain open.

Before the certification, the following matters are examined in the audit.

- Reason for the transfer by the company
- Last audit periods and dates
- Conformity of company scope with SZUTEST scope
- The accuracy, validity of the certificate, whether the addresses on the certificate and the required addresses are within the scope of the certification and their validity, status of non-conformities that are still not eliminated and if possible, verification by the previous certification body of the nonconformities eliminated
- Previous audit reports and observations
- Complaints received and actions taken.

Following examination of the above-mentioned matters, the audit methods to be applied are determined as follows.

If the certificate is deemed valid by SZUTEST, the period for the transfer audit is determined not to be less than 30% of the certification audit period, depending on the size of the firm, the number of employees, the complexity of the process. The certificate validity period is the same as the certificate validity period specified in the previous certificate. The supervision audit period is determined by taking the period applied for the customer's re-inspection and re-certification into account.

Transfer audit is normally applied to the firms with valid accredited certification. However, in the event that the issuing organization has stopped its commercial activities or its accreditation has been canceled, the System Certification Department Manager shall make the decision regarding the transfer audit of the applicant organization upon the approval of the accreditation body.

8.4.6 Follow-up Audit

It is an audit carried out within the scope of a desk job and/or on site in order to determine that the nonconformities detected and followed during the audits have been eliminated.

The follow-up audit period is determined based on the number and magnitude of the nonconformities identified and the impact it has on the system. Follow-up audit

should be proposed to be at least 1 day in consideration of necessary organization, correspondence, reports, etc.

8.4.7 Private Audit

Special audits are carried out in cases such as the complaints containing objective evidence for the company, significant changes in the management system or organization of the company, significant changes in certification rules, and cancellation of suspension. Duration of the audit varies depending on the scope of the special audit. The cost of the audit carried out shall be calculated according to the daily price of the audit.

8.4.8 Pre-Audits

Pre-audit is not an obligatory stage for certification, it is carried out with the aim of measurement and reporting the level of preparation of the organization before the certification audit,

depending on the customer's request. Pre-audits do not constitute a recommendation for certification.

Following the pre-audit, the auditors do not follow up the activities for elimination of nonconformities, it is the company's own responsibility to close the nonconformities.

8.4.9 Proposal of Integrated Management Systems Certification Service

For integrated management system certification; necessary periods for certification of each system one by one are added (by applying the relevant factors provided by the appropriate accreditation guideline and/or rule) and final audit period and the percentage of reduction is calculated as described in Audit Period Determination and Pricing Instruction. This reduction does not apply to ISO 22000 certification activities.

8.4.10 Certification of Multi-Branch Organizations

They are organizations with one or more legal entities consisting of interconnected offices and branches, which have designated headquarters and where certain activities are planned, controlled and managed from the head office.

The relevant process is defined in TL.SB.01 Inspection and Certification Instruction of Management System Operated by Multi-Site Organizations.

8.4.11 Certification of Companies with Temporary Facility/Facilities

It is important to include these facilities in audit programs if the company applying for certification or previously certified performs its services or makes its products in temporary facilities. Temporary facilities are the ones other than the facilities/sites specified in the certificate and where the activities with a certain period of time are carried out within the scope of certification. These facilities can be in the form of large project management or small service/assembly facilities.

The need to visit these facilities and the sampling method should be decided by assessing the risk of nonconformity in the product or service (exposure to environmental dimensions and impacts in the environmental management system, danger and accident in the occupational health and safety management system and exposure to significant risks in the information security management system).

In sampling of the facilities; types and dimensions of the activities should be decided in consideration of different phases of the project and according to the competence needs of the organization and diversity of services.

Temporary facilities should be evaluated on site. However, the following methods may be considered as alternatives to the site inspections:

- a. Holding an interview or meeting with the company and/or its customer,
- b. Examination of temporary facility documents
- c. Remote access to electronic sites covering the records and information related to management system and evaluation of temporary facilities,
- d. Efficient inspection remotely by video and teleconferencing or other technologies,

In each case, sampling method must be fully documented and its effectiveness verified.

8.5 Audit Period Determination and Pricing Rules

8.5.1 General Principles for Determining Audit Periods

8.5.1.1. Audit periods shall be calculated by taking the periods specified in clause xx into account,

8.5.1.2. Number of employees shall also include temporary (seasonal, temporary and subcontractor) personnel who are employed in the firm during the audit.

8.5.1.3. During the audit, an agreement shall be reached with the company regarding timing in such a manner that the whole scope of the certificate can be observed.

Season, month, day/date and if any, shifts are taken into consideration.

8.5.1.4. Part-time employees are handled in comparison to full-time employees, depending on the hours in which they work.

For example; for the part-time employee working for 4 hours, both employees are considered to be 1 active employee.

8.5.1.5. A maximum reduction of 30% may be granted for the audit periods specified provided that necessary reasons for the reduction are available for the audit periods.

8.5.1.6. The audit period includes planning of the auditor or audit team, document review and reporting period.

8.5.1.7. For FSMS, EMS, OHS, EMS; the time spent for planning, document review and reporting should not be reduced below 80% of the audit period specified for the site audit; said time should not be reduced below 90% of the audit period specified for the site audit for QMS, CSMS and OHGMS; and below 70% for ISMS.

For Halal Certification; In cases where Stage 1 is not performed in the field, the duration of the Stage 1 inspection cannot exceed 20% of the total inspection time. In cases where fieldwork is carried out, the duration of Stage 1 cannot exceed 30% of the total inspection time.

8.5.1.8. Transportation times are not included in the calculation.

8.5.1.9. The audit period shall mean the man-day period spent for the audit. A man-day is full daily working time of 8 hours. The number of audit days should not be reduced by programming long audit times during the planning phase of the audit.

8.5.1.10. During the certification phase, the supervision audits are 1/3 of the annual certification audit. Planned supervision audits should be reviewed by taking the changes in the firm, maturity of the system, etc. into account.

8.5.1.11. Audit period for certificate renewal shall be 2/3 of the time spent on certification audit for the same company. The time spent for certificate renewal audits exceeds the time spent on routine supervision audits. Performance of the management system during the certification period should be taken into account when

determining the renewal audit period.

8.5.1.12 The Islamic Affairs Expert assigned in the Halal Certification audits has no audit/ day effect on the inspection period.

8.5.1.13. If most of the operations are carried out in shifts in Management Systems certification, the total number of employees is as follows:

Total Number of Employees = Number of Persons Not Working in Shifts + [(Number of Persons Working in Shifts) / (Number of Shifts -1)]

8.5.1.14. As a general starting point in determining necessary audit period, the number of employees in the firm is considered, then the actual audit period is determined by considering the differences that may affect the audit period in order to carry out an effective audit specific to the firm to be audited. Factors which may require increase in audit period are as follows;

- Carrying out the activity in more than one building and region,
- Personnel who speak more than one language (requires an interpreter or prevents auditors from working individually)
- Very wide areas according to the number of employees,
- Top-level rules (food and drugs, space industry, nuclear power, etc.)
- The system includes highly complex processes or a relatively large number of individual activities.
- Processes consist of combination of hardware, software, process and service,
- Design responsibility for product related matters,
- Auditing the applications routinely made during night shifts requires a change in the audit program,
- Opinions of the competent authorities,
- Indirect conditions which require increase in the duration of audit (Example: Relations with the head office or relations with local authorities)
- Additional / different environmental impacts for the sector,
- Extra / different environmental license / conditions for the sector,
- Immature management systems,
- Higher environmental sensitivity compared to the type-specific location for the industrial sector,
- Technological and regulatory/legal requirements,
- Previous audit results,
- Outsourced activities,
- Activities that require visit of temporary sites to verify the activities of the permanent sites within the scope of the management system certification,
- Risks associated with the product, process or organization's activities,
- Audits are unified, integrated or joint.
- Increase in audit duration for ISO 45001:

Complex logistics, including the presence of multiple locations or buildings where the work is carried out. For example: independent design center to be audited,

Having multilingual staff (needing translator(s) or a situation that prevents the auditors from working independently)

Large areas according to the number of staff (eg: forest),

Extensive legislation (eg: aviation, nuclear power, refinery and chemical industry, fishing vessels, mining, food, pharmaceuticals etc.),

The system to contain high complexity processes or having high number of unique (specific) activities,

Activities that make it necessary to visit temporary sites to verify the activities of permanent sites with management system that will be subject to certification,

Opinions of related parties,

Observing occupational diseases that are above average values for accident rates and related business sector,

Public assets to be available on site of the organization (eg: hospitals, schools, airports, ports, train stations, public transport),

For the organization to be faced with legal proceedings in terms of OHS (depending on the severity and impact of the associated risk),

Presence of a large number of temporary subcontractors and their workers that cause increased OHS risks or complexity (eg periodically closed or transferred refineries, chemical plants, steel production plants and other large industrial complexes)

According to the applicable national legislation and/or risk assessment documentation, the places where there are hazardous substances that may expose the facility to major industrial accident risk,

The presence of organizations that are included in the scope and have fields in other countries except for the country where the headquarters is located (if the legislation and language are not well known)

Some factors that can be allowed to reduce audit time;

- The company has no design responsibility and/or other standard clauses are not included in the scope,
- Risk-free or low-risk products/processes,
- The organization has been implementing the management system for a long time,
- The company has primary knowledge of the system (for example, the organization has been certified by SZUTEST according to another standard).
- Small site according to the number of employees (e.g., office application only),
- The company is ready to be certified (e.g., company is certified or approved by another organization),
- Processes consist of a single general activity (e.g., service activity),
- Maturity of the management system,
- Most of the employees carry out the same simple tasks,
- Outsourced activities,

- Carrying out identical activities in all shifts,
- Where some employees are assigned outside the location (e.g., sales staff, drivers, service personnel, etc.) and where audit compliance is largely possible for review and recording of their activities,
- Reduction in audit time for OHSMS:

Maturity of management system,

The client organization to have prior knowledge of the management system (eg: previously certified by another volunteer OHS MS by the same certification body),

The client's readiness for OHS certification (eg: it has undergone periodic audits by the National Authorities for the mandatory administrative OHSMS standard),

Small field according to the number of employees (eg: office environment only).

NOTE: When the number of staff carrying out certain activities that may be considered as similar or identical in terms of OHS are exposed to risks (such as cleaners, security, sales, call centers, etc.) or having a high percentage of staff in similar positions, a logical and consistent discount can be applied, which varies from company to company, on the basis of the scope of certification.

For groups of staff that perform repetitive tasks which reduce attention and increase the associated OHS risk level (eg: assembly, installation, packaging, sorting), the methods associated with the possible reduction will be documented to include an assessment of OHS risks of the employees' activities / positions.

NOTE: If pre-audit service has been provided to the relevant customer, the personnel evaluating the application cannot consider the pre-audit activity as a factor for reducing the audit time.

Necessary period for an effective audit is determined by taking all the characteristics of the company's system, processes and products/services into account and by making fair arrangements with the factors mentioned above. Factors that increase and reduce audit time can balance each other. In the event of a reduction or increase in audit periods, evidence and records justifying the adjustment should be kept.

8.5.1.1 Number of Effective Personnel

Number of effective personnel; It includes all personnel and shift workers included in the scope of certification. When included in the scope of certification, the number of non-permanent (eg subcontractor) and part-time personnel should also be added to this number.

Number of effective personnel; It includes all personnel and shift workers included in the scope of certification. When included in the scope of certification, the number of non-permanent (eg subcontractor) and part-time personnel should also be added to this number.

For OHSYS; Personnel of contractors/subcontractors performing work or work-related activities that may affect the organization's OHSMS performance and that are under the control or influence of the organization should also be included.

8.5.1.2 Calculation of Effective Personnel Number

Evaluations regarding the determination of the effective number of employees; It includes part-time and partially covered personnel, shift workers, office staff working administratively and in all categories, similar or repetitive processes, and the employment of large numbers of unskilled personnel in some countries.

In cases where there are seasonal operations (harvesting activities, resorts, hotels, etc.) EPS should be calculated based on the number of personnel at the peak of the season.

EPS cannot be reduced due to the large number of unqualified personnel working without considering the risks related to OHS.

The justification for determining the effective number of staff should be reviewed during the audit.

Hours worked may be reduced or increased depending on the number of part-time staff and partially in-scope employees and converted to an equivalent number of full-time staff.

Similar or repetitive process in scope; In cases where there is a high percentage of personnel performing certain activities/tasks that are considered repetitive (cleaner, security, transportation, sales, call centers, etc.), companies in this situation within the scope of certification are allowed a staff reduction, which is applied in a coherent and consistent manner.

In Quality Management System and Environmental Management System audits, while determining the effective number of personnel for similar and repetitive processes, this reduction can be done at a rate of 1/3.

Following graph indicates the factors which increase and reduce the periods specified for QMS and ISMS:

	Big Simple		Big Complex
	Multiple Facilities		Multiple Facilities
	Several Processes		Multiple Processes
	Repetitive Processes		Wide Scope
	Limited Scope		Individual Processes
		Periods calculated	Design Responsibility
Company	Several Processes	from Audit Periods	Multiple Processes
distribution	Limited Scope	Table	Design Responsibility
	Repetitive Processes		Wide Scope
	Small Simple		Individual Processes
			Small Complex

Company/systems complexity

8.5.2 Determination of QMS and CSMS Audit Periods

QMS and CSMS Audit periods are calculated based on the table below. When an integrated audit is performed with the Customer Satisfaction Management System, Quality Management System audits, the total audit time is calculated by adding 1.5 audit-days for additional certification audits and 1 audit days for surveillance and re-certification audits to the ISO 9001:2015 audit period

Note: In the High Risk group, when calculating audit periods, they should be increased at the rate of 5%.

Number of Active Employees	Certification Audit (Stage 1+ Stage 2)	Supervision Audit	Certificate Renewal Audit
1-5	1.5	1	1
6-10	2	1	1.5
11-15	2.5	1	2
16-25	3	1	2
26-45	4	1.5	3
46-65	5	2	3.5
66-85	6	2	4
86-125	7	2.5	5
126-175	8	3	5.5
176-275	9	3	6
276-425	10	3.5	7
426-625	11	4	7.5
626-875	12	4	8
876-1175	13	4.5	9
1176-1550	14	5	9.5
1551-2025	15	5	10
2026-2675	16	5.5	11
2676-3450	17	6	11.5
3451-4350	18	6	12
4351-5450	19	6.5	13
5451-6800	20	7	13.5
6801-8500	21	7	14
8501-10700	22	7.5	14.5
>10700	Follow the index above		

Risk Levels of QMS Sectors

Sector	EA	NACE CODE	Risk Levels
Agriculture, fishery industry	1	01, 02.,03	Moderate
Mining and stone quarry	2	05, 06, 07, 08, 09	High
Food products, Beverages and tobacco	3	10, 11, 12	High
Textiles and textile products	4	13, 14	Moderate
Leather and leather products	5	15	Moderate
Wood and wood products	6	16	Moderate
Pulp, paper and paper products	7	17	Moderate
Publishing companies	8	58.1, 59.2	Moderate
Printing companies	9	18	Low
Production of coke and refined petroleum products	10	19	High
Nuclear fuel	11	24.46	The Highest
Chemicals, chemical products and fibrous products	12	20	High
Medicine	13	21	The Highest
Rubber and plastic products	14	22	Moderate
Non-metallic mineral products	15	23 (except for 23.5 and 23.6)	Moderate

Concrete, cement, lime, gypsum, plaster and etc	16	23.5, 23.6	Moderate
Basic metals and finished metal products	17	1. (except for 24.46) 2. (except for 25.4), 33.11	Moderate
Machinery and equipment	18	25.4, 28, 30.4, 33.12, 33.2	High
Electrical and optical equipment	19	26,27, 33.13, 33.14, 95.1	High
Shipbuilding	20	30.1, 33.15	High
Space researches	21	30.3, 33.16	The Highest
Other transpMediumtion vehicles	22	29, 30.2, 30.9, 33.17	High
Manufacture of other unclassified products	23	31, 32, 33.19	Moderate
Recovery, recycling	24	38.3	High
Electricity supply	25	35.1	High
Gas supply	26	35.2	High
Water supply	27	35.3, 36	Moderate
Construction	28	41, 42, 43	High
Wholesale and retail trade; repair of motor vehicles, motorcycles, personal and household goods	29	45, 46, 47, 95.2	Low
Hotels and restaurants	30	55, 56	High
Transportation, storage and communication	31	49, 50, 51, 52, 53, 61	High
Financial intermediation; Land and real estate; leasing	32	64, 65, 66, 68, 77	Low
Information Technology	33	58.2, 62, 63.1	High
Engineering services	34	71, 72, 74 (except for 74.2 and 74.3)	Moderate
Other services	35	69, 70, 73, 74.2, 74.3, 78, 80, 81, 82	High
Public administration	36	84	Moderate
Teaching	37	85	Low
Health and social affairs	38	75, 86, 87, 88	The Highest
Other social services	39	37, 38.1, 38.2, 39, 59.1, 60, 63.9, 79, 90, 91, 92, 93, 94, 96	Low

8.5.3 Determination of EMS and OHS Audit Periods

Since the environmental impacts vary according to the degree of complexity of the sector in determining the audit period, EMS is examined in five groups and degree of complexity of the sectors is shown. These are as follows:

- High: High environmental impact
- Moderate: Moderate environmental impacts
- Low: Low environmental impact
- Limited: Limited environmental impact
- Special: Additional and single effects should be considered when planning the audit

When planning the EMS Audit, the degree of complexity should be determined by using the Complexity Degree Table of EMS Sectors. For example: Although the chemical sector is classified within high complexity degree, it can be classified as medium complexity or low complexity only if mixing is carried out without chemical reactions in the organization.

After determining the degree of complexity of the sector, the audit period is determined by using EMS audit periods table.

Hazard classes are determined in accordance with the Communiqué on the Risk Groups of Workplaces related to Occupational Health and Safety of the Ministry of Labor, Social and Security.

EMS Sectors Complexity Degree Table

Complexity Degree	Business Sector
	Mining and stone quarry
	Tanning of textile and clothing products

High	<p>Pulp production including paper recycling</p> <p>Oil refining</p> <p>Chemicals and pharmaceuticals</p> <p>Main production-metal</p> <p>Non-metallic processes, ceramic and cement-containing products</p> <p>Coal-based electricity generation (Thermal Power Plant)</p> <p>Building and demolition</p> <p>Hazardous and non-hazardous waste treatment, e.g. incineration, etc.</p> <p>Waste water and sewage process</p> <p>Fishery/Agriculture/Forestry</p> <p>Textile and clothing without tanning</p> <p>Timber production, processing/impregnation of wooden products</p> <p>Paper production and printing (excluding pulp)</p> <p>Non-metal processes and glass, clay, etc. containing products</p> <p>Surface and chemical-based processes in processed metallic products other than basic production</p> <p>Surface and other chemical-based processes in general mechanical engineering</p> <p>Pressurized circuit board production for the electronics industry</p> <p>Transport equipment production - land, railway, air, ship</p> <p>Non-coal power generation and distribution</p>
Medium	<p>Gas production, storage and distribution (if gas extraction process is present, it is included in the degree of high)</p> <p>Water extraction, purification and distribution including stream management (Note: Commercial wastewater treatment is evaluated at the degree of high.)</p> <p>Wholesale and retail trade of fossil fuels</p> <p>Food and tobacco processing</p> <p>Transport and distribution - by sea, air and land</p> <p>Real estate broker, industrial cleaning, hygienic cleaning, dry cleaning</p> <p>Normal parts of general trade services</p> <p>Recycling, composite, landfill (non-hazardous waste)</p> <p>Technical testing and laboratories</p> <p>Health care/ hospital/veterinary</p> <p>Entertainment and personal services, except hotels and restaurants</p> <p>Hotels and restaurants</p> <p>Wood and wood products (except processing of wood products)</p> <p>Paper products (except printing, pulping and papermaking)</p> <p>Injection molding, shaping and assembly of rubber and plastic (except for rubber and plastic production that forms part of chemicals)</p>
Low	<p>Manufacture of metals other than basic production by surface and chemical treatment and by hot and cold molding</p> <p>Mechanical engineering installation, except surface treatment and other chemical-based processes</p> <p>Wholesale and retail (trade)</p> <p>Installation of electrical and electronic equipment, except printed circuit manufacturing</p> <p>Corporate activities and management,</p> <p>Management of Holding companies</p> <p>Transport and distribution</p>
Limited	<p>Telecommunication</p> <p>General commercial services other than commercial real estate, property management, industrial cleaning, hygienic cleaning, dry cleaning</p> <p>Education</p> <p>Nuclear</p> <p>Nuclear power generation</p>
Special cases	<p>Storage of large quantities of hazardous materials</p> <p>Public administration</p> <p>Organizations engaged in environmentally sensitive products or services</p>

EMS audit periods table

Number of Effective Personnel	Audit Period Stage 1 + Stage 2 (day)				Number of Active Employees	Audit Period Stage 1 + Stage 2 (day)			
	High	Medium	Low	Limited		High	Medium	Low	Limited
EMS					EMS				
1-5	3	2.5	2.5	2.5	626-875	17	13	10	6.5
6-10	3.5	3	3	3	876-1175	19	15	11	7
11-15	4.5	3.5	3	3	1176-1550	20	16	12	7.5
16-25	5.5	4.5	3.5	3	1551-2025	21	17	13	8
26-45	7	5.5	4	3	2026-2675	23	18	14	8.5
46-65	8	6	4.5	3.5	2676-3450	25	19	15	9
66-85	9	7	5	3.5	3451-4350	27	20	16	10
86-125	11	8	5.5	4	4351-5450	28	21	17	11
126-175	12	9	6	4.5	5451-6800	30	23	18	12
176-275	13	10	7	5	6801-8500	32	25	19	13
276-425	15	11	8	5.5	8501-10700	34	27	20	14
426-625	16	12	9	6	>10700	Follow progression above.			

Occupational Health and Safety Management Systems

Correlation between the Effective Personnel Number, OHS Risk Complexity Category and Audit Duration

(Only Initial Certification - Stage 1 + Stage 2)

Number of Effective Personnel	Audit Period Stage 1 + Stage 2 (day)			Number of Effective Personnel	Audit Period Stage 1 + Stage 2 (day)		
	High	Medium	Low		High	Medium	Low
1-5	3	2.5	2.5	626-875	17	13	10
6-10	3.5	3	3	876-1175	19	15	11
11-15	4.5	3.5	3	1176-1550	20	16	12
16-25	5.5	4.5	3.5	1551-2025	21	17	12
26-45	7	5.5	4	2026-2675	23	18	13
46-65	8	6	4.5	2676-3450	25	19	14
66-85	9	7	5	3451-4350	27	20	15
86-125	11	8	5.5	4351-5450	28	21	16
126-175	12	9	6	5451-6800	30	23	17
176-275	13	10	7	6801-8500	32	25	19
276-425	15	11	8	8501-10700	34	27	20
426-625	16	12	9	>10700	Follow progression above.		

Note 1: Audit time is shown for high, medium and low OH&SM risk audits.

Note 2: The numbers of personnel in Table OH&SMS 1 should be seen as a continuum rather than a stepped change. If drawn as a graph, the line should start with the values in the lower band. The starting point of the graph should be personnel of 1 attracting 2.5 days as above. If after the calculation the result is a decimal number, the number of days should be adjusted to the nearest half day (e.g.: 5.3 audit days becomes 5.5 audit days, 5.2 audit days becomes 5 audit days).

Note 3: See also clause B.1.9 and B.2.3.

TABLE OH & SMS 2 - Examples of linkage between business sectors and Complexity Categories of OH&S Risks

Complexity

category of Business sector

OH&S risk

- fishing (offshore, coastal dredging and diving)
- mining and quarrying
- manufacture of coke and refined petroleum products
- oil and gas extraction
- tanning of textiles and clothing
- pulping part of paper manufacturing including paper recycling processing
- oil refining
- chemicals (including pesticides, fabrication of batteries and accumulators), and pharmaceuticals
- manufacturing of fibreglass
- gas production, storage and distribution
- electricity generation and distribution
- nuclear
- storage of large quantities of hazardous material
- non-metallic processing and products covering ceramics, concrete, cement, lime, plaster, etc.
- primary productions of metals

High

- hot and cold forming and metal fabrication
- manufacturing and assembly of metal structures
- shipyards (depending on the activities could be medium)
- aerospace industry
- automotive industry
- manufacturing of weapons and explosives
- recycling of hazardous waste
- hazardous and non-hazardous waste processing e.g. incineration etc.
- effluent and sewerage processing
- industrial and civil construction and demolition (including building completion with electrical, hydraulic and air conditioning installation activities)
- slaughter houses
- transport and distribution of dangerous goods (by land, air and water)
- defence activities/crisis management
- healthcare/hospitals/veterinary/social works

Medium

- aquaculture (breeding, rearing, and harvesting of plants and animals in all types of water environments)
- fishing (offshore fishing is high)
- farming/forestry (depending on the activities could be high)
- food, beverage and tobacco ? processing
- textiles and clothing except for tanning
- manufacturing of wood and wooden products including manufacturing of boards, treatment/impregnation of wood
- boards, treatment/impregnation of wood
- paper production and paper products excluding pulping
- non-metallic processing and products covering glass, ceramics, clay, etc.
- general mechanical engineering assembly
- manufacturing of metallic products
- surface and other chemically based treatment for metal fabricated products excluding primary production and for general mechanical engineering (depending on the treatment and the size of the component could be high)
- production of bare printed circuit boards for electronics industry
- rubber and plastic injection moulding, forming and assembly
- electrical and electronic equipment assembly
- manufacturing of transport equipment and their repairs - road, rail and air (depending on the size of the equipment, could be high)
- recycling, composting, landfill (of non-hazardous waste)
- water abstraction, purification and distribution including river management (note commercial effluent treatment is graded as high)
- fossil fuel wholesale and retail (depending on the amount of fuel, could be high)
- transport of passengers (by air, land and sea)
- transport and distribution of non-dangerous goods (by land, air and water)
- industrial cleaning, hygiene cleaning, dry cleaning normally part of general business services
- research & development in natural and technical sciences (depending on the business sector could be high). Technical testing and laboratories
- hotels, leisure services and personal services excludes restaurants
- education services (depending on the object of teaching activities could be high or low)
- corporate activities and management, HQ and management of holding companies
- wholesale and retail (depending on the product, could be medium or high,
- e.g. fuel)
- general business services except industrial cleaning, hygiene cleaning, dry cleaning and

education services).

- transport and distribution - management services with no actual fleet to manage
- engineering services (could be medium depending on type of services)
- telecommunications and post office services
- restaurants and campings
- commercial estate agency, estate management
- research & development on social sciences and humanities
- public administration, local authorities
- financial institutions, advertising agency

Low

Complexity categories of OH&S risks

The provisions specified in this document are based on three primary complexity categories of OH&S risks based on the nature and severity of the OH&S risks of an organization that fundamentally affect the auditor time. These are:

- High ; OH&S risks with significant nature and severity (typically the construction industry, heavy manufacturing or processing type organizations),
- Medium ; OH&S risks with medium nature and severity (typically light manufacturing organizations with some significant risks), and
- Low ; OH&S risks with low nature and severity (typically office based organizations)

Table OH&SMS 1 covers the above three complexity categories of OH&S risks.

Table OH&SMS 2 provides the link between the three complexity categories of OH&S risks above and the industry sectors that would typically fall into that category.

For example, even though many businesses in shipbuilding should be classified as 'high risk?', an organization which would have only small boats of carbon fibre with lower complexity activities could be classified as 'medium?'.

Note: The complexity category of OH&S risk of an organization may also be associated with the consequences of a failure of the OH&SMS to control the risk:

High / where failure to manage the risk could put life at risk or result in serious injury or illness,

Medium / where failure to manage the risk could result in injury or illness, and

Low / where failure to manage the risk may result in minor injury or illness.

8.5.4 FSMS Audit Duration Determination

The category code is determined based on the coverage using the Food Category Codes Table below.

Cluster a	Category	Subcategory	Examples of included activities
Farming	A	Farming of Ani- mals	AI Farming of Animals for Meat/ Milk/ Eggs/ Honey Growing, keeping, trapping and hunting (slaughtering at point of hunting) Associated farm packing b and storage
			All Farming of Fish and Seafood Raising fish and seafood used for meat production Growing, trapping and fishing (slaughtering at point of capture) Associated farm packing b and storage
	B	Farming of Plants	BI Farming of Plants (other than grains and pulses) Growing or harvesting of plants (other than grains and pulses): horticultural products (fruits, vegetables, spices, mushrooms, etc.) and hydrophytes for food Associated farm packing b and storage
			BII Farming of Grains and Pulses Growing or harvesting of grains and pulses for food Associated farm packing b and storage

Food and feed processing	C	Food Manufacturing	CI	Processing of perishable animal products	Production of animal products including fish and seafood, meat, eggs, dairy and fish products
			CII	Processing of perishable plant products	Production of plant products including fruits and fresh juices, vegetables, grains, nuts, and pulses
			CIII	Processing of perishable animal and plant products(mixed products)	Production of mixed animal and plant products including pizza, lasagne, sandwich, dumpling, ready-to-eat meals
			CIV	Processing of ambient stable products	Production of food products from any source that are stored and sold at ambient temperature, including canned foods, biscuits, snacks, oil, drinking water, beverages, pasta, flour, sugar, food-grade salt
	D	Animal Feed Production	DI	Production of Feed	Production of feed from a single or mixed food source, intended for food-producing animals
DII			Production of Pet Food	Production of feed from a single or mixed food source, intended for non-food producing animals	
Catering	E	Catering		Preparation, storage and, where appropriate, delivery of food for consumption, at the place of preparation or at a satellite unit	

Retail, transport and storage	F	Distribution	FI	Retail / Wholesale	Provision of finished food products to a customer (retail outlets, shops, wholesalers)
			FII	Food Broking / Trading	Buying and selling food products on its own account or as an agent for others Associated packaging c
	G	Provision of Transport and Storage Services	GI	Provision of Transport and Storage Services for Perishable Food and Feed	Storage facilities and distribution vehicles for the storage and transport of perishable food and feed Associated packaging c
			GII	Provision of Transport and Storage Services for Ambient Stable Food and Feed	Storage facilities and distribution vehicles for the storage and transport of ambient stable food and feed Associated packaging c

Auxiliary services	H	Services		Provision of services related to the safe production of food, including water supply, pest control, cleaning services, waste disposal.
	I	Production of Food Packaging and Packaging Material		Production of food packaging material
	J	Equipment manufacturing		Production and development of food processing equipment and vending machines
Biochemical	K	Production of (Bio) Chemicals		Production of food and feed additives, vitamins, minerals, bio-cultures, flavourings, enzymes and processing aids Pesticides, drugs, fertilizers, cleaning agents

Retail, transport and storage	F	Distribution	FI	Retail / Wholesale	Provision of finished food products to a customer (retail outlets, shops, wholesalers)
			FII	Food Broking / Trading	Buying and selling food products on its own account or as an agent for others Associated packaging c
	G	Provision of Transport and Storage Services	GI	Provision of Transport and Storage Services for Perishable Food and Feed	Storage facilities and distribution vehicles for the storage and transport of perishable food and feed Associated packaging c
			GII	Provision of Transport and Storage Services for Ambient Stable Food and Feed	Storage facilities and distribution vehicles for the storage and transport of ambient stable food and feed Associated packaging c

Auxiliary services	H	Services	Provision of services related to the safe production of food, including water supply, pest control, cleaning services, waste disposal.
	I	Production of Food Packaging and Packaging Material	Production of food packaging material
	J	Equipment manufacturing	Production and development of food processing equipment and vending machines
Biochemical	K	Production of (Bio) Chemicals	Production of food and feed additives, vitamins, minerals, bio-cultures, flavourings, enzymes and processing aids Pesticides, drugs, fertilizers, cleaning agents

a Clusters are intended to be used for accreditation scope of accredited certification bodies, and for accreditation bodies witnessing certification bodies.

b 'Farm packing' means packaging without product modification and processing.

c 'Associated packaging' means packaging without product modification and processing and without altering the primary packaging

Food Safety Management System Audit Audit Day Table

Category a	Basic on-site audit time, in audit days 7D	Number of audit days for each additional HACCP study 7H	Number of audit days for absence of certified relevant management system 7MS	Number of audit days per number of employees 7FTE	For each additional site visited
A	0,75	0,25	0,25	1 to 19 = 0	50% of minimum on-site audit time
B	0,75	0,25		20 to 49 = 0,5	
C	1,50	0,50		50 to 79 = 1,0	
D	1,50	0,50		80 to 199 = 1,5	
E	1,00	0,50		200 to 499 = 2,0	
F	1,00	0,50		500 to 899 = 2,5	
G	1,00	0,25		900 to 1 299 = 3,0	
H	1,00	0,25		1 300 to 1 699 = 3,5	
I	1,00	0,25		1 700 to 2 999 = 4,0	
J	1,00	0,25		3 000 to 5 000 = 4,5	
K	1,50	0,50		> 5 000 = 5,0	

The shortest audit period for one branch, (Ts)

$$T_s = (D + H + MS + FTE)$$

D: On-site audit period,

H: Audit period for HACPP activities,

MS: Audit period in case of unavailability of an appropriate management system,

FTE: Audit period corresponding to the number of employees

The shortest audit period for each additional branch, (Tm)

$$T_m = T_s \times 50/100$$

Audit time of the shortest initial certification

If the customer organization has scope in more than one category, the higher one is taken into account when calculating the audit period.

The shortest audit period shall be reserved for 1/3 of the first certification audit period and 2/3 for the re-certification audits provided that the shortest audit period is not less than 1 audit day (0.5 audit day for A and B). If there are any factors that may increase or decrease these periods, they should be taken into consideration by the lead auditor and recorded in the audit report.

The shortest re-certification audit period shall be 2/3 of the initial certification audit period provided that the shortest audit period is not less than 1 audit day (0.5 audit days can be acceptable for A and B).

8.5.5 Determination of Halal Certification Inspection Period

The category code is determined based on the coverage using the Food Category Codes Table below. The Halal Certification body will use Table A.1 to perform the following functions;

- To define the scope it undertakes
- To determine the necessary competence and technical quality of their auditors, experts and staff for certain tasks in the halal certification system,
- Selecting a qualified audit team.

The examples given in Table A.1 are not exhaustive, they are merely an indication of relevant topics. The scope of a particular client organization can cover multiple categories.

Table A.1 Halal Product / Service / Process and / or Management System Categories

Cluster	Category	Subcategory	Examples of included activities
Farming	A Farming of Animals	AI Farming of Animals for Meat/ Milk/ Eggs/ Honey	Raising animals (other than fish and seafood) used for meat production, egg production, milk production or honey production Growing, keeping, trapping and hunting (slaughtering at point of hunting) Associated farm packing and storage
		AII Farming of Fish and Seafood	Raising fish and seafood used for meat production Growing, trapping and fishing (slaughtering at point of capture) Associated farm packing and storage
	B Farming of Plants	BI Farming of Plants (other than grains and pulses)	Growing or harvesting of plants (other than grains and pulses): horticultural products (fruits, vegetables, spices, mushrooms, etc.) and hydrophytes for food Associated farm packing and storage
		BII Farming of Grains and Pulses	Growing or harvesting of grains and pulses for food Associated farm packing and storage

Food and feed processing	C	Food Manufacturing	CI	Halal slaughtering & Processing of perishable animal products	Production of animal products including fish and seafood, meat, eggs, dairy and fish products including cutting and packaging.		
			CII	Processing of perishable plant products	Production of plant products including fruits and fresh juices, vegetables, grains, nuts, and pulses		
			CIII	Processing of perishable animal and plant products (Meat based food, mixed products)	Production of mixed animal and plant products including pizza, lasagne, sandwich, dumpling, ready to-eat meals		
					CIV	Processing of ambient stable products	Production of Halal food products from any source that are stored and sold at ambient temperature, including canned foods, biscuits, snacks, oil, drinking water, beverages, pasta, flour, sugar, food-grade salt
			D	Animal Feed Production			DI
					DII	Production of Pet Food	Production of feed from a single or mixed food source, intended for non-food producing animals
Catering	E	Catering			Preparation, storage and, where appropriate, delivery of Halal food for consumption, at the place of preparation or at a satellite unit, restaurants		

Retail, transport and storage	F	Distribution	FI	Retail / Wholesale	Provision of finished food products to a customer (retail outlets, shops, wholesalers)	
			FII	Food Broking / Trading	Buying and selling food products on its own account or as an agent for others Associated packagingc	
	G	Provision of Transport and Storage Services	GI	Provision of Transport and Storage Services for Perishable and ambient stable Food and Feed	Storage facilities and distribution vehicles for the storage and transport of perishable food and feed Associated packagingc	
			GII	Provision of Transport and Storage Services for Ambient Stable Food and Feed	Storage facilities and distribution vehicles for the storage and transport of ambient stable food and feed Associated packagingc	
	Auxiliary services	H	Services	HI		Provision of services related to the safe production of food, including water supply, pest control, cleaning services, waste disposal.
				HIII	Financial services	Banking, insurance, investment funds, leasing, barter etc.
HIIII				Muslim friendly tourism and travel related services	Resorts, Hotels, Tourism and travel agency services, e.g., bookings etc.	
I	Production of Food Packaging and Packaging Material			Production of food packaging material		
J	Equipment manufacturing			Production and development of food processing equipment and vending machines		

Biochemical	K	Production of (Bio) Chemicals			Production of food and feed additives, vitamins, minerals, bio-cultures, flavourings, enzymes and processing aids Pesticides, drugs, fertilizers, cleaning agents
Others	L	Other materials manufacturing	LI	Cosmetics	-----
			LII	Textile and textile products	-----
			LIII	Leather and leather products	-----
			LIV	NEC (Not elsewhere classified)	-----

a Clusters are intended to be used for accreditation scope of accredited certification bodies, and for accreditation bodies witnessing certification bodies.
 b ?Farm packing? means packaging without product modification and processing.
 c ?Associated packaging? means packaging without product modification and processing and without altering the primary packaging.

8.5.5.1 Halal Certification Audit Duration Determination

B.2.1 Minimum audit time for single site, Ts:

$$Ts = TD + TH + (TPV + TFTE)*CC$$

where

TD is the basic on-site audit time, in days;

TH is the audit days for each additional HACCP/Halal CCP product group studies and applied only for products/services/processes group in food-chain. H is considered ?0? when company has 1 HACCP/Halal CCP study. For each additional study, number of audit will be increased, for other type of products/services/processes it can be taken as '0'.

TPV is the audit days for product variety

TFTE is the number of audit days per number of employees.

CC is the factor as multiplier for process or production complexity class

If after the calculation of Ts, the result is a decimal number, the number of days should be adjusted to the nearest half day or (e.g.: 5.3 audit days becomes 5.5 audit days, 5.2 audit days becomes 5 audit days).

or If after the calculation of Ts, the result is a decimal number, the number of days should be rounded up to the next whole or half day (e.g.: 5.3 audit days becomes 5.5 audit days, 5.7 audit days becomes 6 audit days).

B.2.2 Minimum audit time for each additional site, Tasv: $Tasv = Ts * 50/100$

In determining the audit duration, SZUTEST should take into account the following as well as the aforementioned issues:

- a) the requirements of the OIC / SMIC halal standard,
- b) the size and complexity of the organization,
- c) technological and regulatory context,
- d) any outsourcing of production or process or activities within the scope of FSMS,
- e) results of previous audits,
- f) number of sites and multi-site assessments.

Table B.1 - Minimum initial certification audit time

Category (See Annex A)	B Basic on-site audit time (in audit days)	H* for each additional HACCP/HALAL studies (in audit days)	FTE Number of employees related with the scope of certification (in audit days)	CC Complexity Class (factor, multiplier)	PV** Product Variety (in audit days)	Tasv For each additional site visited (in audit days)
A	AI	1.00	0.25	Low CC= 1.25 Medium CC=1.50 High CC= 1.75 Very High CC= 2	1 to 3 = 0.50 4 to 6 = 1.00 7 to 10 = 1.50 11 to 20 = 2.00 > 20 = 3.00	50 % of minimum on-site evaluation /audit time
	AII	1.00	0.25			
B	BI	1.00	0.25			
	BII	1.00	0.25			
C	CI	1.50	0.50			
	CII	1.25	0.50			
	CIII	1.75	0.50			
	CIV	1.75	0.50			
D	1.50	0.25	1 to 19 = 0.5 20 to 49 = 1.0 50 to 79 = 1.5 80 to 199 = 2.0			
E	1.00	0.50	200 to 499 = 2.5			
F	FI	1.50	0.50			
	FII	1.25	0.50			
G	GI	1.50	0.50			
	GII	1.00	0.50			
H	H1	1.25	0.50			
	HII	1.75	0.50			
I	1.00	0.25	500 to 899 = 3.0 900 to 1299 = 3.5 1300 to 1699 = 4.0			
J	1.00	0.25	1700 to 2999 = 4.5			
K	1.75	0.50	3000 to 5000 = 5.0			
L	LI	1.75	0.50			
	LII	1.25	0.25			
	LIII	1.50	0.50			
	LIV	1.00	0.25			
			> 5000 = 5.5			

* H is applied only for products/services in food-chain.

** PV is used for only products not services/processes.

Table B1 is based on four primary complexity classes of the nature of the processes or production of an organization that fundamentally affect the Halal certification audit time, these are:

Very High very large number of detailed sub-processes with significant nature (typically manufacturing or processing type organizations with highly significant non- halal risks. It covers those products or service sectors that potentially have very high risks in terms of Halal aspects, with a high variety of processes or sub-processes or with a very large number of raw materials or inputs);

High - large number of processes with significant nature (typically manufacturing or processing type organizations with significant non-halal risks. It covers those products and service sectors that potentially have high risks in Halal aspects, with many processes.);

Medium - average number of processes with significant nature (typically manufacturing or service organizations. It covers products and services with moderate potential non-halal risks.);

Low - small number of processes with significant nature (typically organizations with few significant nature. It covers products and services with low potential non-halal risks.);

Table B1 covers the above four complexity classes. Table B2 provides the link between the four complexity classes above and the industry sectors that would typically fall into that class.

The Halal certification body should recognise that not all organizations in a specific sector will always fall in the same complexity class. The Halal certification body should allow flexibility in its contract review procedure to ensure that the specific activities of the organization are considered in determining the complexity class. For example: even though many business in the chemical production sector should be classified as 'high complexity', an organization which would have only a mixing free from chemical reaction, and/or high number or risky raw materials and/or advanced processing could be classified as 'medium' or even 'low complexity'.

All attributes of the organization's system, processes, and products/services should be considered and a fair adjustment made for those factors that could justify more or less audit time for an effective audit. Additive factors may be offset by subtractive factors. In all cases where adjustments are made to the time provided in the audit time Table B1 and B2, sufficient evidence and records shall be maintained to justify the variation.

Table B.2 : Examples of linkage between business sectors and complexity classes

Complexity Class	Business Sector
<i>Very High</i>	not elsewhere classified (n.e.c.) chemicals and pharmaceuticals, processed meat products, genetically modified products, food additives, bio cultures, cosmetics, processing aids and microorganisms.
<i>High</i>	slaughtering meat and poultry; cheese products; biscuits; snacks; oil; beverages; hotels; restaurants; dietary supplements; cleaning agents; packaging material, textile, Islamic finance,
<i>Medium</i>	milk products; fish products; egg products; beekeeping; spices; horticultural products; preserved fruits; preserved vegetables; canned products; pasta; sugar; animal feed; fish feed; water supply; development of product, process and equipment; veterinary services; process equipment; vending machines, leather products
<i>Low</i>	fish; egg production; milk production; fishing; hunting; trapping; fruits; vegetables; grain; fresh fruits and fresh juices; drinking water; flour; salt; retail outlets; shops; wholesalers, transport and storage;

Additional time should be added to the audit if a relevant certified Halal product/process/service or management system is not available. In order for the certificate to be considered as a relevant in this regard, that management system certificate must also include the scope of food safety for the relevant product/process/service/process.

The number of employees should be expressed as the number of full-time equivalent employees (FTE) related to the scope of certification.

The use of multi-site sampling is only possible for categories A, B, E, F and G (see Table B2) and is available for organizations with more than 20 facilities operating similar processes within these categories. This applies to initial certification, surveillance and recertification audits. The certification body will justify its sampling decision for multi-site certification.

Other factors may require an increase in the minimum audit duration (for example, the number of product types, the number of product lines, product development, the number of Halal Critical Control Points (CCP), the number of operational PRPs, construction site, infrastructure, internal laboratory tests, the need for a translator).

For all audit types, the audit duration includes the total time (physical or virtual) at the customer's location and the total time spent outside the site for planning, document review, communication with customer staff, and writing reports.

The duration of the on-site audit of halal certification should not be less than 70% of the audit duration calculated following the methodology in Section B.2. This applies to initial certification, surveillance and recertification audits. The Halal Certification Body may implement any reduction or increase in the audit duration using appropriate and feasible grounds. This reduction rate should not exceed 30% of the audit duration according to Section B.2.

Halal Food Surveillance Audit Duration

The minimum surveillance audit duration should be one third of the initial certification audit duration with a minimum of 0.5 audit days.

The minimum duration of recertification should be two-thirds of the initial certification audit duration with a minimum of 0.5 audit days.

8.5.6 Determination of EnMS Audit Duration

When determining the EnMS audit time, the calculation is performed by taking into account the following factors. The calculation is recorded in the FR.SB.02 Audit Program and opinions are received from a lead auditor/auditor/technical expert in the relevant field.

While determining the EnMS inspection time, the number of active staff of the organization, energy resources, important energy uses, energy consumption are taken into consideration.

8.5.6.1 Determination of EnMS Active Staff

EnMS active staff contribute to the fulfillment of the EnMS requirements within the scope and limits for determining, implementing and maintaining the possibilities of improving energy performance. While calculating the audit duration, the number of EnMS active staff is taken into consideration and the following are considered in order to determine the number of active staff.

- a) top management;
- b) the energy management team;
- c) the person(s) responsible for procurement related to energy performance;
- d) the person(s) responsible for making major changes that affect energy performance;
- e) the person(s) responsible for developing, implementing or maintaining energy performance improvements, including objectives, energy targets and action plans;
- f) the person(s) responsible for developing and maintaining energy data and analysis;
- g) the person(s) responsible for planning, operating and maintaining the processes related to the SEUs including during seasonal operations (e.g. harvesting activities, hotels) as appropriate;
- h) the person(s) responsible for design which affects energy performance

It should be considered.

Note 1: Person(s) should not be counted twice when examining categories to determine the effective number of staff.

Note 2: Person(s) responsible for significant energy uses may not be considered ENYS effective personnel due to the impact of their actions on energy performance. It is important to understand their role and influence before being included in ENYS active staff.

Note 3: Number reductions may be permitted if a large percentage of EnMS active staff perform similar or repetitive processes. The rationale and criteria used to identify similar or repetitive processes of EnMS-enabled personnel should be kept as documented information.

8.5.6.2 Determining the Energy Types

While determining the energy sources; should ask the customer to determine the number of energy types that correspond to 80% of the total energy expenditure of that customer organization. These energy sources are the types identified in the energy survey. This number does not have to be the same as the number of energy types for the client organisation. The energy sources will be types that cross the boundaries of the EnMS.

8.5.6.3 Determining the complexity of EnMS

Complexity is based on three assessments:

- a) Annual energy consumption,
- b) Number of energy resources,
- c) Number of significant energy uses.

Complexity is a value calculated based on a weighted coefficient taking into account all these assessments. Two pieces of information are required to calculate the complexity for each assessment:

- a) Weight value or multiplier,
- b) Complexity factor which is a value based on a range

Equation for calculation of Complexity (C) is provided below:

$$C=(F_{EC}\times 0,25)+(F_{ET}\times 0,25)+(F_{SEU}\times 0,50)$$

FEC is the annual energy consumption complexity factor from Table A.1;

FET is the number of the energy types complexity factor from Table A.1;

FSEU is the number of the SEUs complexity factor from Table A.1;

Note: The technical fields and TEC (TURKAK Energy Class (C: Complex; H: High, N: Normal) values determined for ISO 50001 Certification in the TÜRKAK R.40.05 Guidelines are defined in the FR.SB.89 Technical Field Qualification Form.

Table A.1 provides the weighted value and the associated ranges for the factors needed to calculate the

EnMS complexity

Tablo A.1 Energy complexity criterias for determination of Audit duration

Tablo A.1 Energy complexity criterias for determination of Audit duration

Criteria	Weighted value	Range	Complexity factor
Annual energy consumption (TJ)	25 %	≤ 20 TJ	1,0
		20 TJ ≤ 200 TJ	1,2
		200 TJ ≤ 2000TJ	1,4
		> 2000 TJ	1,6
Number of energy types	25 %	1 - 2 energy types	1,0
		3 energy types	1,2
		≥ 4 energy types	1,4
		1-3 SEUs	1,0
Number of significant energy uses (SEUs)	50 %	4-6 SEUs	1,2
		7-10 SEUs	1,3
		11-15 SEUs	1,4
		≥ 16 SEUs	1,6

The annual energy consumption and SEUs are those available from the client organizations energy review.

After calculating the complexity value using the formula above, it is used to determine the EnMS complexity level according to Chart A.2.

Schedule A.2 - EnMS complexity level

Tablo A.2 Level of the EnmS complexity

complexity value C	Level of the EnMS complexity
> 1,35	High
1,15 to 1,35	Medium
< 1,15	Low

8.5.6.4 EMS determination of the audit period

The minimum audit time is determined based on the combination of EMS enabled staff and complexity. The minimum audit period for initial certification (Stage 1 and Stage 2) is shown in Table A.3. In Stage 1, the review and verification of the audit period takes place.

A.3 - Minimum audit period for the initial certification (audit / day)

ENMS effective personnel number	Complexity		
	Low	Intermediate	High
1-8	2,5	4	5
9-15	4	6	7
16-25	5	7	9
26-65	6,5	8	10
86-175	8	9,5	11,5
176-275	9	11,5	12,5
276-425	10	13	15

EnMS effective personnel may exceed 425, throughout the audit duration. This sort of audit duration, should follow the progressive increments declared in this table.

A.4 Minimum requirements for surveillance and re-certification (audit-day)

Number of EnMS effective personnel	Karmaşıklık						In determining the audit time for surveillance
	Low		Medium		High		
	Surveillance	Re-certification	Surveillance	Re-certification	Surveillance	Re-certification	
1 - 8	1	1,5	1	2,5	1,5	3	

9-15	1	2,5	2	4	2,5	5	and
16-25	2	3,5	2,5	5	3	6	recertification
26-65	2,5	5	3	6	3,5	7	audits, the
66-85	2,5	6	3,5	6,5	3,5	8,5	certification
86-175	2,5	6	3,5	7	3,5	8,5	process
176-275	3	6	4	8	4	9,5	should provide
276-425	3,5	7	4	8,5	5	11	for a
							reassessment
							of the
≥ 426							specified audit
							time for
							significant

The certification body provides the audit time for a number of EnMS effective personnel exceeding 425. The certification body shall retain documented information on decisions made to calculate the audit time.

changes in the EnMS, SEUs, facilities, equipment, systems or processes. Surveillance and re-certification pre-audit changes should be obtained from the customer with the FR.SB.01 ANNEX- 1 Energy Management System Application Form.

8.5.6.5 Factors for adjustment of audit time

The certification body shall provide the rationale for the decision and factors used to modify the audit time and ensure that it is retained as documented information. Factors for adjustment of the audit time can include:

- a) reduction:
 - 1) maturity of the management system;
 - 2) accredited verification claim related to energy performance improvement within the current certification cycle;
- b) increase:
 - 1) logistics and larger sites;
 - 2) multiple languages being used in the conducting of the audit;
 - 3) changes in the client organization;
 - 4) past audit findings;
 - 5) on-site generation of energy (e.g. generation of steam within the boundary, cogeneration);
 - 6) a person has multiple roles not accounted for in the EnMS effective personnel count.

The reduction of audit time for an EnMS shall not exceed 30 % of the time established from Tables A.3 and A.4.

Note: In shift-based processes, the extent of the audit of shifts depends on the activities/processes performed in each shift and the level of control the client organization exerts over each shift.

At least one shift must be audited for an effective application to be audited. The sampling method of the shifts and the rationale for the inspection of other shifts should be recorded.

Note: Audits may include remote audit methods such as network-based collaboration, networked meetings, teleconferences, and/or electronic validation of client organization's processes. Remote audit methods are detailed in TL.SB.03 System Certification Remote Audit Instruction.

Remote audit activities should be specified in the audit plan and the time allocated to these activities should be considered as a contribution to the duration of the audit. The audit plan should include justifications for or references to remote audit activities. The audit plan should also include the selection of technologies and how they are managed.

Note: Remote audits can also be used for other activities during audit time.

8.5.7 Determination of ISMS Audit Periods

The Sector and Expertise category code is determined based on the scope using the Sector and Expertise Category Codes specified in PR.SB.06 CLASSIFICATION PROCEDURE for INFORMATION SECURITY, BUSINESS TYPES AND EXPERTISE CATEGORIES.

The minimum period for certification, supervision and re-certification examinations is shown in the table below (Table-1) as a function of the number of employees in the organization.

Inspection preparation and review of ISMS documentation,

On-site inspection (1st and 2nd phase inspections),

Reporting included.

Travel times are not included.

	No of employees	Initial Certification Total	Man/Day Annual Surveillance Total	Re-certification Total
1	1 - 10	5	1,66	3,33
2	11 - 15	6	2	4
3	16 - 25	7	2,33	4,66
4	26 - 45	8,5	2,83	5,66
5	46 - 65	10	3,33	6,66
6	66 - 85	11	3,66	7,33
7	86 - 125	12	4	8
8	126 - 175	13	4,33	8,66
9	176 - 275	14	4,66	9,33
10	276 - 425	15	5	10
11	426 - 625	16,5	5,5	11
12	626 - 875	17,5	5,83	11,66
13	876 - 1175	18,5	6,16	12,33
14	1176 - 1550	19,5	6,5	13
15	1551 - 2025	21	7	14
16	2026 - 2675	22	7,33	14,66
17	2676 - 3450	23	7,66	15,33
18	3451 - 4350	24	8	16
19	4351 - 5450	25	8,33	16,66
20	5451 - 6800	26	8,66	17,33
21	6801 - 8500	27	9	18
22	8501 - 10700	28	9,33	18,66
23	> 10700	Will proceed as it is above.		

Where a reduction in the period of the audit is made according to the table above, the reasons for the reduction should be documented. Reduction in the audit period cannot exceed maximum period of 30% for companies with ISO 27001 standard. However, the maximum period reduction for integrated audits cannot exceed 20%. In the following Tables 2-3-4 and 5, the maximum duration of the increase and reduction to be made at the time of the audit and the resulting increase and reduction rates have been defined with the relevant rationales.

Table 2 indicates the classification of the factors affecting the duration of the examination. Using these classifications, the classification of the degree of complexity of the organization related to business complexity is calculated from Table 3. From Table 4, IT complexity of the organization is calculated. It is decided to make reduction or increase by using the matrix given in Table 5 with the rating data from both tables.

The initial audit period will be prepared in this way and the time spent on site inspection should not be less than 70 percent of the time given in the table. This means report writing, review and so on. The periods reserved for transactions shall not exceed 30% of the total time specified.

For surveillance audits, 1/3 of the time spent in the first audit can be calculated as the audit period.

For recertification audits, 2/3 of the time spent in the first audit can be calculated as the audit period.

For branch audits, the audit period calculated for each branch is calculated separately for the head office and branches. In cases where the audit is not required for the head office and branches, necessary justification can be recorded and a time reduction can be made.

The audit duration is calculated in consideration of all locations associated with information security management systems included in the scope of certification and the number of employees in these locations. After the audit duration is calculated based on the reduction or increase factors, the total time obtained is distributed among the locations included in the scope of certification. During the distribution of this time, the total time is distributed among the branches in direct proportion, in accordance of factors such as the complexity level of operations performed at the relevant service points, the size of the operation and the number of employees. The justifications regarding the audit duration distributed among the branches are recorded through the FR.SB.02 Audit program.

Table 2: Classification of the factors affecting calculation of the audit period

Factors	Reduction	Normal-no change	Increase
Business Type(s) and regulatory requirements (Critical business sectors are services that have risks on health, security, economy, governmental affairs and may have a big negative impact on the country.)			
ISMS complexity	0.5 - Very little confidential or sensitive information	0. 1 - Some confidential or sensitive information is available.	1,5 ? Great deal of confidential or sensitive information is available or high (health, personal information, insurance, bank)
Information security requirements	0.5 - Accessibility (availability) requirements are	1 - Accessibility requirements	1,5 - High accessibility requirements

(confidentiality, integrity low and accessibility)

exist.

Quantity of critical assets 0.5 - There are few critical assets.

1 - There are some critical assets.

1,5 - There are many critical assets

Business type (s) performed within the scope of ISMS 0.5 - Business type (s) with low risk. No legal requirements.

1 - Legal requirements with high risk

1,5 ? High-risk business type (s) and limited legal requirements.

Processes and Tasks

Quantity of processes and services 0,66 - Maximum 2 processes Available with few interfaces. Maximum 2 product types

2 -) 3-4 simple processes, available with few interfaces. 3-4 product types

2-) More than 4 complex processes and interfaces are available. More than 4 product types

Status of tasks 0.66 - Many of the staff within the organization do the same job

2 - The staff within the organization generally do similar work.

2 - The staff within the organization has a wide range of specialties and work in a wide range of areas.

Multiple language requirements 0.66 - Documentation and Staff assessment can be carried out in one language.

2 - Existence of multilingual staff (requiring translation service and preventing the auditor from working independently) or providing documentation in multiple languages

Establishment Level of Management System (First points are taken into consideration as the other line below in this section will be added in Supervision and YB). In initial certification, the figures following or are taken into consideration.

Past performance information of ISMS 0.66 or 1 - recently documented.

1.33 or 2 - A recent supervision audit has been carried out

2 or 3 - No certification or recent examination.

Applicability statement 0,66 or 1 ? ISMS is fully implemented, many audits and improvement cycles, documented internal audits, MR(Management Review) and effective continuous improvement activities are carried out but not documented.

1.33 or 2 -ISMS is partially implemented. Some management system tools are available and implemented. Some continuous improvement processes exist but are partially implemented.

2 or 3 - ISMS is newly established and not fully operational. (Specific control mechanisms of the management system are missing, continuous improvement activities are inadequate, no special process work, etc. are available.)

Inquired before Inspection or Renewal Inspection (Since the other two lines in this section of Inspection and YB are added, first points shall be taken into account)

12 or 6 - Significant changes in scope;

<p>For supervision and renewal audits: Scope and amount of change in accordance with ISO / IEC 17021-1 of ISMS in the context of article no. 8.5.3</p>	<p>0,66 or 2-No change after last renewal test.</p>	<p>0,33 or 4 - Minor changes in scope; some policies, documents, etc.</p>	<p>New processes, new business units, areas, risk assessment management methodology, policies, documentation, risk implementation are significant changes in the above-mentioned scope.</p>	
<p>Outsourcing and dependency on external suppliers (including cloud services)</p>	<p>2 - No outsourcing and few suppliers</p>	<p>4 - Several Outsourcing applications are available.</p>	<p>6 - High level of outsourcing is present and significantly affects business activities, Outsourcing in unknown quantity or scope or many uncontrolled outsourcing agreements are available.</p>	
<p>Degree of outsourcing and 3rd party contracts under ISMS</p>	<p>Outsourcing is well defined and agreements are observed,</p>	<p>4 - Several Outsourcing applications are available.</p>	<p>Outsourcing in unknown quantity or scope or many uncontrolled outsourcing agreements are available.</p>	
<p>Independent evaluation reports are available.</p>	<p>Development activities in information system</p>	<p>4 - Standardized software platforms are used with complex configuration and parameterization. (High level) customized software, Some internal or external development activities</p>	<p>6 - Many extensive and internal software development activities carried out for important business purposes</p>	
<p>Scope of information system development</p>	<p>2 - No internal system development, Standardized software platforms are used</p>	<p>4 - Standardized software platforms are used with complex configuration and parameterization. (High level) customized software, Some internal or external development activities</p>	<p>6 - Many extensive and internal software development activities carried out for important business purposes</p>	
<p>IT Infrastructure Complexity</p>	<p>Number of the branches and disaster recovery centers/branches</p>	<p>1 - Low accessibility requirements and one or no disaster recovery center</p>	<p>2 - Medium and high accessibility requirements and zero or one alternative disaster recovery center</p>	<p>3 - High accessibility requirements (24/7 service), Many alternative recovery centers, Many data centers</p>
<p>Scope and diversity of the components used to realize different components of ISMS (number of different IT platforms, number of</p>	<p>1 - High standardized environment and low diversity (Few IT platforms, servers, operating systems, databases, networks, etc.)</p>	<p>2 - Standardized various IT platforms, servers, operating systems, databases, networks.</p>	<p>3 - High diversity or complex IT (many different network segments, server and database types, number of</p>	

separate networks)

key applications,
etc.)

Calculation table for audit day period

Table 3- Factors related to work and organization (other than IT)

Category	Rating / Score
Business Type (s) and regulatory requirements	1- The organization is in the non-critical business sector and has no regulatory requirements.
	2- The organization has customers from critical business sectors
	3- The organization operates in critical business sectors
Processes and Tasks	1. Standard processes and standard and repetitive tasks are available, and most of the personnel within the organization perform the same work. There is a limited number of products or services.
	2- Standard but non-recurring processes are available, many products or services are available.
	3- Complex processes, many products and services are available. They include many business units within the scope of ISMS certification (ISMS has a large number of complex processes or a large number of or unique activities)
Management System Establishment Level	1- ISMS is well-established and other management systems already exist
	2- Some clauses of other management systems are implemented,
	3- No other management system is established. ISMS is newly established.
a. Critical business sectors are the services that have risks in health, security, economy, and government affairs and may have a major negative impact on the country.	

Table 4- Factors Related to IT Environment

Category	Rating / Score
IT Infrastructure Complexity	1- Few and highly standardized IT platforms, servers, operating systems, databases, networks, etc.
	2- Several different IT platforms, servers, operating systems, databases, networks
	3- Many different IT platforms, servers, operating systems, databases, networks;
Outsourcing and dependence on outsourcing (including cloud services)	1- Little or no outsourcing or supplier.
	2- Several outsourcing and suppliers are available that are not related to critical business activities.
	3- Level of dependency on a lot of outsourcing and suppliers is high, which has a high impact on significant business activities.
Information system development activities	1- Very few or no in-house application developments are available.
	2- There are several outsourced system development applications for important business purposes.
	3- Numerous internal or external system application developments are available for important business purposes.

The information obtained from the application form (FR SB 01 ANNEX 3 ISMS APPENDIX FORM), which will be given to the customer at the application stage and include the classification in Table 2, and the scores at the beginning of the item in Table 2 are added and divided by 2 and thus, point of each section will be calculated.

The points obtained from the calculation are as follows:

Calculated value: If the calculated value is 0 - 1,50, point value will be 1

Calculated value: If the calculated value is 1,51 - 2,50, point value will be 2

Calculated value: If the calculated value is 2,51 - 3,50, point value will be 3

Total scores of the relevant sections in Table 3 and Table 4 are evaluated according to Table 5. Accordingly, the field where the total scores from Table 3 intersect with the appropriate cell in IT Complexity matrix and the total scores from Table 4 with the appropriate cell in the IT Complexity matrix determines Maximum Reduction and Increase limitation.

Table 5-Evaluation of Impact Factors in Audit Period

		IT Complexity		
		Low (between 3-4)	Intermediate (between 5-6)	High (between 7-9)
Business Complexity	High (between 7-9)	+%5 and +%20	+%10 and +%50	+%20 and +%100
	Intermediate (between 5-6)	-%5 and -%15	%0	+%10 and +%50
	Low (between 3-4)	-%15 and -%30	-%5 and -%15	+%5 and +%20

Considering the maximum reduction and increase limits determined according to the calculation made with the above method, the increase and reduction criteria determined according to the following criteria shall be applied.

The reasons and rates of time reduction that SZUTEST shall apply for ISMS and to be recorded (FR SB 02 Annex-1 and FR.SB.02) are as follows:

- Risk-free / low-risk products and productions (10%)
- Presence of several general processes (10%)
- Maturity of the management system (10%)
- Few legislation and standard diversity being subject to (10%)
- Very little confidential or sensitive information (10%)
- Simplicity of technology used in the implementation of different components of ISMS (number of different information technology platforms, number of differentiated networks, etc.) (10%)
- Excess number of employees doing the same job under the control of the firm (10%)
- Presence of the articles excluded in Annex A. (5%)
- Preliminary information about the system of the organization (e.g. the fact that it is certified by SZUTEST for a different standard) (10%)
- Similarity of activities on all shifts (10%)

The requirements and rates of time increase that SZUTEST shall apply for ISMS and to be recorded (FR SB 02 Annex-1 and FR.SB.02) are as follows:

- High complexity products and productions (10%)
- Large number of processes and large number of products or services (10%)
- Requirement for interpreter / translator (5%)
- Large number of employees with various expertises (5%)
- Abundance of applicable legislation and standard diversity (food, pharmaceuticals/medical products, aviation, nuclear power) (10%)
- Large number of alternative disaster recovery centers and/or data centers/uninterrupted access requirements; and the relevant height (5%)
- Excess level of critical asset/ A great deal of sensitive and confidential information (10%)
- Diversity of technology used in the implementation of different components of ISMS (number of different information technology platforms, number of differentiated networks, etc.) (10%)
- Excess regulations on outsourcing and third parties used within the scope of ISMS (Excess supplier use) (5%)
- Redundancy of information system improvements (Intensity and diversity of software development activities) (5%)
- Difficulty in logistics (multiple locations/buildings) (5%)
- Activities permanent sites/fields of which are subject to certification and requiring temporary site visits to certify such permanent sites/ fields (5%)

The audit duration is calculated over the number of employees within the scope of the ISMS standard. For an effective audit, the above factors should be taken into account and adjustments should be made for activities requiring less/more audit time.

If the factors that reduce and increase the audit time are together, offset can be made to determine the audit time.

Effective proofs and documents shall be kept explaining the change made at the time of audit for each state that has been adjusted (FR SB 02 Annex-1 and FR.SB.02).

Review and calculation of the applications according to the above-mentioned method will be made using FR SB 02 Annex 1 ISMS APPLICATION REVIEW FORM. This form comprises the formulated form of the above-mentioned method.

8.5.8 Determination of Audit Periods for Certification of Multi-Branch Organizations

Sample size to be selected for QMS, CSMS, EMS, EMS and OHS Certification Audit is calculated by completing the number resulting from $y=Vx$, $y = 0,8Vx$ for re-evaluation audit and $y = 0,6Vx$ for periodic audits.

Here, y is the sampling size; x is the number of branches. In addition, the head office should be inspected at every audit. At least 25% of the number of firms to be audited is randomly selected. The rest should be selected from as many different regions as possible.

During the selection of the branches, internal audit results, previous certification audit results, complaints, corrective and preventive actions, diversity of working procedures, changes after the previous audit and geographical distribution should be taken into consideration.

Branch selection does not have to be made at the beginning of the audit but may be made after the head office audit.

In the following special cases, the sampling size can be increased:

- Size of the facilities and number of employees,
- Complexity of activity and quality management system,
- Diversity in applications,
- Diversity in activities,
- Records of complaints, corrective and preventive actions,
- Internal audit results,
- International differences,

Matters that do not concern multi-branch organizations may be audited at the head office, in which case the audit period may be reduced for the branches, but total audit period shall not be less than the number of audit days to be determined in absence of the organization's branch.

Reduction in the number of the audit days for the head office is not allowed.

Note: For each site (including the Head Office), the audit period is calculated separately based on the number of employees according to the latest relevant MD document.

Multiple branch sampling for FSMS certification audits is only valid for the groups with more than twenty branches and the category groups A, B, E, F and G in the Category Codes Table specified in article number 8.5.4. For the certification audit, sampling is carried out in such manner that 1 branch corresponds to 5 branches for more than twenty branches.

When sampling is used in the table below, examples of branch numbers are provided;

	Total number of branches								
	X, between 1 and 20	21	22	23	24	25	26	27	28
Branches over 20	0	1	2	3	4	5	6	7	8
Number of additional branches to be audited	0	1	1	1	1	1	2	2	2
Number of additional branches to be audited	x	21	21	21	21	21	22	22	22

Determination of the audit period in the certification of Multi-Branches / Premises Organizations for ISMS:

For ISMS, where the Customer organization has multiple premises that meet the criteria a) to c) below, a sampling-based approach is employed instead of the certification audit of the multiple premises.

- a) All premises are centrally managed, inspected and operated under the same ISMS, which is subject to central management review,
- b) All premises are included in the ISMS internal audit program of the customer organization,
- c) All premises are included in the management review program of ISMS by the customer organization.

Regardless of the Information Security level of risk, the sample size to be selected for its Audit is calculated and determined by rounding off the number (if it is not a whole number, it shall be rounded up) resulting from the formulas $y = \sqrt{Vx}$, $y = 0,8\sqrt{Vx}$ for the reassessment audit and $y = 0,6\sqrt{Vx}$ for the periodic audits.

Here, y is the sampling size, x is the number of branches. In addition, the head office should be inspected at every audit. At least 25% of the number of firms to be audited is randomly selected. The rest should be selected from as many different regions as possible. If the number of premises is 52, the square root is 8; 2 of them are randomly selected and the remaining 6 premises are selected according to the above-mentioned factors and inspected together with the head office.

A representative number of premises is sampled from among all the premises within the scope of ISMS of the customer organization by taking the following factors into account and reflecting the randomness (at least 25% of the samples is randomly selected):

- 1) Internal audit results of the head office and premises,
- 2) The results of the management review,
- 3) Differences in size of premises,
- 4) Differences in the business objectives of the premises,
- 5) The complexity of ISMS,
- 6) Complexity of the information systems in different premises,
- 7) Differences in working methods,
- 8) Differences in the activities carried out,
- 9) Potential interaction with critical information systems or information systems that process sensitive information,
- 10) All changing legal conditions

Matters that do not concern multi-branch organizations may be audited at the head office, in which case the audit period may be reduced, but total audit period shall not be less than the number of audit days to be determined in absence of the organization's branch.

If ISMS has a hierarchical organization (National offices, regional offices, branch offices) with the organization's head office, the above sampling model applies to all levels.

8.6 Determination of Duration in Integrated Management System Certification

The following method is employed to determine the duration of the integrated audit, which includes two or more management system standards (excluding FSMS):

- required time is calculated separately for each management system standard (by applying the relevant factors provided by the appropriate accreditation guideline and/or rule)
- the starting point T is calculated by adding each individual part (T = A + B + C)
- where appropriate, the starting point is determined by taking the factors for time reduction (the table below) or increase required by the integrated audits into account. These factors are as follows as or more than the following:
 - Existence of multidisciplinary auditors,
 - Integrated management system dimension of the organization
 - Competence of the organization's personnel answering questions about multiple management system standards,
 - The audit plan takes the effective use of auditor's time into account,
 - Complexity of integrated audits compared to individual management system audit

d. The customer is notified at the stage of the proposal that the audit period determined based on the declared level of system integration and subsequently determined to be invalid shall be adjusted again.

Other requirements related to Integrated Management Systems are as follows:

e. Even when all mitigating factors are considered, no reduction of more than 20% of the total audit time at the starting point can be made.

f. The starting point and justification for the reduction are documented at the offer stage.

g. No time reduction can be made in combined audits of non-integrated management systems, despite being implemented at the same time.

Method to be employed for Time Reduction

100	5	5	10	15	20
80	5	5	10	15	15
60	0	5	10	10	10
40	0	5	5	5	5
20	0	0	0	0	0
	0	20	40	60	80

This figure indicates reduction in audit time (%) and the correlation is as follows:

h. The vertical axis is the integration level of organizations' management systems (see below) (including taking the ability of the audited company to respond to versatile questions into account).

i. The horizontal axis is the degree in which each auditor is individually qualified for multiple management systems and is calculated according to the following formula:

$$\frac{100 ((X1-1) + (X2-1) + (X3-1) + (X0-1))}{Z(Y-1)}$$

In this formula:

X1,2,3;n: is the standard number that n auditor is qualified with respect to the scope of integrated audit Y: management system standard number covered by the integrated audit Z: number of auditors.

Example:

An integrated audit team consists of 3 auditors covering 3 different management system standards. An auditor is qualified for all standards; the other auditor is qualified for two standards and the third auditor is qualified for only one standard.

The percentage to be used for the horizontal axis is calculated as follows:

$$\frac{100 ((3-1) + (2-1) + (1-1))}{3 (3-1)} = 50\%$$

Integration level:

An integrated management system is concluded when a single management system is used to manage an organization's performance in a versatile manner. It can be described as follows:

- Management reviews that take the overall business strategy and plan into account,
- Integrated approach to internal audits,
- Integrated approach to policy and objectives.
- Integrated approach to systems processes.
- Integrated documentation including work instructions, established for good development.
- An integrated approach to improve functioning (corrective and preventive actions, measurements and continuous improvement)
- An integrated approach for planning with a good use of risk management approaches covering the business fully,
- Combined management support and responsibilities.

If ISO 13485 and ISO 9001 certification scopes are the same or if ISO 9001 certification scope is narrower than ISO 13485 scope and the audit is planned to be carried out simultaneously, the audit period shall be considered to be the period determined for ISO 13485 and reporting and certification shall be realized according to ISO 9001 standard. In the event that the product within the scope of ISO 13485 and if it is not within the scope of ISO 9001, requirement for integration account is decided by considering how that product is defined in respect of production technology.

8.7 Pricing Principles

SZUTEST has published its price policy on its website and it is accessible to all customers. Pricing is defined as follows. If the organization has more branches than one, each branch will be audited separately but the application fee will be charged only for the head office.

Application fee is the fee determined for examination of the documents and application documents given to SZUTEST by the organization upon signing of the contract and for the preparations made before the audit.

CHARGES		Management Systems Certification (All Management System Certifications except ISO 50001 and ISO 27001 Schemes)	ISO 50001 and ISO 27001 Certification	Halal Certification
Application Fee	DOMESTIC	50 Euro	100 Euro	2000 TL
	OVERSEAS	100 Euro	200 Euro	200 Euro
Annual Certificate Usage Fee	DOMESTIC	200 Euro	200 Euro	200 Euro
	OVERSEAS	200 Euro	200 Euro	200 Euro
AUDIT / DAY FEE	DOMESTIC	200 Euro	200 Euro	3000 TL
	OVERSEAS	200 Euro	400 Euro	300 Euro
The fee schedule with the symbol "*" means that the specified fee is valid for 1 Audit/ day.				
The costs of the services performed by the System Certification Department are calculated as [EU], [TL] or [USD].				
Service fees are determined by the General Manager and the System Certification Department Manager. The General Manager is authorized to make necessary adjustments in the service tariff. Recertification fee is calculated in the same way as the interim audit fees.				
Only the audit fee will be charged for scope expansion and follow-up audits.				
When it is decided to repeat a given service due to an error caused by SZUTEST; SZUTEST shall not charge an additional fee for the service to be provided again. Price offers are given for three years during which the certificate will be valid.				
Fee for additional document and/or change on the document is 50 EUR + VAT.				
NOTE: 0.5 m/d will be added to audit duration in case the revision transition has been performed at surveillance period. Relevant wage difference is reflected to surveillance fee.				
NOTE: In Halal Certification audits, while the audit / day is calculated; man/day fee of ISLAMIC AFFAIRS EXPERT is reflected to proposal considering how many days the ISLAMIC AFFAIRS PERSON will participate to audit. However, it will not be reflected to man/day duration.				

Quality Management Systems (ISO 9001) Critical Codes for Witness Audits

ANNEX-A

Environmental Management Systems (ISO 14001) Critical Codes for Witness Audits ANNEX-

Technical cluster	IAF code	Description of economic sector/activity, according to IAF ID1	Critical code(s)
Agriculture, forestry and fishing	1	Agriculture, forestry and fishing	1
Food	3	Food products, beverages and tobacco	3
	30	Hotels and restaurants	
Mechanical	17	Limited to 'Fabricated metal products'	20 or 21
	18	Machinery and equipment	
	19	Electrical and optical equipment	
	20	Shipbuilding	
	21	Aerospace	
	22	Other transport equipment	
Paper	7	Limited to 'Paper products'	9
	8	Publishing companies	
	9	Printing companies	
Construction	28	Construction	28
	34	Engineering services	
Goods production	4	Textiles and textile products	4 and 5
	5	Leather and leather products	
	6	Wood and wood products	
	23	Manufacturing not elsewhere classified	
Chemicals	7	Limited to 'Pulp and paper manufacturing'	7 and 10 and 12 and 13
	10	Manufacture of coke and refined petroleum products	
	12	Chemicals, chemical products and fibres	
	13	Pharmaceuticals	
	14	Rubber and plastic products	
	15	Non-metallic mineral products	
	16	Concrete, cement, lime, plaster, etc.	
	17	Limited to 'Base metals production'	
Mining and quarrying	2	Mining and quarrying	2
Supply	25	Electricity supply	25 or 26
	26	Gas supply	
	27	Water supply	
Transport & Waste management	31	Transport, storage and communication	24 and 39 (limited to NACE 37, 38.1, 38.2, 39)
	24	Recycling	
	39	Other social services	
Services	29	Wholesale and retail trade; Repair of motor vehicles, motorcycles and personal and household goods	29 or 35 or 36
	32	Financial intermediation; real estate; renting	
	33	Information technology	
	35	Other services	
	36	Public administration	

Technical Fields for Energy Management Systems (ISO 50001) certifications and accreditations

ANNEX-C

Technical Field	Explanation	Examples	Typical Energy Use
Light and medium industry	Manufacturing facilities that produce consumer intermediate products or products for the end user	<ul style="list-style-type: none"> • Clothing • Consumer electronics • Electrical appliances, furniture • Plastic products • Production • Special chemicals • Food processing • Water and wastewater treatment 	Typical energy uses: <ul style="list-style-type: none"> • Process heat (electricity, natural gas, coal or other sources) • Operating machines (pumps, fans, compressed air, material handling) • Steam systems • Small cooling towers • Other process uses • Building energy uses (lighting, HVAC, hot water, portable devices)
Heavy industry	Manufacturing facilities that require high capital and consume large amounts of raw materials and energy	<ul style="list-style-type: none"> • Chemicals • Steel and other metals • Oil refining process • Ship building • Paper pulp and paper production facilities • Industrial machinery • Semiconductors • Cement and ceramic 	Typical energy uses: <ul style="list-style-type: none"> • Process heat (electricity, natural gas, coal or other sources, raw materials, intermediates) • Process cooling and freezing • Operating machines (pumps, fans, compressed air, material handling) • Turbines, condensers • Steam systems • Large cooling towers • Transport
Buildings	Facilities with standard commercial building practices	<ul style="list-style-type: none"> • Offices, offices • Accommodation • Retail • Warehouse 	Typical energy uses: <ul style="list-style-type: none"> • Portable devices • Water heating • Lighting • Heating and cooling systems and related fans • Pump systems
Buildings complexes	Facilities where processes requiring special expertise are carried out due to the complexity of energy resources and energy use	<ul style="list-style-type: none"> • Healthcare facilities • Laboratories • Data centers • Education campuses • Military and government campuses with integrated energy supply (district heating and cooling) • Municipalities 	Typical energy uses: <ul style="list-style-type: none"> • Central and district heating and cooling systems • Portable devices • Water heating • Lighting • Local HVAC

Technical Field	Explanation	Examples	Typical Energy Use
			<ul style="list-style-type: none"> Compressed air, material processing systems Elevators / lifting vehicles
Transport	System or means for the transport of people or goods / cargo	<ul style="list-style-type: none"> Passenger services (vehicle, train, ship, planes) Municipalities Trucking services Vehicle fleets Rail businesses Cruise operations Airlines, airline shipping Vehicle fleets 	Typical energy uses: <ul style="list-style-type: none"> Mobile energy uses HVAC Lighting Portable devices Processing of materials Resources (fuel oil, electricity, coal, etc.)

Energy supply	Energy production (nuclear, combined heat and power (CHP), electricity, renewable etc.) and energy transport (transmission and distribution)	Power generation (coal, oil, natural gas, renewable, combined heat and power generation (CHP), IGCC etc.)	Typical energy uses: <ul style="list-style-type: none"> Conversion of raw materials Transmission and distribution turbines Burning Steam systems Condensers and cooling towers
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