VAZ

SCC-VAZ DOCUMENT 006

ACCIDENT STATISTICS AND ACCIDENT FREQUENCY

EXPLANATIONS TO QUESTION 12.6 OF DOCUMENT 003

Please note:
The programme names SCC-VAZ 2021 and SGU Personnel VAZ 2021 are described below as SCC and SGU Personnel for ease of reading.

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Chapter 1 Introduction

Mandatory question 12.6 of document 003 contains the requirement that the company keeps accident statistics and that the determined accident frequencies are below the SCC thresholds. This document 006 contains explanations on how to fulfil this requirement.

Chapter 2 Accident statistics

The accident statistics shall include information on:

- number of occupational accidents per calendar year

- hours worked per calendar year

- average number of employees per calendar year

The accident statistics must be confirmed by signature by the management of the company to be certified.

2.1 Determination of occupational accidents

When determining the number of occupational accidents, occupational accidents of all employees working within the scope of the SCC certificate (including apprentices, trainees and hired temporary workers as well as one-man subcontractors) shall be taken into account.

Occupational accidents with absence from work ≥ one working day without accident day are to be considered (commuting accidents are not taken into account).

Hired temporary workers

The number of occupational accidents of hired temporary workers must be fully included in the determination of the accident frequency for the hirer (SCC contractor).

One-man subcontractors

The number of occupational accidents of one-man subcontractors are to be fully included in the determination of the accident frequency at the hirer (SCC contractor). Occupational accidents of subcontractors with ≥ 2 employees are not considered here – they are instead assessed according to question 11.1 of document 003.

2.2 Determination of working hours

All employees working within the scope of the SCC certificate (including apprentices, trainees and hired temporary workers as well as one-man subcontractors) are to be taken into account when determining the working hours.

Chapter 3 Calculation of the accident frequency

The accident frequency is determined as follows:

$$accident\ frequency\ (AF)\ =\ \frac{number\ of\ occupational\ accidents\ \times\ 10^6}{hours\ worked}$$

The accident frequencies to be indicated are the average of the last three calendar years. In companies that have only existed for one or two years, the average of the last two calendar years or the value of the last calendar year is to be taken as a basis.

To calculate the average accident frequency of the last three calendar years, the sum of all occupational accidents of the last three calendar years shall be related to the sum of hours worked of the last three calendar years.

Example

Table 006-1: Example for the calculation of the accident frequency (AF)

	Occupational accidents	Working hours
1st calendar year	3	192,000
2nd calendar year	0	172,800
3rd calendar year	8	211,200
Total	**11**	**576,000**

$$accident\ frequency\ (AF)\ =\ \frac{11\ \times\ 10^6}{576000}\ =\ 19.10$$

Chapter 4 SCC thresholds

Table 006-2: SCC thresholds

AF (SCC*, SCC**, SCCP)	AF ≤ 20	20 < AF ≤ 40	AF > 40 and AF^1 ≤ BG (German employers' liability insurance association) [2]	AF > 40
Initial certification	Certificate	Certificate	Certificate	No certificate
Recertification	Certificate	Certificate, if AF is reduced by 20 % in the last 3 years	Certificate, if AF is reduced by 20 % in the last 3 years	No certificate
Monitoring	No action required	Action plan aimed at acceptable AF in subsequent audit	Action plan aimed at acceptable AF in subsequent audit	Action plan aimed at acceptable AF in subsequent audit

Companies ≤ 35 employees exceeding the permissible accident frequency

For companies with a maximum of 35 employees, the SCC auditor decides whether to recommend to the SCC coordinator that the company be certified if the permissible accident frequency is exceeded. The decision must be justified in writing and stored in the procedural file.

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[1] only reportable accidents (occupational accident with loss of working hours > 3 calendar days without accident day and fatal accidents)

[2] see table 006-3

Chapter 5 SCC thresholds: Explanations

According to the SCC definition, occupational accidents with absence from work ≥ one working day (without accident day) are counted. In the case of initial certification or recertification, the accident frequency rate (hereinafter referred to as AF) is calculated as the average of the last 3 completed calendar years.

In the event that the company is newly established for a first certification or if no or not all accident figures according to the SCC definition were recorded for the last three previous years, the data from the last two, the last or the current calendar year are used as a basis, depending on availability, and the AF according to the SCC definition is determined as a starting value.

Should an AF of > 40 result here, the SCC regulations allow an alternative for initial certification (and to a limited extent also for recertification – see table above): If the company can provide proof that its accident frequency is below the average of its professional association according to the employers' liability insurance association (hereinafter referred to as UH-BG), the corresponding certification requirement is fulfilled.

According to the definition of the DGUV (German statutory accident insurance), an occupational accident occurs when the person is unable to work for more than three days. The accident statistics of the employers' liability insurance association are evaluated by VAZ e.V. and the comparative figures are provided in the "Table 006-3: Accident frequency from the BG statistics (last update 28.01.2019)" on the homepage of VAZ e.V. These apply in the course of the assessment AF ≤ BG.

Table 006-3: Accident frequency from BG statistics (update from 28.01.2019)

Accident frequency (reportable occupational accidents per 1 million hours worked)[3]				
Numbers & designations		2015	2016	2017
101	BG Rohstoffe und chemische Industrie (raw materials and chemical industry) (BG RCI)	11.68	11.69	11.60
102	BG Holz und Metall (wood and metal) (BG HM)	23.55	23.68	22.17
103	BG Energie Textil Elektro Medienerzeugnisse (energy textiles electrical media products) (BG ETEM)	11.66	11.71	11.63
104	BG der Bauwirtschaft (construction industry) (BG Bau)	35.34	35.22	34.39
105	BG Nahrungsmittel und Gastgewerbe (food and catering) (BGN)	22.23	21.79	21.37
106	BG für Handel und Warenlogistik (trade and merchandise logistics) (BGHW)	14.58	14.58	14.79
107	BG Verkehrswirtschaft Post-Logistik Telekommunikation (transportation post logistics telecommunications) (BG Verkehr)	27.11	27.58	27.54
108	Verwaltungs-BG (Administrative) (VBG)	8.08	7.99	7.69
109	BG für Gesundheitsdienst und Wohlfahrtspflege (health services and welfare care) (BGW)	10.12	10.39	10.05

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[3] **Source: "Business and accounting results of the commercial employers' liability insurance associations of the DGUV" – German statutory accident insurance – for the years 2015, 2016, 2017**

Chapter 6 SCC thresholds: Calculation examples

Example 1 – Initial certification:

A company XYZ from the construction industry submitted the following statistics for its initial certification in 2017:

Table 006-4: Example for the calculation of the accident frequency (AF)

	Occupational accidents	Working hours
2014	15	299,600
2015	10	292,800
2016	12	283,200
Total	**37**	**875,600**

$$accident\ frequency\ (AF) = \frac{37 \times 10^6}{875600} = 42.26$$

The AF average of the last 3 calendar years is thus > 40. In the selected example, company XYZ can only receive a certificate if its UH-BG determined according to the DGUV definition is below the value of the applicable employers' liability insurance association. For the purpose of this comparison, the last reference value specified by the xxx in Table 006-3 shall be decisive. In this specific example, company XYZ is insured with the construction industry BG and reported six accidents to the BG Bau (6 of the 12 accidents in 2016 were reportable to the BG). This results in a UH-BG = 21.19. The last AF of the Bau-BG published for 2016 was UH-BG = 35.22. The company XYZ chosen in the example is clearly below this: AF > 40 and AF1 ≤ BG2 is thus fulfilled.

Example 2 – Initial certification:

A company ABC of the metal industry was newly founded in March 2017 and cannot submit three-year statistics according to the SCC definition for an SCC certification at the beginning of 2018. The AF for 2017 is determined as the starting value: On average, 10 employees were employed with 15,000 hours and 1 accident was recorded in 2017 with one working day lost. This results in an AF = 66.67. This is above the SCC threshold. The company is insured with the BG Holz und Metall (BGHM). The AF-BG of company ABC is UH-BG = 0.00 (no accident with incapacity to work of more than three days) and is thus clearly below the last published UH-BG of the BGHM for the year 2017 = 22.17: AF > 40 and AF1 ≤ BG2 is thus fulfilled.

Example 3 – Recertification:

We will continue with the construction company XYZ described above. Here, we had an AF ratio of 42.26 at initial certification.

For recertification in 2020, the AF mean at initial certification, here in the example 42.26 (from 2014/2015/2016) is compared with the AF mean from 2017/2018/2019:

Table 006-5: Example for the calculation of the accident frequency (AF)

	Occupational accidents	Working hours
2017	8	292,000
2018	7	290,400
2016	6	289,200
Total	**21**	**871,600**

The AF according to the SCC definition is between AF = 20 and AF = 40. The rule "certificate if AF has been reduced by 20% in the last 3 years" applies here, as the AF has been reduced by 18.17 points or by approx. 43% in the last 3 years. The requirements for SCC thresholds for recertification are thus fulfilled.

Example 4 – Recertification:

We will continue with the metal construction company ABC described above. Here, we had determined an AF of 66.67 as a starting value during the initial certification.

For recertification in 2020, this starting value will be compared with the AF mean from 2017/2018/2019:

Table 006-6: Example for the calculation of the accident frequency (AF)

	Occupational accidents	Working hours
2017	1	18,000
2018	1	21,200
2019	0	19,400
Total	**2**	**58,600**

$$accident\ frequency\ (AF) = \frac{2 \times 10^6}{58600} = 34.12$$

The AF according to the SCC definition is between AF = 20 and AF = 40. The rule "certificate if AF has been reduced by 20% in the last 3 years" applies here, as the AF has been reduced by 32.55 points or by approx. 49% in the last 3 years. The requirements for SCC thresholds for recertification are thus fulfilled.