
Cross-border road transport management system (XB-RTMS)



Table of contents

1	Scope	1
2	Normative references	1
3	Terms and definitions	1
3.1	Definitions	1
3.2	Abbreviations	3
4	General requirements.....	4
4.1	Fleet inventory	4
4.2	Load assessment and verification	5
4.3	Road safety.....	6
4.4	Maintaining roadworthy vehicles	6
4.5	Vehicle and load safety.....	6
4.6	Driver health and wellness.....	11
4.7	Support	12
4.8	Document and records	14
4.9	Performance evaluation.....	15
4.10	Continual improvement of efficiency and road safety.....	17
5	Border and regional regulatory requirements.....	17
5.1	Introduction	17
5.2	Company information.....	18
5.3	Compliance record.....	19
5.4	Accounting and logistical systems.....	19
5.5	Financial solvency	20
5.6	Safety and security	20
5.7	Logistical processes.....	21
5.8	Non-fiscal requirements.....	21
5.9	Incoming goods	21
5.10	Storage of goods	21
5.11	Loading of goods (refer to 4.2)	22
5.12	Business partner security requirements	22
5.13	Personnel security	22
5.14	External services	22
	Bibliography	23

Foreword

The African Organization for Standardization (ARSO) is an African intergovernmental organization established by the United Nations Economic Commission for Africa (UNECA) and the Organization of African Unity (AU) in 1977. One of the fundamental mandates of ARSO is to develop and harmonize African Standards (ARS) for the purpose of enhancing Africa's internal trading capacity, increase Africa's product and service competitiveness globally and uplift the welfare of African communities. The work of preparing African Standards is normally carried out through ARSO technical committees. Each Member State interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, Regional Economic Communities (RECs), governmental and non-governmental organizations, in liaison with ARSO, also take part in the work.

ARSO Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare ARSO Standards. Draft ARSO Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an ARSO Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ARSO shall not be held responsible for identifying any or all such patent rights.

This African Standard was prepared by the ARSO Technical (Harmonization) Committee Number 08-4/59 on Automotive Technology and Engineering (ARSO/THC 08-4/ARSO/TC 59).

© African Organisation for Standardisation 2020 — All rights reserved*

ARSO Central Secretariat
International House 3rd Floor
P. O. Box 57363 — 00200 City Square
NAIROBI, KENYA

Tel. +254-20-2224561, +254-20-3311641, +254-20-3311608

E-mail: arso@arso-aran.org

Web: www.arso-aran.org

* © 2020 ARSO — All rights of exploitation reserved worldwide for African Member States' NSBs.

Copyright notice

This ARSO document is copyright-protected by ARSO. While the reproduction of this document by participants in the ARSO standards development process is permitted without prior permission from ARSO, neither this document nor any extract from it may be reproduced, stored or transmitted in any form for any other purpose without prior written permission from ARSO.

Requests for permission to reproduce this document for the purpose of selling it should be addressed as shown below or to ARSO's member body in the country of the requester:

© African Organisation for Standardisation 2020 — All rights reserved

ARSO Central Secretariat
International House 3rd Floor
P.O. Box 57363 — 00200 City Square
NAIROBI, KENYA

Tel: +254-20-2224561, +254-20-3311641, +254-20-3311608

E-mail: arso@arso-oran.org
Web: www.arso-oran.org

Reproduction for sales purposes may be subject to royalty payments or a licensing agreement. Violators may be prosecuted.

Introduction

This standard is a voluntary self-regulation scheme that encourages cross border transport operators to implement a Cross Border Road Transport Management System (XB-RTMS) with the following stated outcomes:

- Preserve Road Infrastructure
- Improve Road Safety
- Prioritise Vehicle Roadworthiness
- Ensure Responsible Driving Behaviour
- Promote Driver Health & Wellness
- Foster Skills Development
- Optimise efficiency
- Comply with respective border and regulatory requirements
- Manage commercial records which allows for appropriate border and regulatory controls
- Demonstrate appropriate safety and security standards
- Systematic compliance with Cross Border Road Transport Regulatory requirements including
 - Operator Registration and Grading
 - Registered Responsible Competent Persons
 - Operator Discs
 - Vehicle Certificates of Fitness (COF)
 - Professional Driving Permits (PrDP)
 - 3rd Party Vehicle Insurance
- Systematic compliance with Immigration requirements including
 - Driver and crew residence and work permits
 - Passports
 - Visas
- Systematic compliance with applicable Preferred Trader (PT)¹ or Authorised Economic Operators (AEO) requirements by the transporter including
 - Border & Regulatory Compliance
 - Accounting and Logistical System
 - Financial Solvency
 - Safety & Security

The above outcomes have been derived from established best transport practices as well as AEO requirements arising from the SAFE Framework of Standards to Secure and Facilitate Global Trade developed by the World Customs Organisation (WCO). The standard makes provision for the transporters' interaction with all the associated business partners in the supply chain. Where an entity may have multiple functions, the entity shall ensure that the transport division is managed according to the requirements of this regional standard.

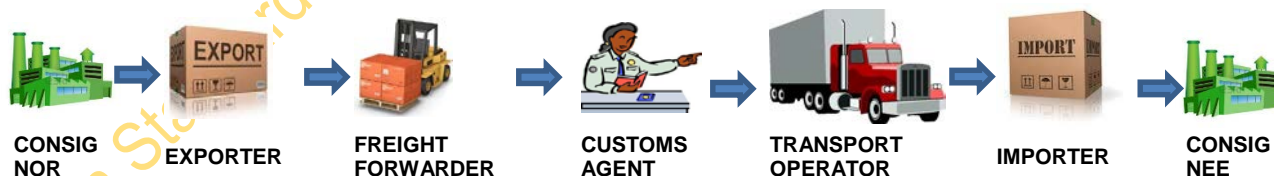


Figure 1: Business Partners associated with a Transport Operator

Implementation of this standard plays a critical role in the regional economy's growth by ensuring efficient and safe transport as well as improved efficiency and compliance with border and regulatory requirements.

Each transport operator shall develop appropriate processes, systems and measurement methods that would enable it to demonstrate compliance to this standard. It is imperative that this standard is implemented in a manner that is sustainable and will achieve the stated outcomes. This standard does not prescribe the specific method(s) to demonstrate compliance, since it is envisaged that each

¹ Implemented by certain Member States as a precursory towards future implementation of the AEO.

DARS 1371:2020

transport operator shall develop unique and customised processes based on the type, size, location and dynamics of the transport operator. However, compliance to the applicable border and regulatory processes shall make provision for the specific application forms and reporting requirements stipulated by border regulatory authorities.

It must be noted that XB-RTMS certification does not in any way absolve the transport operator of compliance with any applicable regional regulations. Hence it is not to be deemed a licence of any kind nor used as a basis to avoid compliance to aforementioned regional regulations.

XB-RTMS certification indicates that the transport operator's management systems comply with the requirements of this standard only. It may be possible for certain bodies (e.g. border authorities and road authorities) to use XB-RTMS certification as an indicator of compliance to the border and/or road regulations.

Draft African Standard for comments only — Not to be cited as African Standard

Cross-border road transport management system (XB-RTMS)

1 Scope

This African Standard applies to the cross-border road transport management system along the major trade corridors in Africa.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ARS 1355-1: *Vehicle Standards — Specification for Vehicle Roadworthiness — Part 1: Roadworthiness of vehicles already in use*

ARS 1355-2: *Vehicle standards — Specification for vehicle roadworthiness — Part 2: Roadworthiness of vehicles prior to entry into service, and thereafter*

ARS 1355-6: *Vehicle standards — Specification for vehicle roadworthiness — Part 6: Roadworthiness — Requirements for combinations of vehicles*

ARS 1370: *Transportation of dangerous goods by road*

ISO 3779: *Road vehicles — Vehicle identification number (VIN) — Content and structure*

ISO 3780: *Road vehicles — World manufacturer identifier (WMI) code*

ISO 4030: *Road vehicles — Vehicle identification number (VIN) — Location and attachment*

FMVSS 115: *Federal VIN Requirements (Title 49, Chapter V, Part 565)*

ISO/IEC 18013-1: *Information technology — Personal identification — ISO-compliant driving licence — Part 1: Physical characteristics and basic data set*

3 Terms and definitions

For the purpose of this standard the following definitions and abbreviations apply.

3.1 Definitions

3.1.1

adaptor dolly

a semi-trailer with one or more axles, designed or adapted to be attached between a truck-tractor or a haulage tractor and a semi-trailer; and not to carry any load other than that imposed by a semi-trailer

3.1.2

axle

device or set of devices, whether continuous across the width of a vehicle or not, about which the wheels of the vehicle rotate and which is so placed that, when the vehicle is traveling straight ahead, the vertical centre-lines of such wheels would be in one vertical plane at right angles to the longitudinal centre-line of such vehicle

3.1.3

axle unit

a set of two or more parallel axles of such vehicle which are so interconnected as to form a unit

3.1.4

border and regulatory clearing agent

a party authorized by international border and regulatory authorities to certify and manage consignments between countries. Sometimes, referred to as customs agent or, clearing and forwarding agent or customs broker

3.1.5

combination of vehicles

a combination of a motor vehicle and a trailer or trailers coupled together to travel as a unit

3.1.6

consignee

person who accepts the goods that have been transported in a goods vehicle

3.1.7

consignor

person who offers goods for transport in a vehicle, and includes the manufacturer or his or her agent, duly appointed as such

3.1.8

converter dolly

a trailer which has one or more axles and, when used in combination with a semi-trailer, converts the semi-trailer into a trailer

3.1.9

driver

the individual who is responsible for driving a motor vehicle

3.1.10

exporter

an entity that sells its goods in another country. For border and regulatory purposes, the party who makes (or on whose behalf an agent or broker makes) the export declaration

3.1.11

freight forwarder

a transport operator specializing in arranging storage and shipping of merchandise on behalf of its shippers. It usually provides a full range of services including: tracking inland transportation, preparation of shipping and export documents, warehousing, booking cargo space, negotiating freight charges, freight consolidation, cargo insurance, and filing of insurance claims

3.1.12

goods

any movable item that is required to be transported

3.1.13

goods vehicle

motor vehicle other than a motor cycle, motor tricycle, motor quadricycle, motor car, minibus or bus, designed or adapted for the conveyance of goods on a road and includes a panel van, a truck-tractor, adaptor dolly, converter dolly and breakdown vehicle; with a minimum gross vehicle mass (GVM) of 3 500 kg

3.1.14

gross axle mass

maximum mass that the axle or axle unit is designed to carry as specified by the manufacturer of the vehicle

3.1.15**gross combination mass****GCM**

maximum design mass of a combination of vehicles and their load as specified by the manufacturer of the motor vehicle on the vehicle plate

3.1.16**gross vehicle mass****GVM**

maximum design mass of a vehicle and its load as specified by the manufacturer of the vehicle on the vehicle plate

3.1.17**importer**

a transport operator that acquires goods from another country into the country in which it is located

3.1.18**manufacturer**

an entity that produces goods for transportation and includes assembly plants

3.1.19**motor vehicle**

any self-propelled vehicle for the conveyance of passengers or goods by road or for drawing another vehicle on a road

3.1.20**registration plate / licence plate / number plate**

appropriately manufactured and embossed plate, which is attached to the front and rear of a motor vehicle or the rear of a trailer and a motorcycle

3.1.21**roadworthy**

vehicle that complies with the relevant provisions of applicable national legislation and that is otherwise in a fit condition to be operated on a public road and is so certified

3.1.21**transport operator or operator**

an entity who has been registered and graded as a cross border operator in accordance with the provisions of the provisions of the domestic Cross Border Road Transport legislation of a specified vehicle class and whose primary function is the movement of goods between two points

3.1.22**trailer**

any vehicle designed to be drawn by a motor vehicle and includes a semi-trailer

3.1.23**vehicle**

means a device designed or adapted mainly to travel on wheels and includes any type of vehicle whether motorised or not

3.2 Abbreviations

AEO	Authorised Economic Operators
AIDS	Acquired Immunodeficiency Syndrome
COF	Certificate of Fitness issued after a periodic roadworthiness test which is to be displayed on the vehicle to which it relates
GIT	Goods In Transit

HIV	Human Immunodeficiency Virus
OEM	Original Equipment Manufacturer
PrDP	Professional Driving Permit
PT	Preferred Trader
VIN	Vehicle Identification Number issued, affixed to and recorded on a vehicle in accordance with ISO 3779, ISO 3780 and ISO 4030 or FMVSS 115, also included in the definition of chassis number in domestic legislation
WCO	World Customs Organisation

4 General requirements

4.1 Fleet inventory

The transport operator shall compile a list of all vehicles that are utilised, including trailers where applicable. All technical specifications for each of the fleet of vehicles shall be tabulated so that the identity, configuration, and load capacity of each vehicle is readily available. It is permissible for the fleet inventory to be available in paper or electronic version, provided that it is current and accurate.

4.1.1 Inventory requirements

The fleet inventory shall be populated with all the relevant data to enable the transport operator to load the vehicles in accordance with the relevant legislation and to also ensure that load safety criteria are considered. Inventory data shall include, but not be limited to the following:

- Vehicle Identification Number (VIN);
- Registration/Licence Number (displayed on number plate);
- Configuration e.g. 3 axle rigid, 7 axle combination of vehicles (6 x 4 TT + tandem/tandem semi-trailer);
- Tare of vehicle/ tare of combination;
- Gross vehicle/ combination mass (GVM/GCM);
- Maximum permissible payload; and
- Maximum permissible load dimensions (where applicable).

4.1.2 Documentation

The transport operator shall document a procedure indicating the following:

- The process for ensuring that the fleet inventory is kept updated so that new vehicles are added and obsolete vehicles are removed;
- The responsibility to update the inventory with any other changes as per the criteria on the inventory list;
- The process by which vehicles are monitored to ensure that each vehicle in the fleet has a valid certificate of fitness and current licence. The location of vehicle registration documents and responsible person(s) shall be indicated; and

- d) The processes of ensuring valid operator discs for cross border operation and abnormal load permits (if applicable) are available, where these are required in terms of existing legislation and/or industry and/or customer requirement.

4.2 Load assessment and verification

4.2.1 General

The transport operator shall establish, implement and maintain a process to ensure that the vehicles do not exceed the permissible mass and dimensions applicable to each vehicle configuration. The transport operators shall define the method(s) used in order to assess the vehicle mass (including axle mass) and dimensions before each laden trip, including back-up methods where practicably possible. There shall also be a process of load verification which should provide objective evidence of the reliability and accuracy of the load assessment method(s)

When demonstrating compliance to this element of the standard, the transport operator shall include the following:

4.2.2 Method of Assessing the Vehicle Mass before Each Laden Trip

Documents shall include but not be limited to:

- a) The transport operator shall document how mass is assessed for each type of load transported before the trip is undertaken.
- b) This assessment shall record the gross vehicle/combination mass ensuring that the applicable permissible mass limit is not exceeded.
- c) The method shall consider appropriate load distribution to enable compliance with relevant permissible axle mass limits.
- d) Such a method may include weighing of the load and/or loading a measured volume at a known specific gravity.
- e) Where mass and/or dimensional assessment is measured using equipment, such equipment shall be calibrated.
- f) Where manufacturer supplied engineering drawings are used to calculate load mass/dimensions (e.g. earthmoving equipment), such source documents shall be referenced in the procedure referred to in 4.2.1.
- g) Alternatively, loading according to a defined unit mass is also permissible.
- h) The procedure to identify and cater for possible variations in load e.g.:
 - i) Variations in specific gravity, for example concrete can have a different mass per volume depending on the mixture composition and can vary from one batch to the next. Mass of timber logs will vary based on different wood species and moisture content; and
 - ii) In the transport of motor vehicles, the addition of new models and/or models with non-standard accessories will result in varying mass and dimensions.
- i) In cases where the transport operator does not have direct control over the loading process (consignor controlled), there shall be evidence of communication with the consignor to ensure compliance with mass and dimensional compliance as per the applicable regulations.
- j) In the case of passenger transport, the transport operator shall document all processes that would ensure that the maximum permissible passengers are not exceeded at any given time during transit. Records of random trip inspections verifying correct loading shall be available.

The transport operator shall monitor and record load mass and dimensions (where required) for all trips undertaken (e.g. daily load register) and periodically analyse trends. Where such trends do not conform to requirements, the transport operator must demonstrate that adequate corrective actions have been planned and/or implemented.

It may be possible where mass/payload limits are not a critical constraint in a particular context e.g. transport of polystyrene/potato crisps/plastic drums etc. In such cases, the transport operator shall clearly indicate the maximum mass based on a maximum number of units loaded.

4.3 Road safety

The transport operator shall consider all aspects of its operation that have an impact or possible impact on the safety of other road users and consequently determine all associated risks. The significant (major) risks shall be identified with appropriate mitigating measures implemented. For this purpose, the transport operator may choose to use various tools e.g. risk matrix; impact register; management programmes; etc.

4.4 Maintaining roadworthy vehicles

The transport operator shall ensure that all vehicles in the XB-RTMS fleet inventory shall be kept in a roadworthy condition at all times. Adequate resources shall be allocated so the vehicles are consistently safe, in good mechanical condition as well as visually presentable.

The transport operator shall have a procedure that defines the vehicle maintenance process including, but not limited to the following:

- a) Vehicle maintenance schedule, indicating that servicing of vehicles is planned as per original equipment manufacturer (OEM) specified intervals;
- b) Responsibility for recording vehicle odometer readings and updating schedule to prevent the possibility of exceeding prescribed service intervals;
- c) Adequate storage of and access to available records for all prescribed services done e.g. checklists, invoices, job cards etc. This applies to both motor vehicles and trailers;
- d) The management of tyres including but not limited to the analysis of tyre pressure, tread depth and scrap analysis;
- e) The process of dealing with vehicle defects from daily inspections and the method by which the transport operator manages mechanical breakdowns *en route*; and
- f) A periodic external inspection to ensure that the vehicle complies with relevant roadworthy requirements (e.g. visible rear chevron plates, retro reflective material/contour or strip markings, minimum tread depth etc.). Such an inspection should also consider in-cab housekeeping (loose items are a safety hazard) and visibility in adverse weather conditions or at night (dirt on lamps, chevron and strip markings may reduce visibility).

4.5 Vehicle and load safety

The transport operator shall ensure that all possible measures are implemented so that the vehicle and load safety is verified at the loading site, during transit, and at the off-loading site.

4.5.1 Vehicle and load safety at the loading site

- (1) A daily basic roadworthiness or pre-trip inspection of the vehicle shall be carried out in compliance with ARS1355-6.

- (2) The transport operator shall have systems in place to prevent any vehicle entering a public road, if the vehicle has a defect which will compromise the safety of the vehicle or where the defect is not permitted in terms of applicable regulations.
- (3) The basic roadworthiness shall address the following minimum criteria in compliance with ARS 1355-1 and ARS 1355-2:
- (a) Oil leaks
 - (b) Oil/water level
 - (c) Brake fluid
 - (d) Brakes
 - (e) Tyre check
 - (f) Wheel nuts/studs
 - (g) Trailer Connections
 - (h) Indicator Lamps
 - (i) Brake Lamps
 - (j) Tail Lamps
 - (k) Stop Lamps
 - (l) Head Lamps
 - (m) Windscreen
 - (n) Wipers
 - (o) Mirrors
 - (p) Audible warning device (hooter)
 - (q) Number plate lamp
 - (r) Fifth wheel lubrication (where applicable)
 - (s) Contour markings
 - (t) Emergency warning signs (triangles)
 - (u) Vehicle placards e.g. orange diamond for dangerous goods vehicles in compliance with ARS 1570
 - (v) Licence disc(s), if applicable, in accordance with domestic legislation
 - (w) COF discs
 - (x) Operator discs
- (4) The transport operator shall ensure that appropriate records are maintained to validate that the inspections referred to in 3.5.1 are implemented consistently.

- (5) The transport operator shall ensure that the load is adequately secured so that load safety during transit is optimised.
- (6) The procedure by which the load is secured shall consider the specific type of goods or equipment.
- (7) Such procedure(s) shall, where applicable also provide details of:
 - (a) Lashing points
 - (b) Load orientation e.g. position of scoop for earthmoving grader that is being transported
 - (c) Number of straps
 - (d) Planned position of goods e.g. break-bulk loads
 - (e) Uniform axle load distribution
 - (f) Measures to minimise load shifting
 - (g) Verification of load dimensions e.g. overhang and maximum height for laden car carrier combination
 - (h) Securing tarpaulins
- (8) Passenger transport to consider passenger safety during entry, transit and exit

4.5.2 Vehicle and load safety during transit

- (1) There shall be evidence that the transport operator has a system in place to ensure contact with the driver is available at any given time, so that information pertaining to the vehicle safety can be relayed between driver and management.
- (2) Such communication shall include driver awareness of significant route risks on specific routes travelled e.g.:
 - (a) Dense fog during early morning and late night;
 - (b) Winding road;
 - (c) Heavy cross winds;
 - (d) Steep incline/descent;
 - (e) High accident zones;
 - (f) Stray animals;
 - (g) Narrow roads;
 - (h) Narrow roads or roads with no shoulder;
 - (i) Low clearance bridges; and
 - (j) Road Works.

4.5.3 Driver behaviour monitoring

- (1) There shall be evidence that the transport operator monitors driver behaviour characteristics that have or could have an impact on safety of the vehicle and on public road users.
- (2) To this end, the transport operator shall have a system to monitor all applicable performance indicators.
- (3) There shall be evidence of monitoring and measurement of such indicators which shall include, but is not limited to the following:
 - (a) Laden vehicle mass, where load mass is a constraint;
 - (b) Laden vehicle dimensions, where load dimensions are a constraint;
 - (c) Vehicle speeds;
 - (d) Accidents (crashes/collisions) and incidents;
 - (e) Insurance claim history;
 - (f) Road traffic and transport transgression history; and
 - (g) Stakeholder feedback (e.g. public compliments/complaints, customer complaints etc.).
- (4) All relevant data (such as date, location, fleet number, driver etc.) for the above shall be available in order to determine cause(s) and/or probable cause(s), where applicable.
- (5) All the criteria shall be collated (e.g. using a spread sheet) and analysed periodically for trends.
- (6) The transport operator shall give recognition for positive traits relating to the above characteristics to promote a culture of safety within the transport operator. Where negative trends are detected, the transport operator shall implement appropriate corrective actions to improve driver behaviour.

4.5.4 Monitoring of crashes, incidents and insurance claims

4.5.4.1 The transport operator shall ensure that all accidents (crashes) and incidents are reported and thoroughly investigated to determine the cause(s) or probable cause(s).

4.5.4.2 Corrective and preventive action shall be implemented based on the causes identified to minimise habitual recurrence of such accidents and incidents.

4.5.4.3 The transport operator shall maintain cumulative accident (crash) and incident statistics to provide meaningful data to management for improvement of safety performance of the transport operator.

4.5.4.4 To complement the above accident and incident analysis, the transport operator shall also analyse insurance claims periodically to note and react appropriately to trends observed.

4.5.5 Insurance

4.5.5.1 The transport operator shall maintain adequate insurance relative to the nature and extent of its activities to prevent placing a burden on state resources in the event of accidents and incidents.

4.5.5.2 Such insurance shall include:

- a) Adequate cover for Goods In Transit (GIT); and
- b) Public liability and environmental remediation where the transport operator is involved in the transport of dangerous goods.

4.5.6 Compliance with standards, legislation and other requirements

4.5.6.1 The transport operator shall identify relevant standards, legislation, industry and customer requirements specific to the nature of its operations.

4.5.6.2 The transport operator shall demonstrate compliance to these identified requirements which may include, but not be limited to, the following:

- a) National Road Traffic Legislation
- b) National Cross Border Road Transport Legislation
- c) National Vehicle Load Management Legislation
- d) National Transport of Dangerous Goods by Road Legislation
- e) National Road Traffic & Transport Transgressions Legislation
- f) Occupational Health & Safety Legislation (applicable sections)
- g) Regulations specific to certain sectors e.g. transport of chemicals, fuel and abnormal loads

4.5.6.3 The transport operator shall comply with the relevant provisions of applicable cross border operator registration requirements and duties. In this regard, records shall be available with the following minimum information:

- a) The name of the applicant and the name of the applicant's responsible competent person at each of the depots, and if applicable the proxy applying on the operator's behalf;
- b) The applicant's postal address;
- c) The street address of each of the depots where the operator's vehicles are kept and operated from;
- d) The details of each of the vehicles that the operator intends to use for cross border transport, including the carrying capacity of each vehicle; and
- e) The details of each of the drivers employed/ contracted by the operator
- f) In the event of an abnormal load permit application, a full route description.

4.5.6.4 Particulars of any existing cross border transit authorisation, if applicable, shall be made available for verification.

4.5.6.5 The transport operator shall ensure payment for all applicable road user charges with documented evidence of such compliance.

4.5.6.6 Border and Regulatory Reporting Requirements

4.5.6.7 Applicable PT or AEO Requirements

4.6 Driver health and wellness

The transport operator shall ensure that drivers are medically fit and resources are allocated toward continued driver wellness, so that drivers' own safety is preserved and the safety of public road users is not compromised due to driver health and wellness deficiencies. To this end, the transport operator shall implement appropriate health and wellness initiatives, including a fatigue management plan

4.6.1 Driver health

The transport operator shall:

- a) Ensure that drivers have annually been examined and declared medically fit to drive a heavy vehicle.
- b) In cases where drivers are diagnosed with chronic conditions such as hypertension (high blood pressure); diabetes; and HIV and Aids or a heart condition the transport operator shall ensure effective management of such drivers including:
 - (i) Training and awareness initiatives relating to the associated risks and treatment thereof; and
 - (ii) Adequate supervision of such drivers.
- c) Periodically check drivers to detect alcohol and prohibited drug consumption, with subsequent actions taken where necessary.
- d) The transport operator shall ensure that those vehicles travelling long distances are equipped with a comprehensive health kit for first aid; HIV and malaria prevention; water hygiene; and dangerous goods protection.
- e) The transport operator shall administer vaccinations to drivers travelling to countries where health risks are present e.g. endemic yellow fever; malaria; and other emerging epidemics.
- f) The drivers shall also be equipped with appropriate personal protective equipment (PPE).

4.6.2 Driver wellness

4.6.2.1 The transport operator shall have a plan to manage driver fatigue including, but not limited to the following:

- a) Driver shift schedules to ensure working hours are within accepted industry standards and/or legislation where these exist;
- b) In addition to the regulation of working hours (shifts), the transport operator shall implement a maximum of 14 driving hours in a period of 24 hours (per driver);
- c) Vehicles shall not travel continuously for more than 4 hours without stopping for at least 5 minutes. Permissible exceptions would include areas where no provision is made for stopping areas and/or it may be unsafe to do so. In such cases, the driver may drive further until a safe stop is available.
- d) Actual working and driving (wheels turning) hours are to be monitored so that any exceptions are noted, and corrective action implemented where excessive violations are observed.
- e) There shall be evidence of initiatives to manage driver fatigue including understanding the causes, effects and symptoms of fatigue, and being able to apply interventions to better manage fatigue.

4.6.2.2 The transport operator shall provide appropriate formal or informal training and awareness that could contribute to optimal driver wellness on relevant topics such as:

- a) Importance of adequate sleep
- b) Healthy eating and nutrition basics
- c) Exercise
- d) Alcohol and substance abuse
- e) Personal health and hygiene
- f) Chronic illnesses (symptoms, prevention and treatment) including:
 - (i) Diabetes;
 - (ii) Hypertension;
 - (iii) HIV-AIDS
 - (iv) Heart conditions.

4.6.2.3 Provision of adequate depot facilities, vehicles and accommodation, where applicable.

4.6.2.4 The transport operator shall ensure effective communication with drivers on matters that affect safety performance.

4.7 Support

4.7.1 Resources

The transport operator shall determine and provide adequate resources required for the effective implementation of the XB-RTMS. All levels of management shall ensure the availability of resources to implement, maintain and improve the XB-RTMS. Resources include human resources, specialised skills, transport operational infrastructure, technology and equipment.

4.7.2 Roles and responsibilities

Roles and responsibilities including accountabilities shall be defined, communicated and understood by all levels of the organisation in order to facilitate an effective XB-RTMS.

Top management shall appoint or designate a XB-RTMS Representative who, irrespective of other responsibilities, shall have overall responsibility for ensuring compliance with the requirements of this standard.

4.7.3 Competence, training and awareness

The transport operator shall:

- a) Implement a system to verify that all drivers are in possession of a valid driving licence in compliance with ISO/IEC 18013-1 and PrDP for the class of vehicle driven.
- b) Identify applicable immigration legislation and ensure that all relevant legislation are complied with including the following (where applicable):
 - (i) Valid passport
 - (ii) Valid Visa

- (iii) Residence Permit
- (iv) Work Permit
- c) Maintain documents and records supporting effective implementation of the above requirements and keep those documents and records readily available for inspection and verification.
- d) Determine the necessary competence of persons that affect the XB-RTMS performance e.g. driver assessments
- e) Ensure that these persons are competent on the basis of appropriate education, training, and experience
- f) Provide adequate training to persons that have an influence on achieving the XB-RTMS outcomes of:
 - (i) Road Safety (Reduction in Crashes)
 - (ii) Maintenance of Roadworthy vehicles
 - (iii) Optimisation of Load
 - (iv) Driver wellness (fatigue, health, training)
 - (v) Productivity and efficiency
 - (vi) Improving driver behaviour
 - (vii) Preservation of road infrastructure
 - (viii) Compliance with border and regulatory requirements
- g) Have a defined training plan for all persons referred to above.
- h) Ensure training topics and subjects are appropriate to the nature of the operation and shall be aligned to contribute towards the achievement of XB-RTMS outcomes and the requirements of this standard.
- i) Make provision for additional refresher training due to:
 - (i) Various XB-RTMS non-conformances
 - (ii) Accidents and incidents
 - (iii) Extended absence from work
 - (iv) Customer needs
 - (v) Non-compliance with border and regulatory requirements
- j) Retain appropriate documented information, as evidence of competence, training and awareness such as:
 - (i) Qualifications
 - (ii) Certificates
 - (iii) Registers

- (iv) Competency assessments
- (v) Theoretical tests
- (vi) Policies, procedures and instructions
- (vii) Training workbooks
- (viii) Videos and presentations
- (ix) Awareness posters

4.8 Document and records

4.8.1 The transport operator's XB-RTMS shall include:

- a) Documented information required by law, regulations and this standard;
- b) Documented information determined by the transport operator for the effective implementation of the XB-RTMS;
- c) A procedure and/or reference to existing transport procedures indicating how the transport operator complies with each element of this standard;
- d) The extent of documented information for the XB-RTMS can differ from one transport operator to another due to:
 - (i) The size of the transport operator
 - (ii) Type of activities, processes, products and services
 - (iii) The complexity of the processes and their interactions
 - (iv) Specific characteristics of the transport operator
- e) Paper and/or electronic means of demonstrating compliance.

4.8.2 The transport operator shall establish and maintain records as necessary to demonstrate conformity to the requirements of its XB-RTMS, as well as achievement of XB-RTMS objectives.

4.8.3 Records shall be identifiable, legible, accessible and traceable.

4.8.4 This standard does not prescribe any specific mechanism, system, process, methodology or software that a transport operator needs to adopt in order to demonstrate compliance. It is intended that the transport operator shall choose, at its sole discretion, any mechanism, method, process or system that is deemed most suitable by the transport operator itself.

4.8.5 Examples of records that may be used include, but are not limited to:

- a) Asset Register of all vehicles and/or Inventory List;
- b) Vehicle registration certificate, vehicle licence, vehicle roadworthy certificate and operator disc;
- c) Manufacturers' data indicating tare, gross axle mass, GVM and GCM;
- d) Trailer manufacturers' engineering drawing;
- e) Database of all loads indicating mass (payload and/or GVM/ GCM);

- f) Empirical mass data such as on-board weighing printout, weighbridge mass printout, manufacturers' unit mass record, waybill, trip sheet, manifest etc.;
- g) Vehicle maintenance schedule;
- h) Vehicle maintenance/service checklist;
- i) Invoices, where appropriate;
- j) Job card/defect notes;
- k) Accident and incident history;
- l) Accident investigation report;
- m) Satellite tracking software outputs e.g. speed profile, route deviations;
- n) Roadworthy/pre-trip inspection sheet;
- o) Briefing/de-briefing sheet;
- p) Tread depth analysis;
- q) Driver medical records;
- r) Driving licence and PrDP copies;
- s) Training registers;
- t) Shift schedules;
- u) Trip sheets.

4.9 Performance evaluation

4.9.1 Monitoring and measurement

4.9.1.1 The transport operator shall monitor, measure and analyse all identified performance indicators in order to evaluate the effectiveness of the XB-RTMS. The transport operator shall identify appropriate controls needed for such monitoring and measurement including measuring equipment, as applicable, to ensure valid results.

4.9.1.2 In the evaluation of its performance, the transport operator shall monitor all identified performance indicators at an established frequency, but at least on a quarterly basis.

4.9.1.3 The transport operator shall implement appropriate corrective actions when necessary to address adverse trends or results.

4.9.1.4 Each transport operator shall define performance indicators that are appropriate to the nature of the transport operator. Such performance factors shall, amongst other factors, include the following:

- a) Number of fatalities;
- b) Accident statistics;
- c) Degree of under loading;
- d) Degree of overloading;
- e) Fuel efficiency;

- f) Speeding statistics;
- g) Traffic infringement trends;
- h) Driving hours;
- i) Driver behaviour e.g. percentage of positive alcohol tests;
- j) Down time statistics;
- k) Training effectiveness;
- l) On-time maintenance;
- m) Defect repair efficiency;
- n) Medical fitness compliance;
- o) Stakeholder feedback e.g. public compliments or complaints; and
- p) Customer satisfaction.

4.9.1.5 The transport operator shall retain relevant information, in either in paper or electronic format, as evidence of all monitoring and measurement initiatives.

4.9.1.6 The transport operator shall document the results of the stipulated performance indicators in the form of a compliance report, which is to be compiled at least quarterly.

4.9.2 Internal audit

4.9.2.1 The transport operator shall conduct internal audits at planned intervals, but at least once a year. These internal audits shall assist the transport operator to determine if it has adequately satisfied the requirements of this standard and if the XB-RTMS outcomes have been adequately addressed.

4.9.2.2 The transport operator shall:

- a) Document all audit results in the form of a report;
- b) Select an auditor who is independent of the function being audited and have no organisational conflict of interest;
- c) Ensure that the results of the audits are reported to the management responsible for the area being audited;
- d) Ensure that all elements of this standard are audit at least once per annum; and
- e) Retain relevant documentation as evidence of the results.

4.9.3 Management review

4.9.3.1 The top management shall review the transport operators' XB-RTMS at least once a year to ensure its continuing effectiveness in achieving the desired XB-RTMS outcomes.

4.9.3.2 Management Reviews shall consider the XB-RTMS performance of the transport operator, including:

- a) Follow-up actions from previous management reviews;
- b) Results of the quarterly compliance report and internal audit;

- c) The need for changes to the XB-RTMS to improve effectiveness; and
- d) Opportunities for improvement.

4.10 Continual improvement of efficiency and road safety

4.10.1 Efficiency of the transport operator

4.10.1.1 The transport operator shall ensure that all identified performance indicators are analysed, with appropriate actions taken to promote greater efficiency within the transport operator.

4.10.1.2 In considering efficiency improvements, transport operators shall consider all opportunities and innovations to improve productivity, provided that it does not have a negative impact on safety within the transport operator's operation.

4.10.1.3 Efficiency improvements may include, amongst others:

- a) Improved fuel efficiency by:
 - (i) Changing driver behaviour e.g. promotion of green band driving;
 - (ii) Optimise route planning and scheduling; and
 - (iii) Improved preventive maintenance e.g. maintaining correct tyre pressures;
- b) Increased revenue per trip by:
 - (i) Minimising under loading, through monitoring and measurement;
 - (ii) Improved planning to minimise empty return legs; and
 - (iii) Avoiding delays at weighbridges or law enforcement inspections by being compliant.

4.10.2 Improving road safety

4.10.2.1 The transport operator shall consider its safety performance by assessing the compliance report generated from monitoring and measurement of its processes. The transport operator shall demonstrate initiatives to improve road safety performance where negative trends are noted.

4.10.2.2 In addition the transport operator shall consider initiatives that would minimise the occurrence of any unsafe practice or possibly unsafe practice. In this regard there must be evidence that the commitment to Road Safety Improvement is integrated into the transport operator at all levels

5 Border and regional regulatory requirements

5.1 Introduction

Due to the increased flow of goods and the globalisation of trade, border and regulatory administrations are faced with ever increasing volumes that need to be verified and validated. It is not possible to check every customs declaration hence the use of modern risk analysis methods and audit based controls are recommended tools in enabling border and regulatory to achieve their objectives.

The transport operator shall provide evidence of a structured management system that will reliably and consistently demonstrate compliance to the border and regional regulatory requirements stipulated herein.

5.2 Company information

5.2.1 General

5.2.1.1 The transport operator shall document all the relevant information in an appropriate format, with defined responsibility for updating information. The transport operator shall ensure that this information is kept updated at all times and any changes are communicated to all affected stakeholders, especially border and regulatory agencies.

5.2.1.2 The transport operator shall ensure as a minimum that the following information is maintained:

- a) Name of entity;
- b) Physical address;
- c) Postal Address;
- d) Date of Establishment;
- e) Nature of Legal Entity (e.g. Sole Proprietor);
- f) Holding Company, if applicable;
- g) Other related entities in the group, if applicable; and
- h) PT or AEO application status itself or other entities in the group, if applicable.

5.2.2 Shareholder information

The transport operator shall ensure that all shareholder information is readily available and currently valid.

5.2.3 Company operations

The transport operator shall describe in detail the full extent of its operations, including, but not limited to:

- a) The nature of all activities that it engages in as well as the role in the supply chain (e.g. manufacturer, exporter, forwarder, warehouse, clearing agent);
- b) List of all operational entities/divisions indicating relevant management structure and contact information; and
- c) Financial management & reporting.

5.2.4 Border regulatory authority

5.2.4.1 The operator shall implement effective quality assurance systems, so that all the applicable regional regulatory requirements are identified and appropriately complied with.

5.2.4.2 If complied with, the relevant border and regulatory authorities' shall be able to validate the operator's compliance.

5.2.4.3 Such systems shall make provision for the following:

- a) Pre clearance of all consignments, where applicable;
- b) All appropriate border authorisations (if applicable);
- c) Manifests and supporting documents; and

- d) Licences (if applicable).

5.3 Compliance record

5.3.1 The transport operator shall maintain a detailed historical record of compliance with border and regulatory requirements in respect of any breaches and/or application refusals and/or suspension or revoking of authorisations.

5.3.2 In cases of such non-conformances, the transport operator shall demonstrate the implementation of an effective corrective action system to prevent habitual recurrence of such breaches.

5.4 Accounting and logistical systems

The transport operator shall document and implement a structured accounting/logistics process which makes provision for the following:

- a) Full audit trail of transport operator activities relevant to border and regulatory requirements. Each accounting entry shall have supporting documents throughout the life cycle of the specific transaction.
- b) Reliable enterprise management system, including appropriate software
 - (i) The system implemented shall ensure user access is controlled so that the accounting functions are separated.
 - (ii) Provision shall be made for traceability between the accounting system and interactions with border and road authorities.
- c) Adequate internal controls in each department
 - (i) Documented internal control processes shall be available for all departments and functions, including border and transit interactions, amongst others;
 - (ii) These shall be periodically evaluated for adequacy and compliance; and
 - (iii) The transport operator shall also implement a software/data verification process to identify possible risks, with accompanying mitigating measure implemented.
- d) Flow of goods
 - (i) The company shall define and implement a process to regulate the flow of goods, including receiving inspection, manufacture (if applicable), storage and distribution, with all supporting records to be readily available; and
 - (ii) Such a process shall indicate the mechanism to manage any discrepancies detected e.g. stock levels.
- e) Border and transit routines
 - (i) The transport operator shall document the processes used to ensure that the relevant border and transit processes are optimally managed.
 - (ii) Documented procedures shall be available for the following:
 - (1) Recording process (checklist) of which goods are being moved and what documents are required;
 - (2) Verification of border and transit declarations, including manifests even if these are managed by an external party such as a freight forwarder or clearing agent;

- (3) Notification of irregularities e.g. theft, burglary, smuggling, fraud;
- (4) Administration of trade licences/permits relating to the import and/or export of specific goods e.g. petroleum product;
- (5) Back up, recovering, archiving and retrieval of business records;
- (6) Protection of computer security, ensuring that unauthorised intrusion is prevented and data security is verified; and
- (7) Protection of documentation to prevent unauthorised access and the abuse of information.

5.5 Financial solvency

The transport operator provides evidence of financial solvency by means of an external audit report, or verification letter from a registered accountant or confirmation from the financial institution. If the transport operator is a new business, the latest financial information shall be available including cash flow statement, balance sheet and profit/loss forecasts.

The transport operator shall disclose all past or current insolvency proceedings initiated against the company.

5.6 Safety and security

5.6.1 The transport operator shall have sufficient measures implemented in order to provide the assurance that the goods and the vehicle are not liable to be tampered with or abused in a way that could result in theft, burglary, smuggling, fraud or other covert and/or illegal activities.

5.6.2 The measures implemented shall include the following provisions:

- a) A risk and threat assessment for all owned premises and vehicles;
- b) Such an assessment shall list all risks and threat arising from the transport operators' activities and shall include both internal and external risks;
- c) The transport operator shall quantify these risks in an appropriate manner in order to identify the significant risks and threats to the transport operator;
- d) Mitigating or controls shall be implemented for these significant risks and threats to the probability that such risks and threats may occur;
- e) The responsible parties for these mitigating measures are indicated in the assessment.

5.6.3 Security procedures and associate instructions shall be communicated to all staff and site visitors.

5.6.4 The company shall maintain a register of all security incidents and implement appropriate measures to prevent habitual recurrence.

5.6.5 The transport operator shall demonstrate compliance with customer and insurance company security requirements.

5.6.6 Access to premises owned or managed by the transport operator

- a) The transport operator shall document and implement adequate access control measures.
- b) The procedure shall make provision for the detection of unauthorised persons.

- c) A floor plan indicating designated areas and access routes shall be indicated. and
- d) Security seals for consignments shall be implemented

5.6.7 Physical security shall be ensured.

5.6.8 Process for external boundary monitoring shall be documented.

- a) The transport operator shall ensure that the provision of the respective occupational health and safety regulations are implemented;
- b) Access and use of facility keys shall be regulated; and
- c) A process shall be in place to regulate all site visitors.

5.6.9 Cargo units (containers, swap bodies, load body) — The transport operator shall implement a process for the safe storage of cargo units, including a procedure indicating access restriction and prevention of tampering

5.7 Logistical processes

The transport operator shall ensure that security is prioritised during the transport of goods. Where freight forwarders, customs agents or sub-contractor transport is used, the transport operator shall ensure adequate security measures exist within these external parties.

5.8 Non-fiscal requirements

The transport operator shall document a procedure to indicate measures in place to manage goods that require import licenses or goods that are subject to export restrictions or embargoes or other non-fiscal requirements.

5.9 Incoming goods

The transport operator shall document and implement a procedure for the handling of incoming goods into own premises.

Such a procedure shall make provision for:

- a) Security and safety of incoming goods;
- b) Quantitative verification; and
- c) Documentary compliance — verification of consignment documentation.

5.10 Storage of goods

The transport operator shall provide evidence of a structured plan to store goods adequately (where storage is required) and shall ensure that:

- a) Goods are stored in appropriate, demarcated areas;
- b) Stock taking process is defined and measures to handle any detected irregularities;
- c) Goods are classified so that different risk levels are stored separately in compliance with ARS 3570; and
- d) Unauthorised access is prevented.

5.11 Loading of goods (refer to 4.2)

The transport operator shall have adequate measures in place to regulate loading of goods and shall make provision for:

- a) Loading responsibilities;
- b) Trip documents e.g. waybill, delivery note, the transport emergency card in compliance with ARS 3570, etc.;
- c) Verification of goods type and quantity; and
- d) Compliance with customer requirements.

5.12 Business partner security requirements

The transport operator shall document the criteria used for the selection of business partners, with respect to safety and security requirements. There shall also be measures in place to verify the identity of trade partners in order to prevent fraud and secure the supply chain.

5.13 Personnel security

There shall be adequate measures in place to prevent possible fiscal or operational risk that may arise due to personnel behaviour. Therefore the transport operator shall:

- a) Maintain an employment policy with stipulated safety and security requirements;
- b) Ensure that employees in security-sensitive areas are screened for criminal record;
- c) Maintain adequate access control, including preventing access to former employees; and
- d) Ensure that employees are trained on safety and security procedures.

5.14 External services

The transport operator shall provide evidence of written agreements with external service providers containing security requirements. There shall be evidence of periodic compliance evaluation to the stated requirements.

Bibliography

1. ISO 9001:2015, *Quality management systems — Fundamentals and vocabulary*
2. ISO 19011:2011, *Guidelines for auditing management systems*
3. ISO 17021:2012, *Conformity Assessment — Requirements for Bodies providing audit and certification of management systems*
4. ISO 39001, *Road Traffic Safety (RTS) Management Systems — Requirements with guidance for use*
5. AEO Guidelines, European Commission, TAXUD/B2/047/2011, Rev 3.
6. Authorised Economic Operator Guidelines, Zimbabwe Revenue Authority.
7. Border and Regulatory External Guide Accreditation, South Africa Revenue Services (SARS), November 2012.
8. Developing Preferred Trader in South Africa, Beyers Theron, SARS.
9. Multilateral Cross Border Road Transport Agreement (MCBRTA), www.ttftp.org
10. National Overload Control Strategy, South African National Department of Transport. Pretoria: Government Printer, 2004.
11. Roadside Driver and Vehicle Fitness Inspection Manual, Road Traffic Management Corporation, South Africa, March 2009.
12. SAFE Framework of Standards to Secure and Facilitate Global Trade, World Customs Organisation Transport Operator, May 2010, D/2010/0048/10.
13. SADC Guidelines for Driver Health Management, Gaborone, November 2011.
14. SARS Accreditation External Guide, November 2012.
15. Vehicle Load Management Agreement (VLMA), www.ttftp.org
16. ZIMRA Self-Assessment Questionnaire, Zimbabwe Revenue Authority.

Draft African Standard for comments only — Not to be cited as African Standard