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Business #: 9593 Customer: VAKO

# FINAL ASSESSMENT REPORT

NoBo Mission
RELATED TO « EC » TYPE EXAMINATION
of Sgnss & Sgns Wagons from VAKO
(module SB)



CONFIDENTIAL

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## LIST OF SUCCESSIVE VERSIONS:

Version	Date	Changes
1	27/07/2020	Initial version
2	02/10/2020	Precisions added to § 3.2. & § 4.
3	28/06/2021	Added version with BA303 wheelsets
4	03/02/2022	New edition of the report Added Sgns version with BA303 wheelsets

The latest version supersedes the previous.

### **VALIDATION:**

	Signature
Name: Rudy Denoyelle Function: Project Manager	- The state of the

People who have written and checked this report (listed on the cover) approved it using secure electronic authorization, with CERTIFER's EDM software keeping a trace of it.

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# List of attached documents

Open Items List: EC\_9593\_0003\_09\_OIL EC-9593-0004-03 Workbook TSI-NOI 2014 EC-9593-0002-10 Workbook TSI-WAG 2019

# 1. Context of the Project

## 1.1. General

CERTIFER's business is part of a notified body's (NoBo) mission in the field of the technical regulations and specifications for interoperability.

## 1.2. Identification of the product subject to conformity assessment

The purpose is to assess the design of Sgnss and Sgns types flat wagons, designed and manufactured in Turkey by VAKO. This Sgnss wagon is based on an existing type of Sgnss wagon, subjected to changes related to the braking equipment and the brake blocks. The wagon has two versions: 22.5 t axle load and 25 t axle load. The Sgns wagon is derived from the Sgnss type, version 25 t axle load, after converting to the S regime by a change in the spring setting of the brake system.

## 1.3. Identification of reference documents

- Directive (EU) 2016/797 of 11 May 2016
- COMMISSION REGULATION (EU) No 321/2013 of 13 March 2013 concerning the technical specification for interoperability relating to the subsystem 'rolling stock — freight wagons' of the rail system in the European Union, repealing Decision 2006/861/EC and Amended by Commission Implementing Regulation (EU) 2019/776 of 16 May 2019
- COMMISSION REGULATION (EU) No 1304/2014 of 26 November 2014 on the technical specification for interoperability relating to the subsystem 'rolling stock noise' amending Decision 2008/232/EC, repealing Decision 2011/229/EU and Amended by Commission Implementing Regulation (EU) 2019/774 of 16 May 2019
- COMMISSION IMPLEMENTING REGULATION (EU) 2018/545 of 4 April 2018 establishing
  practical arrangements for the railway vehicle authorisation and railway vehicle type
  authorisation process pursuant to Directive (EU) 2016/797 of the European Parliament and
  of the Council

### 1.4. Identification of Assessment Plan

DP 3818 0008 version 2 (13/05/2020)

# 1.5. Identification of the product designer or manufacturer

#### **VAKO**

Fatih Sultan Mah. 2368 Sok. No:6 Çamlıkpark , Etimesgut / Ankara

# 1.6. Name and function of stakeholders (including subcontractors) in charge of the assessment

Project manager	Rudy Denoyelle
Lead Assessor	Henri Lagneau
Braking	Gerrit Pluquet
Mechanical engineering, Noise, CSM	Henri Lagneau

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# 1.7. Scope of the assessment described in this report

The assessment of conformity of the product with the technical requirements expressed in the applicable TSI shall be conducted by the examination of the design / construction file of the wagon under assessment.

## 1.8. Restraints and assumptions related to the compliance assessment

The Sgnss type of wagon with a different brake equipment has been successfully assessed by DEKRA in 2015.

# 2. Description of the assessment work

#### 2.1. Assessment methods

CERTIFER carries out the assessment with respect to its Quality Management System.

For this NoBo mission CERTIFER is accredited under n°5-0572 by the "Industrial Products and service Certification" section of COFRAC (French Committee of Accreditation) according to NF EN ISO CEI 17065:2012. The scope is available on www.cofrac.fr.

The assessment is carried out by an Assessor in the Technical Field who is appointed by one of the Section Committees of CERTIFER.

The final report is edited by the Assessor, under the supervision of the Project Manager.

## 2.2. Measurements or tests

## 2.2.1.Measurements or tests performed by or on behalf of CERTIFER

NA

## 2.2.2.Measurements or tests accepted as input data

The buffing tests carried out in 2015 were witnessed by DEKRA and are therefore trustfull.

The noise measurements carried out to assess the initial Sgnss type wagon are taken as reference when implementing the simplified method of the TSI-NOI. These tests were witnessed by the NoBo DEKRA in 2015 and as such are acceptable.

The results are trustfully acceptable.

## 2.3. Identification of the documents or products assessed

The general layout and design characteristics of the Sgnss wagon are given in Document No: 101\_1, Publ. Date: 15.02.2020, Rev.No: 02/15.06.2020. It is possible to equip the wagon with BA004 or with BA303 wheelsets.

The Sgns wagon's layout and design characteristics are given in Document No: 223-2 Technical Descriptions, Public. Date: 21.01.2022, Rev.no/Date: 00/00.00.0000. This wagon is designed to be equipped with BA303-25 t axle load wheelsets.

The documents defining the wagon types are listed in the sheet "Documents" of the workbook EC 9593 0002 10 Workbook TSI-WAG 2019.

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# 2.4. Development process of the assessment work

The development of the assessment took place from 11/02/2020 until now.

The assessment is carried out according to the Assessment Plan. The introduction of BA303 wheelsets was assessed in 06/2021. The Sgns version with BA303 wheelsets was assessed in 01/2022.

CERTIFER has not subcontracted any part of the work.

### 3. Results

## 3.1. Exchange between VAKO and CERTIFER

The exchanges between the applicant and CERTIFER are recorded in the attached document (EC 9593 0003 09 OIL). All open points have been satisfactorily answered and are closed.

The point is completely satisfying.

# 3.2. Assessment of conformity with the technical specification for interoperability relating to the subsystem 'rolling stock — freight wagons'

The assessment is recorded in the attached document (EC-9593-0002-10 Workbook TSI-WAG 2019). According to the expert opinion, in view of the explanations given by the applicant and the results of the assessment of the design documents, the wagons Sgnss and Sgns are technically compliant to:

- the essential requirements
- the clause 7.1.2. Mutual recognition of the first authorisation of placing on the market
- the Appendix C totally [GE wagon].

The demonstration of conformity of the wagon is acceptable.

# 3.3. Assessment of conformity of Constituents of Interoperability

Constituents are described in sheet "CI" of the workbook EC-9593-0002-10 Workbook TSI-WAG 2019. It has been assessed that the constituents are implemented on the sub-system within their respective areas of use.

The demonstration of conformity is acceptable.

# 3.4. Assessment of conformity with the technical specification for interoperability relating to the subsystem 'rolling stock — noise'

The assessment is recorded in the attached document (EC-9593-0004-03 Workbook TSI-NOI 2014). The applicant has used the simplified method with reference to tests carried out in 2015 with a previous version of the Sgnss wagon.

According to the expert opinion, in view of the explanations given by the applicant for both versions with BA004 and BA303 wheelsets, the results of the tests and the comparison, the wagons Sgnss and Sgns are technically compliant to the essential requirements.

Equipped with BA303 wheelsets, both Sgnss and Sgns types are identical.

The demonstration of conformity of the wagon is acceptable.

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# 3.5. Technical compatibility of the vehicle with the network in the area of use

The technical compatibility of the vehicle is documented on the sheet "Restriction codes" in attached document (EC-9593-0002-10 Workbook TSI-WAG 2019).

The point is completely satisfying.

Nota: these results relate exclusively to the elements of the service described in the paragraph 1 above.

# 4. Conclusion

The wagons Sgnss and Sgns comply with:

- the "EC" type examination of regulations applicable to interoperable freight wagons
- the clause 7.1.2. Mutual recognition of the first authorisation of placing on the market
- the Appendix C totally [GE wagon].

The assessment team is in agreement with the "EC" certification (module SB) of:

- the Sgnss wagon in both versions with BA004 and BA303 wheelsets
- the Sgns wagon with BA303 wheelsets.

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