

RSR 00-2-6-1: 2024

Edition 1.0

REGULATOR STANDARD

RAILWAY SAFETY MANAGEMENT

Part 2-6-1: Interface Agreements

RSR 00-2-6-1:2024

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REGULATOR STANDARD

Railway Safety Management

Part 2-6-1: Interface Agreements

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This Regulator Standard was researched and developed by the *Railway Safety Regulator's Standards Technical Committee* (TC RSR-001) and the *Working Group on Interface Agreements Standard* (WG RSR 00-2-6-1).

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Railway Safety Management

Part 2-6-1: Railway Safety – Interface Agreements

NOTE: It is essential that this standard document is read together with the South African National Standards, SANS 3000-1 and SANS 3000-2-6.

Table of changes

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Foreword

This Regulator Standard was developed and approved by the Railway Safety Regulator's *Technical Committee for the Development of Regulator Standards for Railway Safety* (TC RSR-001), in accordance with the *National Railway Safety Regulator Act* (NRSRA) (Act No. 16, 2002), as amended, the *Safety Standards Development Regulations, 2022* and the *RSR Procedure for the Development of Regulator Standards*.

This Standard extends and augments the *SANS 3000* series of standards pertaining to railway safety that are published by the South African Bureau of Standards (SABS) on behalf of the Railway Safety Regulator and, in particular, Technical Requirements for Engineering and Operational Standards - Interface and intraface management, and interoperability, the Railway Safety Regulator Standards, and the Standards for Transport of Dangerous Goods by Rail.

The *SANS 3000* series of standards presently consists of the following parts, under the general title of *Railway Safety Management*:

SANS 3000-1:2016 – Part 1: General.

SANS 3000-2-1:2017 – Part 2-1: Requirements for systemic engineering and operational safety standards - Electrical distribution and overhead traction systems

SANS 3000-2-2:2016 – Part 2-2: Requirements for systemic engineering and operational standards: Track and civil infrastructure.

SANS 3000-2-2-1:2012 – Part 2-2-1: Technical requirements for engineering and operational standards – Track, civil and electrical infrastructure – Level crossings.

SANS 3000-2-3:2017 – Part 2-3: Requirements for systemic engineering and operational safety standards - Rolling Stock

SANS 3000-2-4:2013 – Part 2-4: Technical requirements for engineering and operational standards – Train authorization and control, and telecommunications.

SANS 3000-2-5:2013 – Part 2-5: Technical requirements for engineering and operational standards – Operational principles for safe movement on rail.

SANS 3000-2-6:2013 – Part 2-6: Technical requirements for engineering and operational standards – Interoperability, and interface and intraface management.

SANS 3000-4:2011 – Part 4: Human Factors Management.

The RSR 00 series of standards presently consists of the following parts, under the general title of Railway Safety Management:

RSR 00-2-3-1:2016 – Part 2-3-1: Requirements for systemic engineering and operational safety standards – Rolling stock – Wheels, axles and bearings.

RSR 00-2-7:2016 – Part 2-7: Requirements for systemic engineering and operational safety standards – Railway Stations.

RSR 00-3:2016 – Part 3: Occurrence Management.

RSR 00-4-1:2016 – Part 4-1: Human factors management – Fatigue management.

RSR 02-5-1:2023: Verbal Safety-Critical Communication

The standard on the Transportation of Dangerous Goods by Rail is the following:

SANS 10405:2014 - Transport of Dangerous Goods by rail.

Where reference is made to a specific published date, version or edition of a document that version of the document shall apply. Where reference is made to a document without specifying a date, version or edition, it should be assumed that the latest published version shall apply.

Reference is made in this document in clause 7.1.2(b) to the “relevant national Legislation”. In South Africa and for the purpose of this document, this shall mean the “Regulations Regarding the category and type of all notifiable Railway Occurrences to be reported to the Chief Executive Officer of the Railway Safety Regulator, 2022”

Annexure A is provided for information only.

Introduction

This Standard was developed with a primary aim to achieve uniform, seamless and safe interoperability through the implementation of appropriate Interface Agreements within the railway operations in South Africa. The railway industry in South Africa has seen itself conducting railway operations which include Interfaces, Intrafaces and interoperability with each other. Inadequate Interface Agreements and related processes contributed to significant railway occurrences, including collisions at interfaces.

The management of operational interfaces, intrafaces and interoperability therefore remains a crucial component of safe railway operations, and consequently non-adherence has contributed to, and has a potential to cause railway occurrences.

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1. Purpose and Scope

1.1. Purpose

- 1.1.1. To describe the Interface Agreement management and approach applicable to safe railway operations;
- 1.1.2. To provide the minimum requirements of Interface Agreements;
- 1.1.3. To contribute to the reduction of railway occurrences attributed to management of interfaces;
- 1.1.4. To provide a standardised approach to the development and management of Interface Agreements within the railway operations in South Africa; including those of the neighbouring States whose rail operations enter South Africa.; and
- 1.1.5. To amplify and augment the Interface, intraface and interoperability requirements outlined in SANS 3000-2-6.

1.2. Scope

- 1.2.1. This Standard is applicable to all railway operators as defined in the NRSR Act 16 of 2002 as amended.
- 1.2.2. It is designed for use by railway operators when they develop, review, implement or amend interface agreements to enhance safe railway operations.

2. Normative References

- 2.1. The following referenced documents are indispensable for the understanding and application of this Standard. For undated references, the latest edition of the Standard (including any amendments) shall apply:
 - SANS 3000-1: Railway safety management – Part 1: General.
 - SANS 3000-2-4: Part 2-4: Technical requirements for engineering and operational standards – Train authorization and control, and telecommunications.

- SANS 3000-2-5: Part 2-5: Technical requirements for engineering and operational standards – Operational principles for safe movement on rail.
- SANS 3000-2-6:2013 – Part 2-6: Technical requirements for engineering and operational standards – Interoperability, and interface and intraface management.
- SANS 3000-4: Railway safety management – Human factors management.
- SANS 10405 - Transport of Dangerous Goods by rail.

2.2. Current railway related national and international standards can be obtained from the South African Bureau of Standards (SABS), Standards Division. Website: <https://www.sabs.co.za/>.

2.3. Regulator Standards can be obtained from the Railway Safety Regulator, South Africa. Website: <http://rsr.org.za/>.

RSR 00-2-3-1:– Part 2-3-1: Requirements for systemic engineering and operational safety standards – Rolling stock – Wheels, axles and bearings.

RSR 00-2-7: – Part 2-7: Requirements for systemic engineering and operational safety standards – Railway Stations.

RSR 00-3: – Part 3: Occurrence Management.

RSR 00-4-1: – Part 4-1: Human factors management – Fatigue management.

RSR 02-5-1:Part 2-5-1: Verbal Safety-Critical Communication

3. Definitions and Abbreviations

3.1. Definitions

3.1.1 interface

physical or organisational area, point or location where the activities or assets, or activities and assets of two or more railway Operators or a railway Operator and another organisation meet and interact or have the potential to affect one another or both.

3.1.2 interface agreement

An agreement between two or more railway Operators that relates to the management of safe railway operations at interfaces.

3.1.3 serviceworthy

condition of the rolling stock, track, station, infrastructure network or, any structure intended for the movement of a train at the desired level of service to allow safe movement.

3.1.4 trainworthy

ability of the railway network infrastructure elements to ensure and sustain a safe movement of rolling stock over the network portion.

3.2. Abbreviations

ISO: International Standards Organisation

RSR: Railway Safety Regulator

SANS: South African National Standards

WG: Working Group

4. Requirements for Interface Agreements

4.1. Operators must have processes and procedures developed, approved and implemented for the development, documentation and implementation of Interface Agreements as envisaged in the SANS 3000, RSR series of standards, the SMS and SMSR Determination.

5. Identification of Interfaces

5.1. Network Operators shall identify areas where:

5.1.1. their network or any part thereof meet the network of another Operator, and

5.1.2. part(s) of their network is used or is to be used by another railway Operator.

- 5.2. Network Operators shall identify areas where their operations have risks which may impact or are impacted by risks emanating from other Operators within close proximity to their operations.
- 5.3. Station Operators shall identify areas where they interface with other Operator(s) and indicate which parts of a station are used or are to be used by another Train Operator.
- 5.4. Train Operators shall identify and indicate which part/s of their operations interface with other Operator(s).

6. Minimum Requirements to be Included in an Interface Agreement

- 6.1. The following shall be the minimum requirements for Interface Agreements (refer to Annexure A):
 - 6.1.1. Scope of the Agreement
 - 6.1.2. Interfacing Operators involved in the Agreement
 - 6.1.3. Commencement, Variation And Termination Of The Agreement
 - 6.1.4. Notices and *Domicilium citandi et executandi*
 - 6.1.5. Definitions and Acronyms
 - 6.1.6. Roles and Responsibilities of each Party to the Interface Agreement;
 - 6.1.7. Processes and Procedures for risk assessment(s) relevant to the interface(s)
 - 6.1.8. Emergency Preparedness and Response Plans
 - 6.1.9. The procedures for monitoring compliance with Interface Agreement
 - 6.1.10. The exchange of information and cooperation between the Interfacing Operators in relation to their obligations under the Interface Agreement
 - 6.1.11. The procedures for managing operational changes affecting the interfaces including changes in technology.
 - 6.1.12. Review of the Interface Agreement
 - 6.1.13. Dispute Resolution
 - 6.1.14. List of Interface Procedures and Standards

6.1.15. List of other Reference Documents (Annexes)

7. Risk management

7.1. Interface Risk Assessment

7.1.1. Operators shall jointly identify risks related to operational interfaces and implement applicable risk control measures.

7.1.2. The joint Interface Risk Assessment shall be conducted prior to the signing of the Interface Agreement, and shall be reviewed at least annually or due to the following circumstances:

- (a) Within 60 calendar days post an operational railway occurrence involving two or more interfacing operators, and which resulted in a fatality of an *employee(s)* of interfacing operator(s);

NB: employee(s) in the clause above refers to operator's employees, contractors and subcontractors within the interfacing area.

- (b) Following 3 reportable occurrences (as defined in the relevant national legislation) involving two or more interfacing operators at the specific area of interface within one calendar year;
- (c) Introduction of additional operator(s) affected by the interface(s);
- (d) As a result of change in legislation that affects interface(s);
- (e) Where there are significant change(s) in the parameters of SMS that relates the interfaces;
- (f) Following the recommendations from occurrence investigation(s), audits and/or inspections that relates to interface(s); and
- (g) As directed by the RSR.

7.2. Interface Risk Controls

7.2.1. The Operators shall implement and maintain control measures to manage the identified risks related to area(s) of interface, and the following shall be considered:

- (a) Elimination of the risk;
- (b) Isolating the hazard from the process/person put at risk;
- (c) Substituting the hazard giving rise to the risk with means that gives rise to a lesser risk;
- (d) Minimising the risk by engineering means;
- (e) Minimising the risk by administrative means (for example, by adopting safe working practices or providing appropriate training, instruction or information);
- (f) Using personal protective equipment; and
- (g) Use a combination of abovementioned controls to manage risk.

Note: New required control measures may be identified through the process of identifying and assessing safety risks. Where these risk controls cannot be implemented immediately, an action plan with specific timeline should be agreed upon, recorded and implemented accordingly.

7.3. Monitoring of Interface Risks

7.3.1. The Operators shall incorporate the monitoring requirements in accordance with the signed Interface Agreements.

7.3.2. The Operators shall continuously monitor and review the risks related to operational interfaces on regular intervals, as well as the measures to manage the risks agreed upon in the joint risk assessment.

7.3.3. Any new risks identified through the process of monitoring and review of interface risks, shall be considered for revision of joint risk assessments and/or the Interface Agreement.

7.4. Exchange of information

7.4.1. The Operators shall develop and manage processes and procedures for the exchange of information required for operational interfaces,

7.4.2. The information to be exchanged shall include the following, but not limited to:

- (a) Details of the Operators' representatives for the purposes of the interface management;
- (b) Occurrence related information;
- (c) Emergency Preparedness and Response Plans
- (d) Safety Critical information such as normal, degraded and abnormal mode; and
- (e) Other train operations related matters (train configurations, axle mass loads, train technical instructions).

7.5. Management of Change

7.5.1. The Operators shall develop and manage processes and procedures to ensure management of change that impact operational interfaces.

7.5.2. The introduction of change shall be in a safe manner.

7.5.3. The risks shall be mitigated to a level as low as it is reasonably practicable.

7.5.4. Prior implementation, the change shall be communicated, agreed upon and signed off by all Interfacing Operators involved.

7.6. Roles and Responsibilities of Operators

7.6.1. Network Operators

7.6.1.1. The Network Operator shall ensure that relevant Interfaces Agreement is documented, signed and implemented between the Network Operator and the relevant Interfacing Operator, in accordance with clause 6.

7.6.1.2. The documented Interface Agreement must include the factors referred to in SANS 3000-2-6, clause 6.2.3.

7.6.1.3. All Interface Procedures and Standards, rules, specifications and other related documents shall form part of the Interface Agreement and shall be implemented.

7.6.1.4. The signed Interface Agreement shall be submitted to the RSR within 30 days after signing of the Interface Agreement.

7.6.2. Train Operators

7.6.2.1. The Train Operator shall ensure that relevant interface agreement is documented, signed and implemented between the Train Operator and the relevant interfacing Operator in accordance with clause 6.

7.6.2.2. The documented Interface Agreement must include the factors referred to in SANS 3000-2-6, clause 6.3.3.

7.6.2.3. The implementation of the Interface Agreement requirements must include the integration of the train operations with the relevant network or station operations (or both).

7.6.2.4. It shall also consider the activities of other train operators into a seamless safe working system.

7.6.2.5. All Interface Procedures and Standards, rules, specifications and other related documents, such as local instructions and local appendices that relates to the affected interface, the shall form part of the Interface Agreement and shall be implemented.

7.6.2.6. The signed Interface Agreement shall be submitted to the RSR within 30 days after signing of the Interface Agreement.

7.6.3. Station Operators

7.6.3.1. The Station Operator shall ensure that relevant Interfaces Agreement is documented, signed and implemented between the Station Operator and the relevant Interfacing Operator.

- 7.6.3.2. The documented Interface Agreement must include the factors referred to in SANS 3000-2-6, clause 6.4.3.
- 7.6.3.3. The implementation of the Interface Agreement requirements must include the integration of the train operations with the relevant station operations and other train operations into a seamless safe working system.
- 7.6.3.4. All Interface Procedures and Standards, rules, specifications and other related documents shall form part of the Interface Agreement and shall be implemented.
- 7.6.3.5. The signed Interface Agreement shall be submitted to the RSR within 30 days after signing of the Interface Agreement.

8. Reviews of Interface Agreements

8.1. The review of Interface Agreements shall be conducted as follows:

- At least not longer than 5 (five) years.
- As per the circumstances specified in clause 8.2 & 8.3
- As the Interfacing Operators deem it necessary.
- As directed by the RSR based on the identification of a potential safety risk.

8.2. Validity of the Interface Agreement

- The Interface Agreement shall be valid for a period of no longer than 5 (five) years.

8.3. Circumstances that necessitate the review and renewal of Interface Agreements

- Within 180 days following an interfaces related railway occurrence involving two or more Interfacing Operators, which resulted in a fatality of an employee(s) of Interfacing Operator(s).
- In line with the outcome of the risk assessments that relates to interfaces.
- Introduction of additional Operator(s) affected by the interface.

- Change in legislation that affects interfaces.
- Significant changes in the parameters of SMS that relates to the interfaces.
- As directed by the RSR.

9. Dispute Resolution

- 9.1. Interfacing Operators to agree on a dispute resolution mechanism and/or process.

ANNEXURE A

Interface Agreements Standard

Template

INTERFACE AGREEMENT

CONCLUDED BETWEEN

Operator A

(a company duly incorporated in accordance with the laws of South Africa)

AND

Operator B

(a company duly incorporated in accordance with the laws of South Africa)

AND

Operator C

(where applicable)

(a company duly incorporated in accordance with the laws of South Africa)

Signed at, on this day of 2xxx

Operator A Representative

Signed at, on this day of 2xxx

Operator B Representative

Signed at, on this day of 2xxx

Operator C Representative

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1. SCOPE OF THE AGREEMENT

In this section of the agreement, the interfacing operators are required to provide overall scope of the agreement.

2. INTERFACING OPERATORS INVOLVED IN THE AGREEMENT

In this section of the agreement, the interfacing operators shall provide full detail of all parties involved.

3. COMMENCEMENT, VARIATION AND TERMINATION OF THE AGREEMENT

In this section of the agreement, the interfacing operators are required to provide the following:

- the commencement date of the agreement,
- terms and conditions for variation, and
- terms and conditions for termination of the agreement

4. NOTICES AND *DOMICILIUM CITANDI ET EXECUTANDI*

In this section of the agreement, the interfacing operators shall provide their nominated physical addresses where notice shall be sent. The interfacing operators shall outline a process of notifying another operator of any changes to the physical address for the purpose of sending/receiving any notice in terms of this Agreement.

5. DEFINITIONS AND ACRONYMS

Word/ Abbreviation/ Acronyms	Meaning

6. ROLES AND RESPONSIBILITIES OF EACH PARTY TO THE INTERFACE AGREEMENT

In this section of the agreement, the interfacing Operators shall provide and clearly defined roles and responsibilities of each Party at interfaces in accordance with the requirements of this Standard.

7. PROCESSES AND PROCEDURES FOR RISK ASSESSMENT(S) RELEVANT TO THE INTERFACE(S)

In this section of the agreement, the interfacing Operators shall provide relevant and clearly outlined processes and procedures developed for management of risks at interfaces.

8. EMERGENCY PREPAREDNESS AND RESPONSE PLANS

In this section of the agreement, the interfacing Operators shall provide agreed and clearly outlined plans relating to management of emergencies at interfaces.

9. THE PROCEDURES FOR MONITORING COMPLIANCE WITH INTERFACE AGREEMENT

In this section of the agreement, the interfacing Operators shall provide clearly outlined procedures for monitoring compliance with this Interface Agreement.

10. THE EXCHANGE OF INFORMATION BETWEEN THE INTERFACING OPERATORS

In this section of the agreement, the interfacing Operators shall provide all information to be exchanged in relation to their obligation related to their interfaces.

11. THE PROCEDURES FOR MANAGING OPERATIONAL CHANGES AFFECTING THE INTERFACES

In this section of the agreement, the interfacing Operators shall provide and clearly outline procedures for managing operational changes affecting the interfaces including changes in technology.

12. REVIEW OF THE INTERFACE AGREEMENT

In this section of the agreement, interfacing Operators shall provide full details for the review of the interface agreement such as expected date of review, circumstances that require the Agreement to be reviewed

13. DISPUTE RESOLUTION

In this section of the agreement, interfacing Operators shall agree on, and provide a dispute resolution mechanism and/or process for the management of disputes that relate to this Agreement.

14. LIST OF INTERFACE PROCEDURES AND STANDARDS

In this section of the Agreement, Interfacing Operators shall provide a list of all Procedures and Standards applicable for safe operations at the Interface.

15. LIST OF REFERENCE DOCUMENTS (ANNEXES)

Annexure A: List all applicable legislative documents (e.g. Act, Regulations, Standards etc)

Annexure B: List of all relevant documents other than legislative documents (e.g. specification, rules, plans)

Annexure C: List of other related documents

END