



**Training on ISO 45001:2018 and IAF
MD22:2018**
(Certification and accreditation for OH&SMS)

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IAF MD22:2018
Application of ISO/IEC 17021-1 for the Certification
of Occupational Health and Safety Management
Systems (OH&SMS)

APPENDIX B
DETERMINATION OF AUDIT TIME OF
OCCUPATIONAL HEALTH AND SAFETY
MANAGEMENT SYSTEMS

APPENDIX B

Determination of Audit Time of Occupational Health and Safety Management Systems

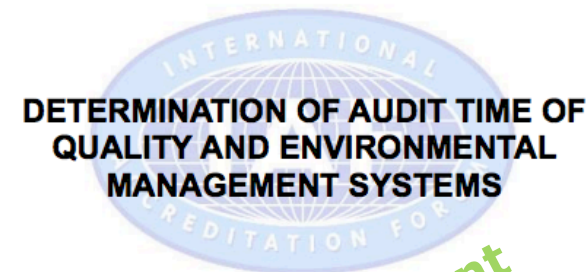
- ✓ It incorporates **14 additional requirements** to document [IAF MD5:2015](#), **specific for the OH&SMS scheme.**
- ✓ All requirements of the IAF MD5:2015:
 - ✓ If not modified continue to be applicable
 - ✓ if modified include all relevant original requirements of the IAF MD5:2015

IAF MD 5:2015

International Accreditation Forum, Inc.



IAF Mandatory Document



Source document
(IAF MD 5:2015)

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SUMMARY

- **DIFFERENT APPROACH: RISK AND COMPLEXITY CATEGORIES**
- **COMPLEXITY CATEGORY BASED ON OH&SMS RISKS**
- **METHODOLOGY FOR CALCULATION OF AUDIT TIME**
- **NEW DEFINITIONS**
- **REDUCTION OF NUMBER OF PERSONNEL BASED ON RISK**
 - HIGH NUMBER OF UNSKILLED PERSONNEL
 - SIMILAR ACTIVITIES
 - REPETITIVE JOBS
- **AUDIT ON MORE THAN ONE SHIFT**
- **AUDIT ON MORE THAN ONE SITE**
 - (MULTI-SITE, TEMPORARY SITES)
- **LIMITATIONS FOR REMOTE AUDIT ACTIVITIES**
- **CONTROL OF OUTSOURCING**

FOREWORD

- Appendix B of IAF MD22 is **mandatory** for use with ISO/IEC 17021-1 with OH&SMS, meaning that **CBs shall use it as part of their contract review and audit planning processes.**
- The expectation is that the **CB is able to demonstrate to the AB assessment team that they have considered the required activities for the audit and based the duration on being able to effectively complete these activities**
- Therefore Appendix B of IAF MD22 **shall be used to identify if the calculated audit time to achieve this clause is within the audit time** resulting from the application of the methodology herein presented.

DIFFERENT APPROACH: RISK AND COMPLEXITY CATEGORIES

IAF MD5:2015 uses a different approach for the calculation of audit time of QMS and EMS:

Risk category for QMS (IAF-MD5,§1.10)

For QMS, the provisions are based on three categories, dependant on the **risks posed by failure of the product or service** of the client organization...

(See IAF MD5, Annex A, Table QMS 2)

Complexity category for EMS (IAF-MD5,§1.11)

For EMS, the provisions specified are based on five primary complexity categories of the **nature, number and gravity of the environmental aspects** of an organization that fundamentally affect the audit time.

(See IAF MD5, Annex B, Table EMS 2)

DIFFERENT APPROACH: RISK AND COMPLEXITY CATEGORIES

Consistently §B.1.12 of IAF MD22 introduces for OH&SMs the more appropriate concept of:

Complexity category based on OH&S risks

For OH&SMS, the provisions are based on three primary complexity categories based on the **nature, number and severity of the OH&S risks** of an organization that fundamentally affect the audit time.

(See IAF MD22, Appendix B, Table OH&SMS 2)

High risk activities normally require more audit time to carry out an effective audit, while medium and low risk activities require less time proportionally

THREE CATEGORIES OF COMPLEXITY OF OH&SMS RISKS

Section B3 / Tables OH&SMS 1 e 2: the calculation is based on **three categories** of complexity classified according to **nature and severity of the OH&S risks** of an organization, which significantly affect the audit time:

- ✓ **“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);
- ✓ **“Low”**: OH&S risks with low nature and severity (typically office based organizations);

“limited” e “special” categories are withdrawn for OH&SMS

METHODOLOGY FOR CALCULATION OF AUDIT TIME

Based on the combination of **three steps that may cause significant differences** in the results among the OH&SMS, QMS and EMS certification schemes.

- 1. Effective number of personnel** linked to complexity categories of OH&S risk (table OH&SMS 1)
 - 2. Business sectors** linked to complexity categories of OH&S risk (table OH&SMS 2)
 - 3. Additional factors for adjustments of audit time** (clause B.8)
- *Step 1 and 2 above are used as inputs in the 2-ways table OH&SM 1 to calculate the full audit time (m-days)*
 - *Step 3 determines the **mandatory increases** (or **decreases**) to the above calculated audit time*

STEP 1 – TABLE OH&SMS1 FOR AUDIT TIME

In table OH&SMS 1, it was decided to maintain the **same audit time** as in the table EMS 1, since:

- the EMS table of IAF-MD5 has been historically widely used for OH&SMS also
- any increase could have been hardly supported by technical justifications and did not find consensus

TABLE OH&SMS 1

**Relationship between Effective Number of Personnel,
Complexity Category of OH&S Risk and Audit Time
(Initial Audit only – Stage 1 + Stage 2)**

Effective Number of Personnel	Audit Time Stage 1 + Stage 2 (days)			Effective Number of Personnel	Audit Time Stage 1 + Stage 2 (days)		
	High	Med	Low		High	Med	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		

STEP 2 - TABLE OH&SMS 2 FOR BUSINESS SECTORS

Introduction of more “business sectors” at high complexity category of OH&SMS risk compared to EMS:

- ✓ High: 28 for OH&SMS vs 12 for EMS,
- ✓ Medium: 23 for OH&SMS vs 20 for EMS,
- ✓ Low: 11 for OH&SMS vs 8 for EMS

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

Complexity category of OH&S risk	Business sector
High	<ul style="list-style-type: none"> • 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 <p>*****</p>
Medium	<p>types of water environments)</p> <ul style="list-style-type: none"> • 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 <p>*****</p>
Low	<ul style="list-style-type: none"> • 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).

STEP 3 – B8 ADDITIONAL FACTORS FOR ADJUSTMENT

Introduction of **more severe adjustment factors**

- Increasing factors: **13 for OH&SMS vs 9 for EMS**
- Decreasing factors: **4 for OH&SMS vs 8 for EMS**

B8 - MORE SEVERE FACTORS FOR ADJUSTMENT

B8.1 - ... additional factors that shall be considered ...:

- **More increasing factors** (13 OH&SMS vs 9 EMS) e.g.:
 - ✓ rate of accidents and occupational diseases higher than average for the business sector
 - ✓ the organization is facing legal proceedings related to OH&S (depending on the severity and impact of risk involved),
 - ✓ temporary large presence of many (sub)contractors causing an increase in complexity or OH&S risks (e.g. periodical shutdowns or turnaround of refineries, chemical plants, steel manufacturing plants and other industrial complexes)
 - ✓ presence of dangerous substances in quantities exposing the site to the risk of major industrial accidents,
 - ✓ organization with sites included in the scope in other countries (if legislation and language are not well known).
- **Less reduction factors** (4 OH&SMS vs 8 EMS)

Any decision taken in relation to the requirements of this clause shall be recorded.

B.8 EXAMPLES OF FACTORS FOR ADJUSTMENTS OF AUDIT TIME

B.8.1 The additional factors that shall be considered include but are not limited to:

- i) Increase in audit time of OH&SMS:
 - a. complicated logistics involving more than one building or location where work is carried out. e.g., a separate Design Centre shall be audited,
 - b. staff speaking in more than one language (requiring interpreter(s) or preventing individual auditors from working independently),

- ii) Decrease in audit time of OH&SMS:
 - a. maturity of the management system,
 - b. prior knowledge of the client organisation's management system (e.g. already certified in another voluntary OH&SMS scheme by the same CAB),

FINAL RESULT (STEP 1 + STEP 2 + STEP 3)

The final result of the application of such methodology of audit time calculation for OH&SMS is:

- a general increase in audit time for OH&SMS compared to that for EMS
- with no need to increase the audit time in table OH&SMS 1 vs table EMS 1

DIFFERENT APPROACH FOR DETERMINATION OF AUDIT TIME

- Risk for QMS
- Complexity for EMS
- **Risk-based complexity for OH&SMS**

To determine the audit time, **the riskiest, most complex or unique factors among the applicable processes, activities and control measures** should be taken into consideration, e.g.:

- Activities classifiable at high risk only from the point of view of the type of process, **such as work at height**, do not automatically imply higher audit times since their control measures can be easily identified
- Vice-versa even if the normal welding activities may be considered not at high risk, the **underwater welding activities** which involve more complex control measures should require higher audit time.

NEW DEFINITIONS

- **B1.9: Effective Number of Personnel:**
 - **All personnel** (permanent, temporary, and part-time) **involved within the scope of certification** including those working on each shift.
 - to also include **contractors/subcontractors under control/influence** of the organization that can impact on the organization's OH&SMS performance.
- **B1.12:** introduced the **complexity category based on OH&S risk**

JUSTIFICATION FOR REDUCTION OF NUMBER OF PERSONNEL

- B2.3.4a: reduction permitted for **high percentage personnel performing similar or identical activities**
- B2.3.1/B2.3.6: Reductions due to **employment of large numbers of unskilled personnel** not permitted without consideration of the associated risk, because the lack of awareness may be a source of risk.
- B2.3.4b: Possible reductions for groups of **workers performing repetitive jobs** which can reduce attention, and raise the associated level of OH&S risk shall be documented to include the assessment of the OH&S risk

AUDIT ON MORE THAN ONE SHIFT

B2.3.5/3.7 Work on shifts

- need to audit outside normal working hours :
 - ✓ at least **one of the shifts inside and one outside of regular office hours** during the 1st certification cycle
 - ✓ **during surveillance audits of the subsequent cycles, the CB may decide not to audit the second shift** based on the recognised maturity of the OH&SMS.
- Adjustments for delaying the starting time of audit are recommended in order to cover both shifts within the 8 hours audit time
- The justification for not auditing the other shifts shall be documented taking into account the risk for not doing so.

AUDIT ON MORE THAN ONE SITE

Multi-sites

- B10.1/B10.2: New IAF-MD1:2018 applicable. Site sampling is permitted or not, **based on the evaluation of the level of OH&S risks associated** with the activities and processes carried out in each site included in the scope of certification

Temporary sites

- B9.2/9.3: need to visit and the extent of sampling **based on an evaluation of the risks** of failure of the OH&SMS to control the OH&S risks associated with the client's operations.
- B9.2/9.3: Sites included in **sampling to represent the client's scope of certification**, sizes and types of activities and processes, type of hazards involved and associated OH&S risks, and stages of projects in progress

LIMITATIONS FOR REMOTE AUDIT ACTIVITIES

B4.5/9.3 remote audit:

- limited to reviewing documents and records
- limited to interviewing staff and workers
- **excluded for witnessing of operational control** and other OH&SMS activities that need direct observation
- max 30% of onsite time, if more to be justified
- to be identified in the audit plan

CONTROL OF OUTSOURCING

B11.1/B11.2:

- to obtain evidence that the organization has determined type and extent of control to be applied
- to evaluate the effectiveness of the organization 's OH&SMS in managing any supplied activity and the risk this poses to the OH&S performance
- to consider the criteria applied by the organization for the evaluation, selection, monitoring of performance of external providers
- to consider the risk that the external providers can adversely affect the organization's ability to control its own OH&S risks.

CONTROL OF OUTSOURCING

B11.3/B11.4

- auditing the complete provider's MS is not required,
- but the CAB **shall consider outsourced processes / functions** included within the scope of the organization's OH&SMS
 - to plan and accomplish an effective audit
 - to prepare and update the certification programme before every audit