CERTIFICATION & INSPECTION

TL.07

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VERIFICATION / VALIDATION SCHEDULE CALCULATION AND CHARGING INSTRUCTIONS

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CONTENTS

1. PURPOSE

The purpose of this instruction is to determine the method for determining the verification and validation periods and fee for the verification and validation processes to be carried out according to the Republıc Of Turkıye Mınıstry Of Envıronment, Urbanızatıon And Climate Change Monitoring and Reporting Regulation, ISO 14064-1 and ISO 14064-2 standards.

2. SCOPE

This instruction; Republıc Of Turkıye Mınıstry Of Envıronment, Urbanızatıon And Climate Change Monitoring and Reporting Regulation includes continuity and validation to be organized according to ISO 14064-1 and ISO 14064-2 documents.

3. DEFINITIONS

4. REFERENCE DOCUMENTS

4.1. Forms

4.2. Other Documents

- EUROPEAN COMMISSION DIRECTORATE-GENERAL CLIMATE ACTION Directorate A - International and Climate Strategy CLIMA.A.3 - Monitoring, Reporting, Verification Man-day Guidance for NABs and NCAs
- EA-6/03 - EA Document for Recognition of Verifiers under the EU ETS Directive Annex D – Factors to consider for time allocation and data sampling (normative)
- SHY-16-4 Regulation on Monitoring of Greenhouse Gas Emissions from Aviation Activities
- SHT-CORSIA International Aviation Carbon Offset and Reduction Scheme Implementation Instruction
- ICAO Annex 16 – Environmental Protection – Volume IV, Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)
- ICAO Doc 9501 - Environmental Technical Manual - Environmental Technical Manual
- ISO 14064-1:2018 Greenhouse Gases – Part 1: Guidance and specification standard for enterprise level calculation and reporting of greenhouse gas emissions and removals
- ISO 14061-2:2019 Greenhouse gases - Part 2: Guidance and specification standard for project-level calculation, monitoring and reporting of greenhouse gas emission reductions or removal improvements
- Republıc Of Turkıye Mınıstry Of Envıronment, Urbanızatıon And Climate Change Monitoring and Reporting Regulation
- Republıc Of Turkıye Mınıstry Of Envıronment, Urbanızatıon And Climate Change Regulation on the Accreditation of Verification Organizations

5. APPLICATION

5.1. REPUBLIC OF TURKIYE MINISTRY OF ENVIRONMENT, URBANIZATION AND CLİMATE CHANGE, MRV Verification Times and Prices

5.1.1. Verification Durations

The minimum periods determined for the facility categories (*) are determined according to the table below.

Facility Category	Minimum Verification Time (1)	Minimum Field Visit Duration (within minimum verification time) (2)	Minimum Strategic Analysis Field Visit Duration (Within the minimum verification period, if applicable, in addition to the minimum site visit time) (3)	Minimum Technical Expert Duration (in addition to the validation time if used in the validation team) (4)	Minimum Technical Expert Duration (For plants that use their own laboratory, which is not a minimum for determining calculation factors) (5)
	(man/day)	(man/day)	(man/day)	(man/day)	(man/day)
Low emission plants	3	1	0,5	0,5	0,5
Category A plants	4	2	0,5	0,5	0,5
Category B plants	8	4	1	1	1
Category C plants (**)	16	6	1	1	1
Category B and C facilities in activity group 2, 3 (carrying out all sub-activities simultaneously) or 8.3	20	8	2	2	1

* The times to be spent for the field visit to be carried out before the contract are not included in the times in the table. The periods in columns (1), (2) and (3) of the table cover only the post-verification activities of the lead verifier and verifiers. Columns (4) and (5) cover only the post-verification activities of technical experts.

** The minimum verification period for category C natural gas cycle power plants is 12 man-day. The periods in columns (2), (3), (4) and (5) are the same as those determined for category B facilities.

In order for the verification to be carried out properly, the verification times can be increased in the following cases;

1. The nature of the facility and the complexity of its activities
2. Number of emission sources and resource flows
3. Information in the Ministry-approved monitoring plan and the complexity of the planÖnemlilik seviyesi

4. The scope and complexity of the facility's data flow activities and control system
5. Location of information and data on greenhouse gas emissions

5.1.2. Verification Prices

The minimum man-day wage for verification activities, excluding Value Added Tax, is applied as the monthly gross minimum wage determined in accordance with the Labor Law No. 4857 dated 22/5/2003 for the month of January of the greenhouse gas emission report to be verified.

The minimum man-day fee covers the verification activity and other mandatory expenses, including the services of the lead verifier, verifier and technical experts.

5.2. CORSIA Validation Durations

Verification times are determined according to the table below.

Aircraft Operator Category	Domestic and International Total Emissions (CO2e)	Strategic Analysis Field (Man/Day)	Process Analysis Field (Man/Day)	Process Analysis Office (Man/Day)
Category A	0-25.000	1	2	2
Category B	25.001-100.000	2	4	4
Category C	100.001-…….	2	6	6

Tablo 1

* The times to be spent for the field visit to be carried out before the contract are not included in the times in the table.

* Technical Experts must be on site with the verification team throughout the field visit.

5.2.1. Extension of Verification Periods

In the following cases, verification times can be increased.

- For verifications that require an interpreter +%10
- Conducting site visits with multiple locations +%20
- Complexity of datasets (lots of manual data…) +%20

5.3. ISO 14064-2 Verification / Validation Times and Prices

5.3.1. Durations

The first step for the verification period calculation starts with the Complexity calculation based on the Annual emission amount, energy source and assurance level taken at the time of application. In the light of the information received during the strategic analysis, this period can be increased or decreased.

Parameters	Impact Rate	Gap	Complexity Factor
Annual Emission (Ton)	30%	1-10	1
		10-100	1,2
		100-1.000	1,4
		1.000-10.000	1,6
		10.000-100.000	1,8
		≥100.000	2
Energy Source and Number of Sources, Sinks, Warehouses	30%	1-2	1
		3	1,2
		≥4	1,4
Assurance Level	40%	Limited	0,6
		Reasonable	1

Complexity Value = (Complexity factor from the annual emission amount*0.3) + (Complexity factor from the number of energy sources*0.3) + (Complexity factor from the assurance level*0.4)

The complexity value determined by the above formula is evaluated in the table below and the complexity level of the facility is determined.

Complexity Value	Complexity Level
<1,15	Low
1,15-1,35	Middle
>1,35	High

The man-day calculation is made according to the table below, over the determined Complexity Level and the number of Greenhouse Gas Emission Sources.

	Complexity Level		
Number of Emission Sources	Low	Middle	High
1-5	3	3,5	4

6-10	3,5	4	4,5
10-15	4	4,5	5
16-20	4,5	5	5,5
21-25	5	5,5	6
26-...	5,5	6	6,5

5.3.2. Verification/Validation Price

The minimum man-day wage (Str Analysis + Process Analysis) for verification activities is applied as 50% of the monthly gross minimum wage determined in accordance with the Labor Law No. 4857 dated 22/5/2003 at the time the verification contract was signed, excluding Value Added Tax.

5.4. ISO 14064-1 Verification Times and Prices

5.4.1. Verification Duration

The verification period is calculated based on the information received during the application according to the table given below. The information collected during the strategic analysis can be increased or decreased this time.

1	Risk assessment	High	Low
a	Risks associated with the verifier's independence and impartiality	1	0
b	Technical risks for the sector	1	0
c	Data risks in terms of application form information	1	0

If any of the options a, b, c is selected as high risk, the total risk score is 3, if all options are selected low, the risk score is 0.

2	General Information	High	Low
a	Is the organization a new customer?	5	0
b	Is the corporate carbon footprint calculated for the first time?	2	0
c	Is your corporate carbon footprint verified for the first time?	2	0
d	Are the emissions calculated by a consultant?	0	2
e	Will the results be included in the sustainability report?	1	0
f	Do you need a translator?	5	0
g	Has a verification been made within the scope of the P&R Regulation?	0	2
h	Are ISO 14064-1 procedures integrated into a QMS?	0	1
ı	Is Initial verification conducted by QSI under 14064-2 for the same facility	0	-5

3	**Project Information**	**Yes**	**No**
a	If the number of Facilities with Improvement / Reduction Projects = 1 0 points, 2-4 = 2 points, 5-10 = 4 points, if more than 10 = 7 points)		
b	If the Number of Affiliates Included in the Study = 0 0 points, if 1-3 = 5 points, if more than 3 = 10 points)		
c	Improvement Made in Direct Emissions	3	0
d	Improvement Made in Energy Indirect Emissions	5	0
e	Improvement Made in Transport Emissions	3	0
e	Improvement Made in Procurement Emissions	5	0
f	Is there a National / International Reference Project?	0	2
g	Is it the first project on a similar topic by QSI?	5	0
h	Is it the first project on a similar subject by the facility?	1	0

4	**Complexity of data flow activities and robustness of control system?**
a	Very low complexity and good controls in place = 0 points Moderate complexity and good control = 2 points High complexity but good control = 4 points Medium/High complexity and poor control = 8 points

Total point = Group 1 + 2 + 3 + 4

Duration Calculation Chart

Point	The total time	Strategic Analysis	Process Analysis Field
0-15	1.5	0.5	1
15-49	(Total point * 0.125) + 0.5	See Table	See Table
50-70	8	2	6

Total Points	**Strategic + Process**	Calculated Time		Rounded Time		**The Form of Strategic Analysis**
		Strategic	**Process**	**Str**	**Proses**	
0-15	1,5	0,5	1,1	0,5	1,0	Office
16	2,5	0,8	1,8	1,0	2,0	Office
17	2,6	0,8	1,8	1,0	2,0	Office
18	2,8	0,8	1,9	1,0	2,0	Office
19	2,9	0,9	2,0	1,0	2,0	Office
20	3,0	0,9	2,1	1,0	2,0	Office
21	3,1	0,9	2,2	1,0	2,0	Office

22	3,3	1,0	2,3	1,0	2,0	Office
23	3,4	1,0	2,4	1,0	2,0	Office
24	3,5	1,1	2,5	2,0	2,0	Office
25	3,6	1,1	2,5	2,0	2,0	Office
26	3,8	1,1	2,6	1,0	3,0	Office
27	3,9	1,2	2,7	1,0	3,0	Office
28	4,0	1,2	2,8	1,0	3,0	Office
29	4,1	1,2	2,9	1,0	3,0	Office
30	4,3	1,3	3,0	1,0	3,0	Office
31	4,4	1,3	3,1	1,0	3,0	Head validator decision
32	4,5	1,4	3,2	1,0	3,0	Head validator decision
33	4,6	1,4	3,2	1,0	3,0	Head validator decision
34	4,8	1,4	3,3	1,0	3,0	Head validator decision
35	4,9	1,5	3,4	2,0	3,0	Head validator decision
36	5,0	1,5	3,5	2,0	4,0	Head validator decision
37	5,1	1,5	3,6	2,0	4,0	Head validator decision
38	5,3	1,6	3,7	2,0	4,0	Head validator decision
39	5,4	1,6	3,8	2,0	4,0	Head validator decision
40	5,5	1,7	3,9	2,0	4,0	Head validator decision
41	5,6	1,7	3,9	2,0	4,0	Head validator decision
42	5,8	1,7	4,0	2,0	4,0	Head validator decision
43	5,9	1,8	4,1	2,0	4,0	Head validator decision
44	6,0	1,8	4,2	2,0	4,0	Head validator decision
45	6,1	1,8	4,3	2,0	4,0	Head validator decision
46	6,3	1,9	4,4	2,0	4,0	Head validator decision
47	6,4	1,9	4,5	2,0	5,0	Head validator decision
48	6,5	2,0	4,6	2,0	5,0	Head validator decision
49	6,6	2,0	4,6	2,0	5,0	Head validator decision
50	6,8	2,0	4,7	2,0	5,0	Head validator decision
51-70	8,0	2,0	6,0	2,0	6,0	Head validator decision

5.4.2. Prices

Daily 1.000 USD

6. REVISION TRACKING PAGE

Rev. No	Rev. Date	Revision Description
0	01.05.2016	First Release Date
2	14.12.2017	Ücretlendirme talimatı ile birleştirilip European Commission tarafından yayınlanan Man-day Guidance for NABs and NCAs AVR time allocation guidance/tool for NABs and NCAs, final version 11 November 2013 e göre talimat revize edilmiştir.
3	02.03.2018	EA 6/3 Anex D Additional Factors (CEÖS) article has been added. The reference documents section has been updated.
4	17.02.2021	Added CORSIA Validation Time calculation method
5	01.10.2022	14064-1 ve 14064-2 Added Validation Time calculation method
6	25.08.2023	14064-2 The Validation/ Verification time calculation method has been changed. Content has been edited.