UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

Transport and Transit Facilitation Systems

Lessons from Regional Transport and Transit Systems in Africa

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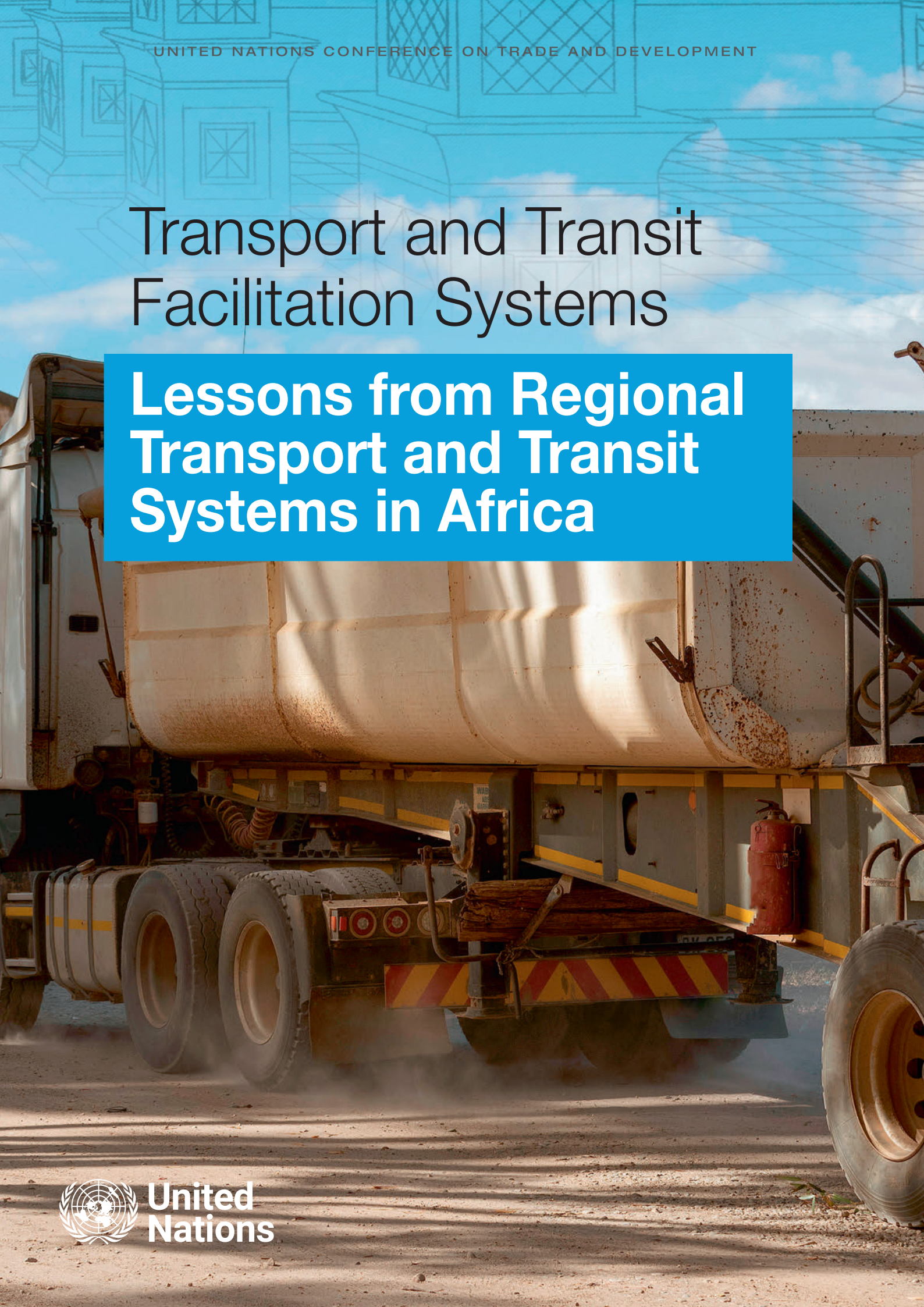

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LIST OF ABBREVIATIONS

AfCFTA	African Continental Free Trade Agreement
AU	Africa Union
BOAD	West African Development Bank
CCE	Corridor Coordination Entity
CMA CGM	Compagnie Maritime d'Affrètement Compagnie Générale Maritime
CMR	COMESA Customs Management Regulations
CMS	Customs Management Systems
COMESA	Common Market for Eastern and Southern Africa
CVTFS	COMESA Customs Management Regulations
DANIDA	Danish International Development Agency
EAC	East African Community
ECOWAS	Economic Community of West African States
EDF	European Development Fund
EDI	Electronic Data Interchange
EU	European Union
FAL Convention	Convention on the Facilitation of Maritime Traffic
GATT	General Agreement on Tariffs and Trade
GPRS	General Packet Radio Service
GPS	Global Positioning System
IMO	International Maritime Organisation
IRU	International Road Transport Union
ISRT Convention	Inter States Road Transport Convention
ITS	Intelligent Transport Systems
JBP	Joint Border Post
MCBRTA	Multilateral Cross-Border Road Transport Agreement
MCLI	Maputo Corridor Logistics Initiative
MSC	Mediterranean Shipping Company
NCTS	New Computerised Transit System
NCTTA	Northern Corridor Transit and Transport Agreement

NCTTCA	Northern Corridor Transit and Transport Coordination Authority
NEPAD	New Partnership for Africa's Development
NTB	Non-Tariff Barrier
OSBP	One-Stop Border Post
Port CDM	Port Collaborative Decision Making
RCTG Carnet	Regional Customs Transit Guarantee Scheme
REC	Regional Economic Community
RISE	Research Institutes of Sweden
RKC	Revised Kyoto Convention
SADC	Southern Africa Development Community
SIGMAT	Système Interconnecté de Gestion des Marchandises en transit
STM	Sea Traffic Management
STTV	Satellite Transit Truck Village
TCDH	Cross border Trade Community Data Hub
TFA	Trade Facilitation Agreement
TFWA	Trade Facilitation West Africa
TIP	Trade Information Portal
TIR Convention	Convention on International Transport of Goods Under Cover of TIR Carnets
UEMOA	West African Monetary and Economic Union
UN	United Nations
UN OHRLLS	United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States
UN/CEFACT	United Nations Centre for Trade Facilitation and Electronic Business
UNECA	United Nations Economic Commission for Africa
UNECE	United Nations Economic Commission for Europe
VLMA	Vehicle Load Management Agreement
WCO	World Customs Organisation
WTO	World Trade Organisation
YD	Yamoussoukro Decision

1

INTRODUCTION

This Study aims to conduct a preliminary investigation of the issues and bottlenecks affecting the implementation of the various initiatives on transport[1] and transit systems launched at the continental and regional levels by the African Union (AU) and African regional economic communities (RECs), respectively. This initial analysis seeks to identify the cause of the persistently low implementation of multilateral and regional protocols or conventions designed to facilitate transit and transport across the African regions.

Over the last thirty years or so, spurred on by the creation of the World Trade Organisation in 1995, countries have made significant progress in unilaterally lowering trade tariffs and dismantling quota systems. Many would argue that this has resulted in the significant increase in volumes and values of international trade and the growth in global supply and value chains.

The requirements of these global supply and value chains have changed the way logistics and transport services operate, with the demand for just-in-time and just-in-sequence logistics services. This, in turn, has increased the demand for predictable, reliable, and efficient cross-border systems, which include the requirement for efficient, fast, and reliable border clearance procedures, whether from customs, immigration, security, police, agricultural or veterinary departments or other border agencies.

In the globalized world of international trade, it is also clear that the supply chain is as good as its weakest link.[2] A holistic approach to improving supply chain management is required – it is not enough to have an efficient customs service if all other border agencies are inefficient and delay cargo from crossing the border for hours, days or weeks.

For all of the above reasons and more, and as noted by the United Nations Economic Commission for Europe's Trade Facilitation Implementation Guide,[3] trade facilitation has emerged as a critical factor for international trade efficiency and the economic development of countries. This is because of its impact on competitiveness and market integration and its increasing importance in attracting direct foreign investments.

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1 Trade facilitation components of transport are also considered but pure trade aspects of trade facilitation, such as simplification of rules of origin, preferential trade areas, customs classification and valuations, etc. are not considered.

2 Pettit, Keely, and Fiksel (2019). The Evolution of Resilience in Supply Chain Management: A Retrospective on Ensuring Supply Chain Resilience. Journal of Business Logistics 40(1), 50-65.

3 https://tfig.unece.org/details.html.

2

TRANSPORT RELATED TRADE FACILITATION INSTRUMENTS

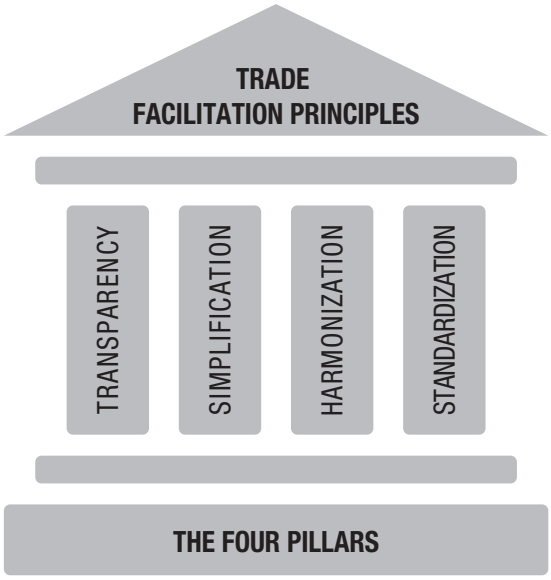
Trade facilitation can ease and simplify trade across national geographical borders and, when correctly utilized, will reduce transaction costs and contribute to greater consumer welfare through reduced prices.

The primary goal of trade facilitation is to help make trade across borders (imports and exports) faster, cheaper, and more predictable while ensuring its safety and security. In terms of focus, it is about simplifying and harmonizing formalities, procedures, and the related exchange of information and documents between the various partners in the supply chain.

For UNECE and its UN Centre for Trade Facilitation and Electronic Business (UN/CEFACT), trade facilitation is ***"the simplification, standardization, and harmonization of procedures and associated information flow required to move goods from seller to buyer and to make payment."*** Such a definition implies that not only the physical movement of goods is essential in a supply chain but also the associated information flows. It also encompasses all governmental agencies that intervene in the transit of goods and the various commercial entities that conduct business and move the goods.

The UN's Trade Facilitation Implementation Guide defines the fundamental principles of trade facilitation as transparency, simplification, harmonization, and standardization, as shown in Figure 1, opposite.

Figure 1 Pillars of Trade Facilitation Principles



Source: https://tfig.unece.org/details.html

Transparency within government promotes openness and accountability of a government's and administration's actions. It entails the disclosure of information in a way that the public can readily access and use it. This information may include laws, regulations, and administrative decisions of general application, budgets, procurement decisions, and meetings. Regulatory information should be published and disseminated, when possible, before enforcement to allow the parties concerned to take note of it and make necessary changes. Furthermore, relevant stakeholders and the general public should be invited to participate in the legislative process by providing their views and perspectives on proposed laws before enactment.

Simplification is the process of eliminating all unnecessary elements and duplications in trade formalities, processes and procedures. It should be based on an analysis of the current, "As-Is", situation.

Harmonization is the alignment of national procedures, operations and documents with international conventions, standards and practices. It can come from adopting and implementing the same standards as partner countries, either as part of a regional integration process or as a result of business decisions.

Standardization is developing formats for practices and procedures, documents and information internationally agreed upon by various parties. Standards are then used to align and, eventually, harmonize practices and methods.

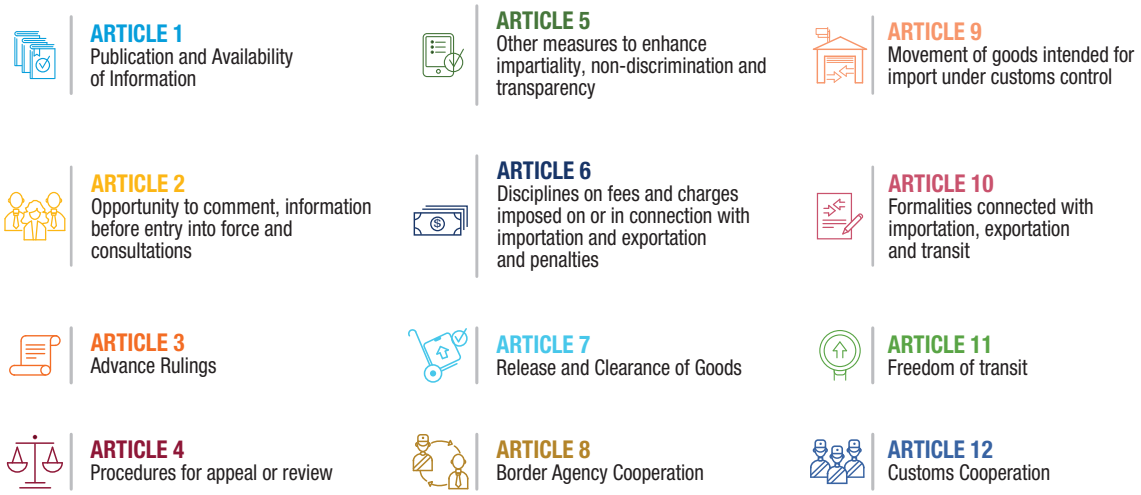
The main trade facilitation instruments at the global level include:[4]

[4] For a more comprehensive list of international conventions see UN-OHRLLS "Report on Best Practices for Effective Transit Transport Corridor Development and Management". Gilbert Maeti.

2.1. The World Trade Organisation's Trade Facilitation Agreement (WTO TFA)

The WTO TFA is the first multilateral trade agreement to be concluded since the establishment of the WTO. The agreement comprises border-related procedures, processes and other obligations that governments are required to implement. They provide transparency of laws, rules and procedures, fairness in border agency decisions, streamlined clearance procedures, and help reduce administrative constraints on transit. Figure 2 below gives a graphic summary of the Articles of Section 1 of the TFA.

Figure 2 WTO TFA Section 1 Articles



2.2. The FAL Convention

The FAL/IMO initiatives are designed to simplify cross-border trade, reduce the administrative burden, and create a more efficient logistics chain.

The purpose of the FAL Convention is to provide a unified, global approach to shipping facilitation. In its Annex, the FAL Convention contains standards, recommended practices, and rules for simplifying formalities, documentary requirements and procedures on ships' arrival, stay and departure. Implementation is done through standardized FAL documentation[5] for authorities and Governments to use, and the FAL Convention urges all stakeholders to use these.

In April 2019, the IMO's Facilitation of Internal Maritime Traffic (FAL) Convention introduced an amendment requiring national member governments to implement the electronic exchange of information related to maritime transport. The requirement, mandatory under the FAL Convention, is part of a package of amendments under the revised Annex to the FAL Convention, adopted in 2016.

The IMO has also encouraged national government members to introduce the Maritime Single Window concept, where all information required by public authorities in connection with the arrival, stay and departure of ships, people and cargo will be submitted electronically via a single platform without duplication.

[5] The FAL forms can be downloaded from https://www.imo.org/en/OurWork/Facilitation/Pages/FormsCartificates-default.aspx.

2.3. The World Customs Organisation's Revised Kyoto Convention

The 2000 Revised Kyoto Convention (RKC) is the main Trade Facilitation Customs Convention and aims to facilitate cross-border transport and trade by harmonizing and simplifying Customs procedures and practices. The RKC General Annex commits contracting parties to the following key principles:

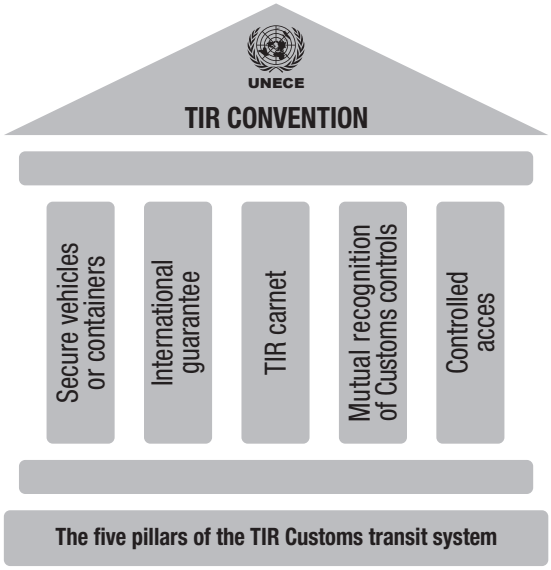
- Transparency and predictability of Customs actions.
- Standardisation and simplification of the goods declaration and supporting documents.
- Simplified procedures for authorized persons.
- Maximum use of information technology.
- Minimum necessary Customs control to ensure compliance with regulations.
- Use of risk management and audit-based controls.
- Coordinated interventions with other border agencies.
- Partnership with the trade.

2.4. The Customs Convention on the International Transport of Goods under Cover of TIR Carnets (TIR Convention)

The objective of the TIR Convention is to facilitate international transit through Simplified Customs Transit Procedures and an International Guarantee System. As of December 2020, there were 77 parties to the Convention, including 76 states and the European Union.

The TIR is a very widely used road transport transit system. The system enables internationally traded goods to move from one country to another or through one country under customs control without paying customs duties or charges of equivalent effect. The TIR is multi-modal but must include transportation by road. It was developed under the auspices of the United Nations Economic Commission for Europe (UNECE), which manages the TIR Convention. The TIR guarantee payment system is managed by an international organization called the International Road Transport Union (IRU).

Figure 3 Pillars of the TIR Customs Transit System



The TIR transit system operates on five (5) pillars which are:

a) Security of goods: transporters must always use secure vehicles or containers;

b) Payment guarantee: customs duties and taxes must be guaranteed through the international guarantee chain;

c) Documentary proof: all transactions are documented and accompanied by a TIR carnet;

d) Customs cooperation: all customs administrations under the scheme commit to recognize and respect each other's customs controls mutually; and

e) Restricted access to the system: access to and use of the TIR system is strictly controlled.

The TIR Convention establishes an international customs transit system with the maximum facility to move goods:

- In sealed vehicles or containers.
- From a customs office of departure in one country to a customs office of destination in another country.
- Without requiring extensive and time-consuming border checks at intermediate borders.
- While, at the same time, providing customs authorities with the required security and guarantees.

The TIR system not only covers customs transit by road, but a combination is possible with other modes of transport (e.g., rail, inland waterway, and maritime transport), as long as at least one part of the total transport is made by road.

Box 1. European Union (EU) Customs Transit System

The European Union runs two customs transit systems – the Union Transit System and the Common Transit System.

Union Transit

THE EU customs transit system applies to the movement of non-EU goods for which customs duties and related taxes are chargeable on entry into the EU customs territory. It also applies to goods of EU origin that pass through a third country en route from one EU member to another. These are EU goods that transit a third country, when exported from one EU member to another, and which are subject to EU customs transit procedures.

Common Transit

Common Transit is like Union Transit but applies to goods moving between the EU and the EFTA countries, Turkey, Macedonia, Serbia and now, the United Kingdom.

TIR in the EU

The EU applies the TIR system as any other party to the TIR Convention, but:

i) The EU is considered a single territory;

ii) The TIR may only be used in EU transit operations if the movement either starts or ends in a third country, or where an intra-Union movement of goods traverses a third (non-EU) country;

iii) The customs duty and taxes guarantee amount under the TIR system is a maximum of Euro 100,000 per TIR carnet;

iv) Data for all TIR operations within the EU must be provided to the customs authorities digitally (in electronic format); and

v) Electronic exchange of data between the customs administrations of the EU Member States must use the EU electronic transit system, New Computerised Transit System (NCTS).

2.5. Customs Transit Systems

The Revised Kyoto Convention defines customs transit[6] as a procedure involving the movement or transportation of goods under customs control from one customs office to another without paying any customs duty. The movement of goods can be between customs offices within the same country or, as a cross-border movement, between customs offices in two or more countries.

[6] This definition is contained in **Specific Annex E of the Revised Kyoto Convention**. These are also reflected in the Trade Facilitation Agreement.

The WCO has developed a series of guidelines and approaches for an effective transit system. These approaches are contained in the WCO Handbook on Transit and are:[7]

2.5.1. Effective Information Sharing

Sharing information among border agencies, especially customs offices, is cardinal for effective transit operations. This enables border agencies of either country to prepare for and process goods in transit faster and more effectively, reducing transaction costs for the traders, transporters, and border agencies.

2.5.2. Guarantee System

Customs and other government agencies responsible for collecting duties and other levies must be guaranteed that the anticipated revenues would not be lost during transit. Customs duties especially are at high risk and must be secured through a guarantee-system. A well-functioning guarantee-system speeds up transit operations and allays the revenue concerns of transit countries.

2.5.3. Simplification of Customs Formalities

Customs transit system requirements can be onerous for the transit operator. To address this concern, Customs administrations worldwide have introduced simplified Customs formalities, including accepting electronic copies of transport documents and advance declaration of manifests.

2.5.4. Risk Management

Risk management involves applying appropriate risk management techniques to goods or transit operators based on their risk to border agencies. This means high-risk goods are subjected to the right level of control, while low-risk goods may be exempted from some of the controls, inspections, or requirements. Introducing Authorized Economic Operator (AEO) programs is usually part of the risk management process for transit operators who maintain high compliance. It brings about benefits for these transit operations, such as pre-arrival processing.

2.5.5. Customs Seals and Other Security Measures

To ensure the security of goods during transit operations, Customs administrations usually affix Customs seals and fastenings to the goods and the transport unit. Customs may allow flexible and facilitative measures, such as accepting special seals affixed by transit operators.

In the recent past, most customs administrations have introduced electronic seals/tracking devices used to monitor the status and location of transit goods.

2.5.6. Border Infrastructure

Border infrastructure is an important element in the reduction of border congestion. Trucks must wait in a queue at the border at land border facilities with a "first-in, first-out" arrangement. It is reasonable to consider specific infrastructure, such as separate transit lanes, at border points where large volumes of transit goods are encountered.

2.5.7. Coordinated Border Management

Transit operations inevitably involve various regulatory requirements imposed by government agencies other than Customs. Transit goods are stacked at the border without cooperation and coordination between the relevant government agencies. One of the best practices concerning coordinated transit management is establishing a one-stop border post.

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[7] Excerpts from and adapted from the WCO handbook on Transit.

2.5.8. Performance Measurement

Performance measurement helps to demonstrate the effectiveness of transit operations and identify bottlenecks preventing the smooth movement of transit cargo. Several international tools for assessing the performance of transit operations may give valuable clues on improving the transit system. In particular, the WCO Time Release Study Guide may assist Members in identifying key problems in transit systems.

Source: Zambia; Photo taken by Mwansa James Musonda at Kasumbalesa Border on the DRC-Zambia border, 2017, Truck Park yard, Kasumbalesa border post.

3

TRADE, TRANSPORT, AND TRANSIT FACILITATION IN AFRICA

Over the last decade, trade, transport, and transit facilitation have gained prominence in Africa's multilateral, continental, regional, and sub-regional agendas, as seen with African countries' accession to the WTO's Trade Facilitation Agreement; the African Continental Free Trade Agreement; regional Free Trade Agreements; and Cross-Border Transport and Transit Agreements respectively.

Despite all these initiatives, transport and transit systems in Africa are still plagued by the lack of, or poor implementation, resulting in delays and incremental costs, which ultimately affect Africa's global market competitiveness and constitute a formidable obstacle to African regional integration.

In 2019, sub-Saharan Africa's overall global competitive rating placed it as the least competitive region,[8] with twenty-five of the thirty-four economies assessed scoring below 50 out of 100 points during the year. The assessment also covered other regions and groups, including the G20, East Asia and the Pacific, Latin America and the Caribbean, the Middle East and North Africa, Eurasia, and South Asia. All these outperformed sub-Saharan Africa in terms of their competitiveness.

The African Trade Policy Centre's Trade Policy Briefing number 1 of June 2004 on Trade Facilitation noted that ***"In recent years, the volume of goods moving across borders increased exponentially due to the global integration of modern production systems, new forms of electronic commerce, and the development of containerized transport that has allowed large cost reductions in cargo handling. Indeed, the value of international trade was 50 times higher in 1999 than it was in 1960. However, developing countries in general and African countries, in particular, have not yet benefited from the steady increase in international trade."***[9] What was true in 2004 is still true in 2022 – African countries are still not benefitting as much as expected from increases in international trade and are excluded from most high-value global supply chains.

The United Nations' Digital and Sustainable Trade Facilitation Global Report 2021,[10] which is based on the United Nations Global Survey on Digital and Sustainable Trade Facilitation, notes that reducing trade costs are essential for enabling economies to participate in regional and global value chains effectively, and for them to continue using trade as an important engine of growth and sustainable development.

The UN's Global Report 2021 reviews the progress of trade facilitation reforms across 144 countries. The analysis is based on 58 trade facilitation measures that are classified into four groups ("General Trade Facilitation," "Digital Trade Facilitation," "Sustainable Trade Facilitation," and "Other Trade Facilitation") and a further 11 sub-groups covering both binding and non-binding WTO TFA measures, as well as measures beyond the scope of WTO TFA. The global average implementation rate of 31 general and digital trade facilitation measures was 64.7%.

The findings of the Global Report were that, in general, WTO TFA-related measures are relatively well-implemented globally. In addition, the COVID-19 pandemic has contributed to the acceleration of digital transformation, with the implementation of 'Paperless Trade' standing at 64%.

However, the implementation level of 'Cross-Border Paperless Trade' is low at 38%, with bilateral and subregional paperless trade systems remaining either mostly partial or on a pilot basis. Nonetheless, progress in the implementation of 'Paperless Trade' and 'Cross-Border Paperless Trade' measures is encouraging, with increases of 6.3 and 5.4 percentage points over the past two years, respectively – the biggest improvement in these areas since the introduction of the survey in 2015.

Figure 4 shows the levels of implementation of the various trade facilitation instruments measured by the UN's Global Survey on Digital and Sustainable Trade Facilitation for each region. The worst performing region in terms of implementation of trade facilitation instruments was the Pacific Islands, with an implementation rate of 40% overall. Sub-Saharan Africa's implementation rate was about 50%. The main difference between the performance levels of the Pacific Islands and the Sub-Saharan Africa regions

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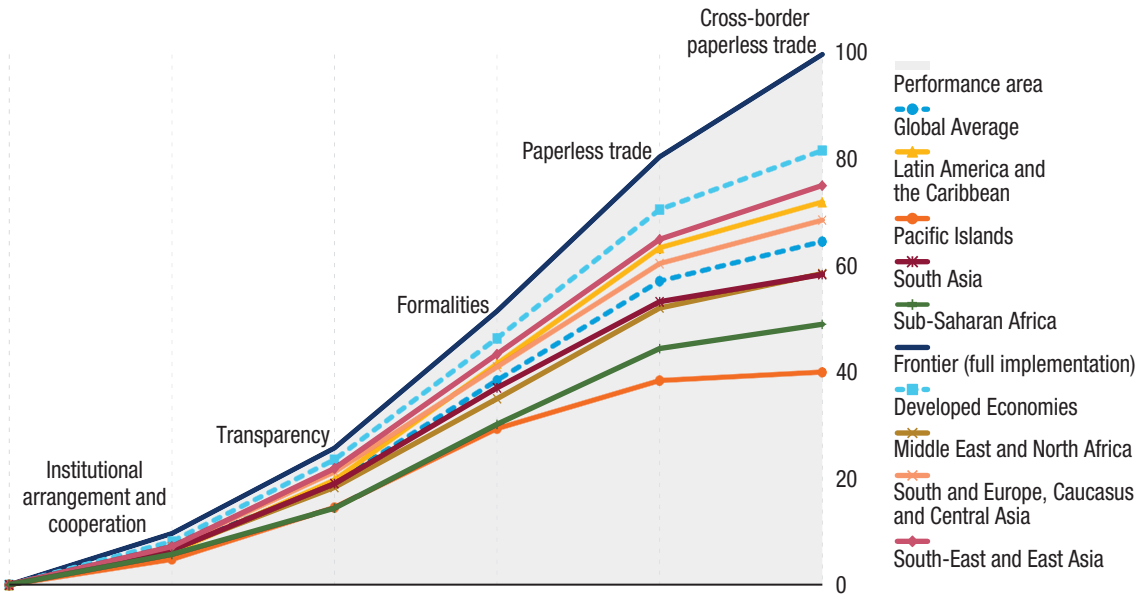
8 http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf.

9 https://repository.uneca.org/bitstream/handle/10855/22339/b10736700.pdf?sequence=1&isAllowed=y.

10 https://unescap.org/sites/default/d8files/knowledge-products/UNTF-Global%20Report-web%2B.pdf.

Figure 4 Moving up the Trade Facilitation Ladder towards Seamless International Supply

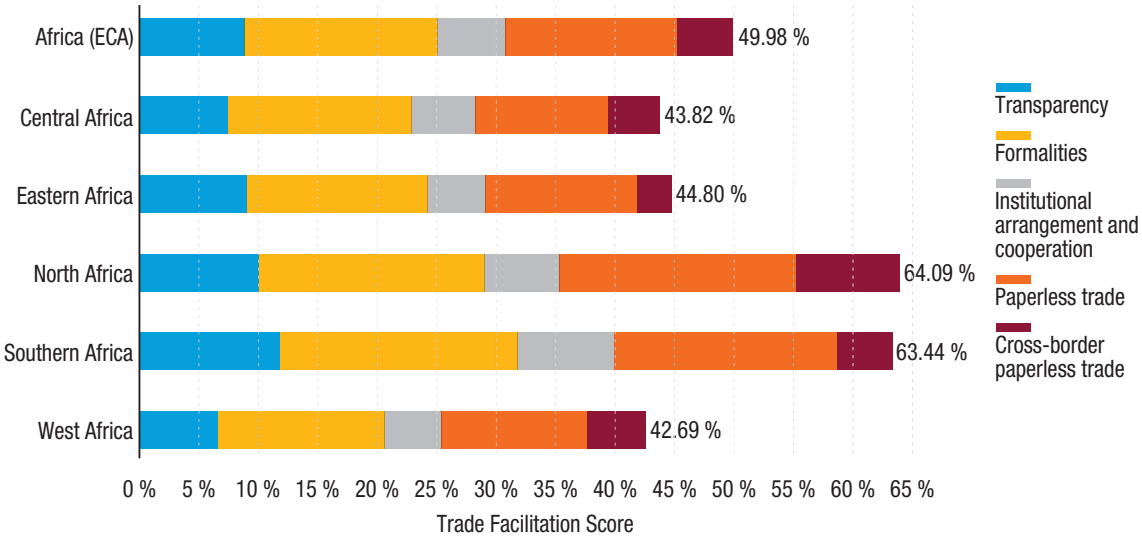


Source: The UN Global Survey on Digital and Sustainable Trade Facilitation, 2021. Available at untfsurvey.org.

was the implementation of paperless and cross-border paperless trade. This is an important distinction as, again, according to the UN's 2021 Global Report, ***"Empirical evidence shows that full digital trade facilitation implementation beyond the WTO TFA commitments could cut the average trade cost by more than 13%, 6.7 percentage points more than that could be expected from meeting requirements of the WTO TFA."***

Figure 5 shows the levels of implementation of Trade Facilitation instruments in African Sub-Regions. As seen from Figure 5, according to the survey figures, overall, Central and West Africa are the poorest performers in Africa regarding the implementation of trade, transport, and, transit instrument. North and southern Africa are the best performers. However, the main difference between performance levels is the levels of paperless trade. Implementation of the other measures is similar.

Figure 5 Level of Implementation of Trade Facilitation instruments in African Sub-Regions



Source: Derived from https://www.untfsurvey.org/region?id=ECA.

Trade, transport, and transit facilitation systems at the African continental level are addressed in the Protocol on Trade in Goods of the African Continental Free Trade Agreement. Although the scope of AfCFTA is large in that it addresses trade policy issues, such as tariff reductions and rules of origin and other FTA instruments, as well as trade in services, the main economic impact will probably be on the implementation of the provisions on trade, transport, and transit facilitation.

3.1. AfCFTA Trade Facilitation Provisions

The AfCFTA Protocol on Trade in Goods has provisions that address Elimination of Tariff Barriers (Article 12); Customs Cooperation and Mutual Administrative Assistance (Article 14); Trade Facilitation (Article 15); and Transit (Article 16). In all instances, the articles mentioned above refer to a specific annex on the subject.

3.1.1. Annex 3: Customs Cooperation and Mutual Administrative Assistance

The objectives and scope of Annex 3 are for Customs Administrations to cooperate by providing common measures, establishing appropriate institutional arrangements at continental, regional and national levels, and providing mutual administrative assistance to other Customs Administrations.

The following Articles address the procedural aspects of Annex 3:

- Article 3 addresses the harmonization of Customs tariffs and statistical Nomenclatures.
- Article 4 addresses the harmonization of valuation systems and practices based on the principles of non-discrimination, transparency and uniform application of such a system in accordance with Article VII of GATT on Valuation for Customs Purposes.
- Article 5 promotes the simplification and harmonization of Customs procedures.
- Article 6 encourages the automation of Customs operations in that State Parties to undertake to establish, use and continually upgrade modern data processing systems to facilitate effective and efficient Customs operations and transmission of trade data amongst themselves.
- Article 7 provides for the advance exchange of information between national Customs.
- Article 9 addresses the request, exchange, and provision of information.

3.1.2. Annex 4: Trade Facilitation

The AfCFTA Protocol on Trade in Goods closely follows the WTO's Trade Facilitation Agreement, deliberately so, and ensures that there is no conflict between WTO Members' commitments to the Trade Facilitation Agreement and their AfCFTA commitments. In this respect:

- Article 4 (similar to Article 1.1 and 1.2 of the TFA) addresses publication and information Article 27 (similar to Article 10.4 of the TFA) addresses.
- Article 5 (similar to Article 1.3 of the TFA) addresses enquiry points.
- Article 6 (similar to Article 3 of the TFA) addresses advance rulings.
- Article 7 (similar to Article 7.1 of the TFA) addresses pre-arrival processing.
- Article 8 (similar to Article 7.2 of the TFA) addresses electronic payment.
- Article 9 (similar to Article 7.3 of the TFA) addresses Separation of Release from Final Determination of Customs Duties, Taxes, Fees and Charges.
- Article 10 (similar to Article 7.4 of the TFA) addresses risk management.
- Article 11 (similar to Article 7.5 of the TFA) addresses post-clearance audit.
- Article 12 (similar to Article 7.6 of the TFA) addresses the establishment and publication of average release times.

- Article 13 (similar to Article 7.7 of the TFA) addresses trade facilitation measures for Authorised Operators.
- Article 14 (similar to Article 7.8 of the TFA) addresses expedited shipments.
- Article 15 (similar to Article 7.9 of the TFA) addresses perishable goods.
- Article 16 (similar to Article 10.3 of the TFA) addresses the use of international standards.
- Article 17 (similar to Article 10.4 of the TFA) addresses the use of information technology.
- Article 18 (similar to Article 10.4 of the TFA) addresses single windows.
- Article 19 (similar to Article 11 of the TFA) addresses freedom of transit.
- Article 20 (similar to Article 10.1 of the TFA) addresses documentation.
- Article 21 (similar to Article 6 of the TFA) addresses fees, charges, and penalties.
- Article 22 (similar to Article 4 of the TFA) addresses reviews and appeals.
- Article 23 (similar to Article 10.6 of the TFA) addresses the use of customs brokers.
- Article 24 (similar to Article 10.5 of the TFA) addresses pre-shipment inspection.
- Article 25 (similar to Article 8 of the TFA) addresses border agency cooperation.
- Article 26 (with no direct link to the TFA) addresses other measures to facilitate trade.
- Article 27 addresses the establishment of a Sub-Committee on Trade Facilitation, Customs Cooperation, and Transit.
- Article 28 addresses the establishment of National Committees on Trade Facilitation.
- Article 29 addresses implementation.
- Article 30 is a clause on dispute settlement.
- Article 31 provides for review and amendment.

3.1.3. Annex 5: Non-Tariff Barriers

Annex 5, on NTBs, provides for the following:

a) Institutional structures for the elimination of NTBs;

b) General categorization of NTBs;

c) Reporting and monitoring tools; and

d) Facilitation of resolution of identified NTBs.

Annex 5 also makes provision for a Sub-Committee on Non-Tariff Barriers, composed of duly designated representatives from State Parties. The main functions of the NTB Sub-Committee shall be:

a) The development of working procedures for the implementation of Annex 5 of the Trade in Goods Protocol;

b) Monitoring implementation and facilitating periodic reviews of the Annex and the NTBs mechanism to enhance the elimination of NTBs in the AfCFTA; and

c) Any other NTB-related activities.

Article 6 of Annex 5 provides for the establishment of an NTB Coordination Unit at the AfCFTA Secretariat and National Monitoring Committees and National Focal Points in each State Party.

The RECs are expected to establish or strengthen NTB monitoring mechanisms.

Appendix 1 of Annex 5 outlines the general categorization of potential sources of NTBs as follows:[11]

Table 1 NTB Classifications used by the AfCFTA

Parts & Sections	Descriptions
Part I	Government Participation in Trade and Restrictive Practices Tolerated by Governments • Government aids, including subsidies and tax benefits. • Restrictive practices tolerated by governments. • Other.
Part II	Customs and Administrative Entry Procedures • Customs valuation. • Customs classification. • Consular formalities and documentation. • Samples. • Rules of origin. • Customs formalities. • Import licensing. • Pre-shipment inspection and other formalities related to pre-shipment inspection. • Other.
Part III	Technical Barriers to Trade • Technical regulations and standards, including packaging. • Labelling and marking requirements. • Conformity assessments. • Certificate of Free Sale. • Other.
Part IV	Sanitary and Phytosanitary Measures • SPS measures including chemical residue limits, disease freedom, specified product treatment, etc. • Conformity assessments. • Other.
Part V	Specific Limitations • Embargoes and other restrictions of similar effect. • Quantitative imports and export restrictions or prohibitions. • Tariff quotas. • Other.
Part VI	Charges on Imports • Prior import deposits. • Surcharges, port taxes, statistical taxes, etc. • Credit restrictions. • Border tax adjustments. • Other.
Part VII	Other • Transport, Clearing and Forwarding.

Regarding reporting, monitoring and elimination arrangements, the AfCFTA has adopted the COMESA-EAC-SADC Tripartite Reporting Monitoring and Elimination Mechanism at the continental level to all intents and purposes. The AfCFTA Reporting, Monitoring, and Elimination Mechanism is shown in Figure 6, and the Mechanism, which is still under development can be found at https://tradebarriers.africa/.

[11] It may be noted that this classification closely follows the COMESA-EAC-SADC categorisation of NTBs.

Figure 6 Reporting an NTB under the AfCFTA RME Mechanism

The process to follow is the same as that of the COMESA-EAC-SADC NTB RME mechanism:

1) Go to https://tradebarriers.africa and choose a language.
2) Click on Login/Register => Register => fill in details and submit.
3) In the Email: Receive a confirmation email => click on the activation link in that email.
4) Go back to https://tradebarriers.africa => Login/Register => enter username/email and password => Login.
5) Click on "Report an NTB online" => fill out the form and provide as much detail as possible => Submit complaint.

3.2. Yamoussoukro Decision

African ministers responsible for civil aviation adopted the Yamoussoukro Decision which commits its 44 African signatory countries to deregulate air services and promote regional air markets open to transnational competition. It followed up on the Yamoussoukro Declaration of 1988, in which many of the same countries agreed to principles of air services liberalization. In 2000, the Decision was endorsed by the heads of states and governments at the Organisation of African Unity and became fully binding in 2002. Specifically, the Yamoussoukro Decision calls for, amongst other things:

- Full liberalization of intra-African air transport services in terms of access, capacity, frequency, and tariffs.

- Free exercise of first, second, third, fourth, and fifth freedom rights for passenger and freight air services by eligible airlines (These rights, granted by most international air service agreements, enable, among others, non-national carriers to land in a state and take on traffic coming from or destined for a third state).
- Liberalised tariffs and fair competition.
- Compliance with established ICAO safety standards and recommended practices.

Experience with liberalized air services elsewhere has also shown that liberalization may result in increased trade, both regional and intercontinental. Competitive air carriers with more frequent flights and lower fares can open the door to trade in perishables and high-tech manufacturers. However, implementation of the Yamoussoukro Decision has been poor, and the lack of the YD constitutes a trade and air transport barrier to African countries.

3.3. Digitalisation of Corridor Logistics

The approach to digitizing transport and transit logistics used by the Africa Union is to design a generic "SMART Corridor" where "SMART" stands for Safety, Mobility, Automated, Real-time Traffic Management. A SMART Corridor is defined as ***"A modal or multimodal surface transport corridor with quality infrastructure and logistic facilities, between two or more countries, used to carry intraregional and international cargo and passengers facilitated by the latest trade facilitation tools and conducive policies. The corridor includes innovative Intelligent Transport Systems (ITS) aimed at facilitating trade through simplification of transport administrative processes and providing real-time information to the key corridor stakeholders to monitor cargo clearance and movement."***

The SMART Corridor concept and its generic design were developed in a report entitled "Smart Corridor Definition and Characteristics"[12] prepared for the AUC by the NTU/LB Consortium in 2016, financed by the EU. The concept has been adopted in the Programme for Infrastructure Development in Africa (PIDA) and included in its Priority Action Programme (PAP) and was presented to, and adopted by, AUC stakeholders at the Validation Committee meeting held in Addis Ababa, Ethiopia 23-24 February 2016.

The characteristics of a SMART Corridor are as follows:

Cross-border Intelligent Transport Systems (ITS)

The ITS systems simplify the administrative procedures and logistics processes, monitor traffic movements along the corridor, and provide real-time information to stakeholders to enable them to manage the processes, as shown in Figure 7.

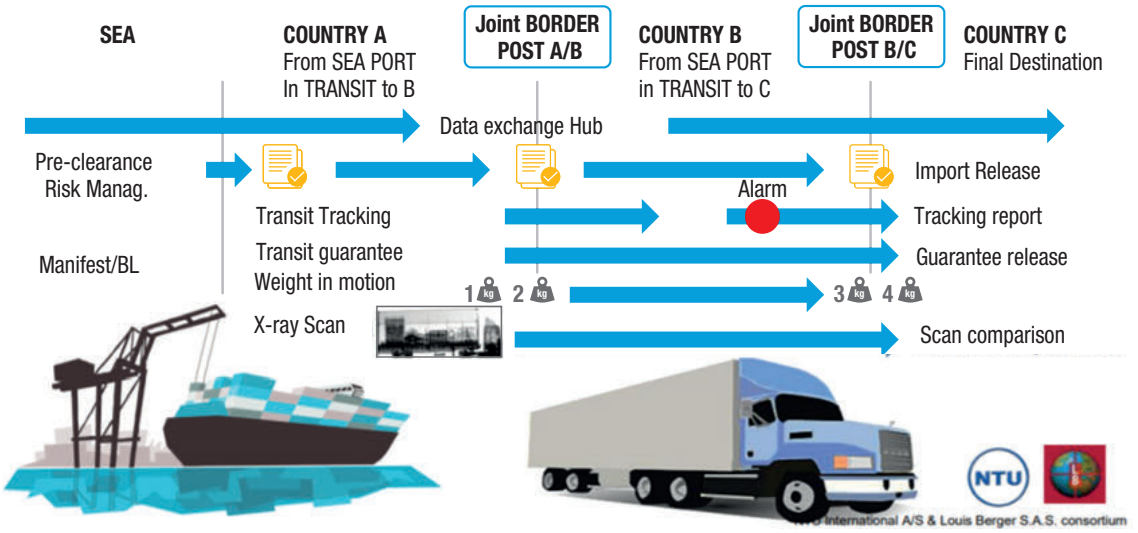
A SMART Corridor's key ITS components are computerized networks infrastructure, Electronic Data Interchange (EDI)[13] and software, including:

- Cross border Trade Community Data Hub (TCDH) and Electronic Data Interchange (EDI).
- Customs Management Systems (CMS) connected through the TCDH/regional network.
- Customs Risk Management Systems for cargo physical examination selection.
- Electronic payment systems between stakeholders' banks via the TCDH.

[12] https://au.int/sites/default/files/newsevents/workingdocuments/31372-wd-smart_corridor_definition_and_characteristics_5-7-16ff.pdf.

[13] Electronic Data Interchange (EDI) is the electronic interchange of business information using a standardised format; a process which allows one company to send information to another company electronically rather than with paper. This was the technology used at the time the AUC SMART Corridor study was done, in 2016. With the advent of the Internet of Things (IoT) it is more likely that different protocols will be used in rolling out SMART Corridors in 2021.

Figure 7 SMART Corridor ITS key Component Processes



- Real-time monitoring and tracking system for cargo and vehicle movements – GPS/GPRS tracking devices and electronic seals for all types of cargo transport vehicles.
- Corridor Coordination Entity (CCE) statistical performance monitoring and reporting system.
- Customs Transit Security Bond Guarantee monitoring software at the regional level.
- X-ray Cargo Scanners remote image analysis at destination for cargo examination.
- Weigh-in-motion weighbridges automated and interconnected to the TCDH.
- Electronic toll portal equipment on highways.
- Electronic application/delivery of authorizations/credential by government agencies.
- Traffic information/route status/alerts – data collection and report delivery to corridor users.

All individual systems should be connected to one central ITS system which allows all the stakeholders to access a given set of specified data while ensuring the confidentiality of information. Whenever necessary, corridor countries must issue appropriate regulations to recognize the use of electronic documents in their legal system for the ITS system to operate legally.

The operations of the ITS should be financially sustainable through the “users pay principle” while their overall impact shall be a reduction in trade and transport costs.

WTO/WCO Trade Facilitation Tools

The trade facilitation tools that are proposed for use on SMART Corridors include National Single Windows; Coordinated Border Management; One-Stop Border Posts; a common Customs declaration form – Single Administrative Document (SAD); customs procedures modernization and streamlining (e.g., pre-arrival clearance); and risk management-based procedures for Customs physical examination. These are generic recommendations and care should be taken to tailor each of these trade facilitation tools to the specific needs of the Corridor being designed.

REC Trade Facilitation Policies, Laws and Regulations

Smart Corridor countries should implement the agreed measures such as:

- Authorised size and axle load of vehicles.

- Liberalisation of the trucking industry.
- Vehicle and freight insurance laws and regulations.
- Regional Customs Transit Bond Guarantee regulations.
- Selection and control of vehicles authorized to operate along the corridors.
- Electronic Certificate of Rules of Origin.
- Standardisation and harmonization of processes, procedures, fees, taxes, etc.

Quality Transport Infrastructure

Smart Corridor countries should take measures to ensure the following:

- Quality of the design and layout of the transport infrastructure:
  - For road: width of the road lanes, bypass of key cities and villages, third climbing lane when the road rises by more than a 3 percent gradient, stop facilities such as provision for Roadside Stations/Truck Stops or One-Stop Inspections Centres mainly by the private sector.
  - For rail: gauges, size of crossing, private siding, etc.; rail capacity (quality of rail rolling stock i.e., locomotives, wagons, etc.).
  - For port: capacity (and equipment for short dwell time), loading and unloading container facilities, inland container depots (ICDs).
  - Intermodal facilities (and appropriate equipment).
- Quality of the maintenance of this infrastructure:
  - Contribution of the private sector through Public-Private Partnership (PPP).
  - Enabling financing mechanisms for maintaining and modernizing the transport infrastructure, etc.

Although not mentioned as part of the design of SMART Corridors, it would also be advisable to conform to the Ise-Shima Principles for Promoting Quality Infrastructure Investment[14] which has been adopted by the G7 countries and is as follows:

Principle 1

Ensuring effective governance, reliable operation and economic efficiency in view of life cycle cost and safety and resilience against natural disaster, terrorism and cyber-attack risks. Quality infrastructure investment should ensure effective governance, economic efficiency, sustainability and reliable operation during the life span of a project as well as safety and resilience against natural disaster, terrorism and cyber-attack risks.

Principle 2

Ensuring job creation, capacity building and transfer of expertise and know-how for local communities. Quality infrastructure investment should seek to contribute to job creation for local workforces and to transfer expertise and know-how to local communities.

Principle 3

Addressing social and environmental impacts. Quality infrastructure investment must consider the social and environmental impacts of infrastructure projects and duly address such impacts including by applying

[14] https://www.mofa.go.jp/files/000160272.pdf.

social and environmental safeguards that are in line with international best practices as reflected in the most relevant standards including those of existing Multilateral Development Banks (MDBs).

Principle 4

Ensuring alignment with economic and development strategies including aspects of climate change and environment at the national and regional levels. Quality infrastructure investment should be aligned with economic and development strategies at the national and regional levels, through dialogues with stakeholders during the project preparation and prioritization phases. Relevant elements of economic and development strategies to be considered include the development of a global supply chain through enhanced connectivity; use of the latest technology such as information and communication technology; promotion of private investment and attraction of new industries; medium and long-term plans based on a long-term and cross-sector demand forecast and other relevant information; and debt sustainability and fiscal outlook. Climate change resilience, energy security and sustainability, conservation of biodiversity, and disaster risk reduction should be considered including through the further promotion of ecosystem-based approaches and green infrastructure.

Principle 5

Enhancing effective resource mobilization, including through Public-Private Partnerships (PPPs). Quality infrastructure investment should effectively mobilize resources from the private sector through PPP and other forms of innovative financing, including MDBs. To this end, joint efforts among stakeholders including host country governments to strengthen the enabling investment environment at national and sub-national government levels and enhance due process and transparency are essential.

4

TRADE FACILITATION INSTRUMENTS USED ON AFRICAN TRANSPORT AND TRANSIT CORRIDORS

While customs administrations at the national, regional, and global levels are implementing various forms of trade facilitation at their borders, regional organisations are developing and implementing regional trade facilitation models to ease the movement of goods across national borders along transport corridors. In this regard, regional organizations, such as the Economic Community of West African States (ECOWAS), the Common Market of Eastern and Southern Africa (COMESA), and the East African Community (EAC), have made notable contributions.

4.1. COMESA Customs Transit Systems

The COMESA Customs Transit System is based on the COMESA Customs Management Regulations (COMESA CMR) designed to facilitate trade once the COMESA Customs Union takes effect. It is designed as a centralized system covering all trade into and out of the COMESA Customs Union.

The CMR is a detailed customs law covering all customs areas, including clearance procedures for intra-regional and extra-regional goods, customs controls and formalities, risk analysis and management, customs cooperation both at OSBPs and other customs facilities relationship between customs and third parties.

The CMR complies with the World Customs Organisation Revised Kyoto Convention (WCO RKC) and the WTO TFA. The COMESA CMR is not yet operational as the COMESA Customs Union is not yet in force.

COMESA has developed a transit management and regulatory system through a series of complementary trade facilitation initiatives operational within and beyond its member States. These are intended to improve the transport and communications systems of the region and reduce the cost of doing business. They include the following:[15]

COMESA Customs Management Regulations (CVTFS)

The CVTFS is an electronic trade facilitation initiative developed to monitor consignments along different regional transport corridors. It integrates other COMESA instruments on one online platform including: The Yellow Card (third-party motor vehicle insurance); Regional Customs Bond Guarantee System (RCTG); Transit Data Transfer Module; Carrier License for road freight operators; Harmonised Axle Load, and Gross Vehicle Mass Limits which includes the COMESA Certificate of Overload Control; and the Customs Declaration Document.

The CVTFS uses software designed to interpret all the information on the seal and transmit the container details, the vehicle details, and any other relevant details, to a centralized server that can be monitored from anywhere. The seal has a GPS modem that provides the location of goods' location, a GSM modem to transmit information to a central server, and a sensor to detect tampering. The device is fitted on a cargo container carrying the consignment.

CVTFS provides complete visibility in real-time of all tagged consignments from source to destination, making it an effective solution for cargo tracking management. The system is accessible to Customs authorities, freight forwarders, insurance companies, banks, port authorities, container freight stations and traders, to mention but a few.

The Regional Customs Transit Guarantee Scheme (RCTG-CARNET)

The COMESA Customs Transit Guarantee Scheme, popularly known as the RCTG-CARNET, is a customs transit regime designed to facilitate the movement of transit goods under Customs seals in the COMESA region. The RCTG Agreement was signed and ratified by twelve COMESA Member and non-Member States, namely: Burundi, Djibouti, DR Congo, Ethiopia, Madagascar, Malawi, Kenya, Rwanda, Sudan,

[15] *Source:* COMESA website (https://www.comesa.int/programme-activities-trade-facilitation); visited 13 January 2021.

Tanzania, Uganda, and Zimbabwe. Work on developing the modalities of operations and institutional arrangements was started in 2002. The implementation of the scheme commenced in 2012.

COMESA Carrier's License

The COMESA Carrier's License allows commercial goods' vehicles to be licensed with one regionally valid license so that the vehicles can operate in all Member States. With the carrier's license, vehicles can pick up back-loads in other countries, leading to more efficient use of the region's transport fleet and reduced costs. The license was introduced in 1991 and is currently in operation in 10 COMESA and one former COMESA country (Burundi, Ethiopia, Eritrea, Kenya, Malawi, Rwanda, Eswatini, Tanzania, Uganda, Zambia, and Zimbabwe).

The COMESA Yellow Card

The COMESA Yellow Card Insurance Scheme is a Regional Third-Party motor vehicle insurance scheme that provides third-party legal liability cover and compensation for medical expenses resulting from road traffic accidents caused by visiting motorists. The liability coverage offered under this scheme is limited to the statutory provisions on road traffic third party liability award limits of the country being visited and or in which an accident occurs. A Yellow Card issued in one COMESA Member State is valid in all other countries participating in the scheme.

The COMESA Yellow Card was established in 1986 after 14 countries signed the Protocol on the Establishment of the Third-Party Motor Vehicle Insurance Scheme in Addis Ababa, Ethiopia. The scheme is operational in 13 COMESA countries, namely Burundi, DR Congo, Djibouti, Eritrea, Ethiopia, Kenya, Malawi, Rwanda, Sudan, Uganda, Zambia, and Zimbabwe, and one non-COMESA country, namely Tanzania. The yellow card scheme is operational in these countries through over two hundred public and private insurance companies.

4.2. EAC Customs Transit System

The East Africa Community Transit System connects five customs systems (Kenya, Burundi, Tanzania, Uganda, Rwanda)[16] into a centralized customs platform. Each country's customs system operates independently but seamlessly connects to the central platform when required.

The centralized customs system has made export and import into the East African Community single market seamless and has reduced transaction costs. For example, exports from Rwanda are despatched through the Rwanda Revenue Authority system to Kenya, passing through Uganda as a transit country. All three countries are connected through the Centralised System and can track the consignment in real-time.

The Centralised System has facilitated the implementation of the single customs territory for the EAC countries. The system was first implemented along the Northern Corridor, and the following have been noted as its successes:[17]

- Time savings of up to 70% (reduced turnaround time).
- Single weighing for transit cargo.
- Single customs declaration for goods destined to Rwanda and Uganda.
- Reduced customs documentation and transaction costs (cost of doing business).
- Enhanced information exchange among Revenue Authorities.

[16] South Sudan and DR Congo are not yet connected to the Centralised Customs Platform.

[17] *Source:* vCargo Cloud Pte Ltd presentation to EAC countries.

4.3. Tripartite Transport and Transit Facilitation Programme (TTTFP)

While negotiating the Tripartite Free Trade Area encompassing initially twenty-six, later twenty-eight countries, of COMESA, EAC and SADC, Member States realized that the continued lack of an integrated and liberalized road transport market in the region presented several logistical challenges to intra- and extra-regional trade. These challenges led to delays in the delivery of goods and raised transaction costs for the region's business community. Other considerations arising from the lack of an integrated road transport network included limited road safety leading to massive costs in terms of loss of human life and property.

The Tripartite progressed towards achieving the African Economic Community goals in agreeing on establishing a Free Trade Area and agreed on the prioritization of infrastructure development in the region through their respective treaties and protocols as part of the comprehensive TTTFP. Hence, in 2012, the Tripartite developed a comprehensive transport and transit facilitation programme covering the 28 Tripartite countries and focussing on the Tripartite Vehicle Load Management Strategy: which seeks to address challenges in implementing harmonized road transport policies, laws, regulations, systems, and standards that affect drivers, loads, vehicles, and road infrastructure in the countries of the Tripartite region. Under this component, the Tripartite countries have signed a Vehicle Load Management Agreement (VLMA) that provides optimal locations of weighbridges throughout the region's road network and benchmarking weighbridge management systems within the Tripartite. In developing harmonized vehicle and driver regulations and standards, the Tripartite required, as a pre-condition, an operational Transport Register and Information Platform and System (TRIPS).

This would be realized through a Multilateral Cross Border Road Transport Agreement (MCBRTA) and a Vehicle Load Management Agreement (VLMA). Both have since been drafted and are under circulation for signature.

Vehicle Load Management Agreement

Roads are designed for a lifespan of a certain number of standard axle loads, with a standard axle load defined as a single axle with dual wheels with 80-kilo Newtons weight on the axle, which is roughly equivalent to 8.16 tons. Weight restrictions in the COMESA region, which have been adopted in the COMESA-EAC-SADC Tripartite region, are 8 tons on the driving axle and a single axle with dual wheels, 16 tons on a double-axle with dual wheels, and 24 tons on a triple-axle with dual wheels.

If a truck is overloaded, it makes it unsafe to drive as the tires, suspension, braking system and transmission are designed for a specific maximum load and not more than this. This means that the truck has more chance of tire blow-outs, has longer stopping distances, is less stable in motion, and has more chance of breaking down if run overloaded.

In addition, overloading a vehicle causes exponential damage to roads that are designed to carry vehicles with a standard axle load. If, for example, a 6-axle truck carries a load of 40 tons, which is, in effect, a standard load in Horn of Africa countries, this equates to an overloading of about 20 percent. A 20 percent overload will result in a percentage increase in damage to the road of 105 percent This means that a road that is designed to last for 20 years will be destroyed in 9.8 years and will need to be rebuilt entirely, from the sub-base up, in less than half the design life of the road.

Multilateral Cross Border Road Transport Agreement

The MCBRTA is a pillar of the Tripartite Transport and Transit Facilitation Programme and is signed by 21 Member States of the COMESA-EAC-SADC Tripartite, including Ethiopia, Djibouti, Eritrea, South Sudan, Sudan, Kenya, Tanzania, Uganda, Rwanda, Burundi and DR Congo. The following principles govern the MCBRTA:

a) Quality regulation is adopted as the basis for regional cross-border road transport regulation instead of quantity regulation;

b) The phased repealing, annulment and termination of measures to regulate the quantity of transport supplied will be applied, for the purpose of cross-border carriage of goods and passengers in their national policies and legislation;

c) Each Party grants permission to all other Parties for access to transportation in its territory by transport operators providing regional and defined international transport services who are registered in terms of the MCBRTA;

d) A harmonized and integrated Operator Registration System is established;

e) Standardised registration and fitness requirements of vehicles owned or operated by registered transport operators are to be implemented;

f) A standardized driver registration system will be established based on standardized driving license categories for professional drivers of heavy goods and passenger vehicles in the employ of registered transport operators;

g) A system will be created by which nationally registered transport operators will be issued with cross-border operator disks for vehicles to be used in cross-border road transport;

h) Uniform procedures for arrest warrants and prosecutions for offenses committed by foreign drivers will be implemented with a harmonized schedule of penalties and demerit points as sanctions in respect of administratively adjudicated violations to be enforced against transgressing transport operators and drivers;

i) An integrated transgression monitoring system will be established to record offenses and violations by transport operators;

j) The provisions of the MCBRTA shall not derogate from the application of the provisions of national laws and regulations imposing any restrictions and controls on the grounds of public health, road traffic, veterinary, Phyto or pathological reasons, or the dues chargeable by virtue of such laws and regulations of a Party.

The Implementation Framework (Article 18) of the MCBRTA commits the Parties to develop an implementation schedule and:

a) Within one year of signing the MCBRTA, designate the Competent Authority to liaise with the Tripartite Cross-Border Road Transport Commission (the Commission) in developing and introducing the TRIPS system in relation to cross-border road transport;

b) Within one year, establish an effective communication body between the Competent Authority and the domestic road freight and passenger operator associations regarding the TRIPS development process;

c) Within two years, remove all regulatory measures intended to limit or control the supply of transport of passengers and goods in cross-border road transport between the territories of the Parties;

d) Within two years, remove and terminate the requirement for specific permits for cross-border road transport by registered transport operators;

e) Within two years, introduce harmonised charges for all road traffic and transport transgressions, together with a demerit points system to enable consistent and equal treatment of domestic and foreign drivers and transport operators;

f) Within two years initiate the process of making such necessary changes to domestic legislation to introduce and support all elements of TRIPS and the related Operator Registration System, Transgression System and supporting National Transport Information System to provide computerized services for the administration of vehicle registration, roadworthiness testing, as well as driver and professional driver assessment and licensing;

g) Within four years, evaluate and, if so decided, provide for future permission of cabotage in their territories.

Under these agreements, additional work includes drafting model laws and regulations relating to Cross Border Road Transport Model Law, Road Traffic and Transport Transgressions Model Law, Vehicle Load Management Model Law, and Transport of Dangerous Goods by Road Model Law. Extensive consultations were undertaken in all Tripartite countries to sensitize stakeholders and ensure the draft model laws and regulations are well understood and there is adequate buy-in.

4.4. ECOWAS Transit System

West Africa Transport and Transit Facilitation Project

The West African Transport and Transit Facilitation Project, supported by the World Bank, was approved on 19th June 2008, for a cost of US$197.2 million, with an IDA credit of US$190 million. The project cost at completion was US$180.87 million, with US$173.5 million of the International Development Association (IDA) credit being used. The project was closed on June 30, 2015, with a delay of 15 months.

The objectives of the project were to:

a) Improve access by Burkina Faso and Mali to the ports in Ghana and port operations; and

b) Facilitate efficient traffic movement along the Tema-Ouagadougou-Bamako Road transport corridor.

These were to be achieved through the rehabilitation of key sections of the corridor, construction of a Satellite Transit Truck Village (STTV) parking facility near the Port of Tema, strengthening of the capacity of customs and transport authorities of the project countries to manage transit traffic along the Corridor, interconnection of the customs systems of the three countries, and introduction of a cargo tracking system for monitoring transit traffic on the Burkina Faso and Mali section of the Corridor.

The project closed in 2015 but valuable lessons have been learned that are applicable to the design of the Trade and Transport Facilitation Implementation Project, including:

- A regional approach to implementing road rehabilitation works along strategic corridors can enhance the benefits, particularly for the landlocked countries, by linking them to gateway ports. Project experience shows that carrying out road rehabilitation works simultaneously in all participating countries rather than separate single operations helps address the needs of the entire corridor in a timely and coordinated manner.
- It is important to have strong upstream analytical work and technical assistance for regional trade facilitation reforms so that countries can agree early on the technical details of institutional reforms. The project's experience shows that waiting until project implementation to sort out the technical details is risky, and this initiative failed. During the preparation stage and early years of project implementation, the World Bank and UEMOA facilitated coordination and collaboration between countries to discuss customs interconnection issues and cargo tracking systems. However, despite numerous meetings, no agreement was reached regarding which cargo tracking system technology should be adopted: Ghana continued using its separate tracking system; Mali piloted its in-house cargo tracking system; and Burkina Faso opted for a different system from Ghana and Mali. Similarly, the interconnection of the customs systems experienced problems in agreement regarding the configuration and format of data to be exchanged.
- When the projects involve Regional Economic Communities (REC), it is important to assess and cover RECs' funding needs for project coordination and implementation so that they can carry out this function effectively. Regional institutions perform important roles, such as:

bringing countries together, obtaining their political commitment, helping them take collective decisions, playing an advocacy role and performing monitoring and evaluation functions at the regional level.

ECOWAS Community Transit System

The Supplementary Act A/SA/.2/12/21 relating to the ECOWAS Community Transit was approved by the ECOWAS Heads of State and Government on 12 December 2021 and which repeals and replaces Convention A/P.4/5/82 relating to inter-state road transit of goods and Supplementary Convention A/SP.1/5/90 establishing a community guarantee mechanism for inter-state road transit of goods.

The stated objective of the Supplementary Act A/SA/.2/12/21 is to complete and provide further precision to the provisions of Articles 200 to 208 of the ECOWAS Customs Code to ensure the implementation of a functional, effective and efficient transit regime, by road and by rail, which contributes to the enhancement of economic competitiveness and revenue security of member States.

The Supplementary Act makes provision for:

- Freedom of transit through the territory of each member state.
- Full and unrestricted freedom of transit through each ECOWAS country for goods proceeding to or from a third country indirectly through that territory to or from other Member States.
- Transit not being subject to any discrimination, quantitative restrictions, duties or other charges.
- No fees or charges for transit except charges for administrative expenses related to transit or charges for services rendered.
- Movement of non-Community goods from one point to another within the customs territory of the Community without the goods being subject to: import duties and taxes; other charges, as provided for under other relevant provisions in force; and commercial policy measures insofar as they do not prohibit the entry or exit of goods into the customs territory of the Community.
- An automated community transit regime, applicable on transit corridors with automated customs clearance systems.
- Sharing of cargo information including information on Customs seals and identification marks, electronically in advance with the Customs offices en route as well as the office of destination.
- Use of an electronically generated unique identification number which is the movement reference number (MRN) that shall be recognized by all Customs administrations involved in the transit operation.
- A list of goods excluded from Community transit.
- Secure carriage of goods in transit, secured with a Customs seal.
- Security measures for goods in transit include a Customs Guarantee; Customs seals; Prescription of an itinerary and time limits; and a Customs convoy and escort, although Customs convoys and escorts are an exceptional measure and fees cannot be charged for the Customs escort or Customs convoy (Article 27).
- Goods carried under the Community transit procedure in sealed road vehicles, combinations of vehicles or containers shall not be subjected to any examination at Customs offices along the route, except in exceptional cases, when irregularity is suspected.

Once the transit goods are presented to the office of destination, the office of destination shall share the arrival record and the control results with the office of departure and all relevant Customs offices involved in the transit operation.

The transit procedure shall end, and the obligations of the holder shall be met when the goods placed under the procedure and the required documents are produced at the office of destination in accordance with the provisions of the procedure in question.

The Supplementary Act provides for, in Article 51, simplification measures that:

- designate authorized consignors, and allows them to place goods under the Community transit procedure without presenting them to customs;
- designate authorized consignees, and allows them to receive goods moved under the Community transit procedure at an authorized place,
- uses a comprehensive guarantee;
- uses seals of a special type, where sealing is required to ensure the identification of the goods placed under the Community transit procedure;
- uses a customs declaration with reduced data requirements to place goods under the Community transit procedure;
- uses an electronic transport document as a customs declaration to place goods under the Community transit procedure, provided it contains the particulars of such declaration and those particulars are available to the customs authorities at departure and at destination to allow the customs supervision of the goods and the discharge of the procedure.

The Supplementary Act also provides for Authorized Consignors and Authorized Consignees, who could be termed “trusted traders”, which gives them special privileges because they are trusted traders.

It should be noted that goods in transit are to comply with the axle load limits of the ECOWAS Supplementary Act/Sp.17/02/12.

The Supplementary Act also provides for a Community Guarantee Mechanism that makes the community guarantor responsible for guaranteeing the payment of duties, taxes and other charges incurred in the territory of the Member State where the conditions of the transit procedure are breached.

There have been some positive developments in the implementation of the Système Interconnecté de Gestion des Marchandises en transit (SIGMAT). The SIGMAT project, launched in March 2019, is one of the actions undertaken by ECOWAS to improve the flow of goods on road corridors by making information available to Customs offices in digital form on cargoes in transit from one state to another. It allows Customs offices in the country of departure of the transit consignment to send data about the consignment in real time to the Customs offices en route and the Customs office of destination. It also allows Customs offices en route to inform the office of departure that the vehicle and goods have passed through, and the office of destination can confirm the arrival of the vehicle and the acceptance of the cargo.

Implementation of the SIGMAT system has also improved coordination between ECOWAS, UEMOA and development partners in the process of developing a joint solution for road transit which could also be used for rail transport; and in the level of consultations with customs administration and a wide range of stakeholders, including small scale traders and women.

ECOWAS Axle load Limits

In the West Africa region vehicle overloading, meaning that vehicles carrying more that the specified axle weight of 11.5 tons, is common. However, efforts are being made to control and restrict overloading and to harmonize standards and procedures for the control of the dimension, weight and axle load of heavy goods vehicles in the Member States of ECOWAS, These efforts are summarized in a draft Supplementary Act introduced to amend Supplementary Act SP/17/02/12 in June 2022. This draft Supplementary Act takes into consideration:

- Conclusions of the report of the evaluation study conducted in 2021 on the implementation of the Supplementary Act SP.17/02/12 and its Regional Action Plan on ECOWAS Axle Load Control.

- Recommendations of Member States at the validation workshop of the axle load assessment study in Lomé, Togo, on 24 and 25 February 2022, for the urgent harmonization of ECOWAS Supplementary Act SA.17/02/12 and WAEMU Regulation 14 on axle load control.
- Recommendations of the ECOWAS-UEMOA Joint Technical Secretariat (JTS) meeting of 8th March 2019, requesting the two institutions to harmonize the ECOWAS Supplementary Act SP.17/02/12 and WAEMU Regulation 14 on axle load control.

The objective of the draft Supplementary Act is to harmonize amongst ECOWAS Member States, the standards on dimension, weight and axle load of heavy-duty goods transport vehicles, and the sanctions imposed for non-compliance with these standards.

This Supplementary Act complements and amends all the relevant ECOWAS Texts on Axle Load Control, in particular Convention A/P2/5/82 of 29 May 1982, Decision C/DEC/7/9 of 13 July 1991, and Council of Ministers Resolution 5/5/90 of 27 May 1990 and Supplementary Act SP.17/02/12. It applies to the dimensions, weights, axle loads and certain characteristics of heavy goods vehicles, with the characteristics specified in Annex 1 of the Supplementary Act.

Chapter II provides limits to the dimensions, weight and axle load of heavy goods transport vehicles.

Chapter III addresses measures to implement and control standards.

Chapter IV deals with the inspection of heavy-goods vehicles dimension, weight and axle load on platforms and along road corridors.

Chapter V deals with sanctions for non-compliance with dimensions, weight and axle load limits. The sanctions that are to be applied are designed so that the cost of running overloaded is more than the benefit a transporter will receive from delivery of the goods that constitute the overload. The means that the level of fine for overloading shall be determined in such a way that the amount applicable shall be at least equal to the income expected by a public transporter on the transportation of the cargo weight that constituted the overload. In this regard, account shall be taken of the average cost of heavy-duty transportation of a kilometre ton and the average transportation distances in respect of national and inter-State transport. Repeated breaches of the standards in respect of both dimension and load shall attract increased fines at rates determined in a Council Regulation.

Annex 1 addresses definitions relating to axle types. In annex 1 an oversized vehicle is a vehicle with a weight of more than 51 tons; an axle load of more than 13.5 tons per axle; a width of more than 2.9 meters; and a rigid length of more than 18.65 meters.

The maximum allowed vehicle dimensions, before the vehicle is classified as abnormal, are a width of 2.55m (2.60m for a temperature-controlled transport vehicle); 22m in length and 4.5m in height.

Annex 3 provides specifications for the design of axle load weighing stations, which have been adapted from Gambian Heavy Vehicle Size and Weight Regulations, 2019.

ECOWAS Brown Card Scheme

The ECOWAS Brown Card is a regional facilitation instrument for third-party liability insurance for motor vehicles conducting cross-border transportation of goods or passengers in West Africa. It eases the movement of persons transported in private and commercial vehicles by harmonizing policies that enable vehicles to enter and temporarily reside in a Member State for up to ninety and fifteen days respectively. The ECOWAS Brown Card.

Most ECOWAS Member States have instituted the ECOWAS Brown Card. The Brown Card and the ISRT play an important role in promoting the free movement of goods and people within the Community. The Brown Card has become one of the most important documents needed in crossing national borders with a motor vehicle in the ECOWAS region.

However, previous reports, publications and press releases from Brown Card regional organs and national participants and opinions gathered from sections of motorists and road users suggest that, despite efforts made, the scheme continues to be characterized by the following main inefficiencies:

- The delay in the handling and settlement of claims (payment of compensation to) from third liability victims of cross-border accident cases continues to be excessive.
- Long delays by the police in handling and reporting on accident cases involving visiting motorists, associated sometimes with discriminatory or abusive treatment by the police/judiciary (undue detention of drivers or impounding of vehicles, pressure for the direct financial settlement of victims outside the scheme provisions).
- Long timeline from the handling bureaus in instructing the police to release non-residents' motorists/vehicles involved in cross-border accidents.
- Disparities amongst countries in the timelines to settle claims, assessment methods, and the limit of the amount of the claim payable to road accident victims.
- Use of counterfeit Brown Cards by some visiting motorists thereby jeopardizing the right of their potential third liability victims to compensation under the scheme and preventing the handling of any case that may arise, according to the scheme's provisions.

4.5. One-Stop Border Posts

One important factor for evaluating the performance and determining the attractiveness of a transport corridor is the efficiency of border crossing points along a corridor. Transit-related controls along a corridor occur at three main control points: seaports or airports, land border crossing points between countries, and inland clearance facilities. Land border crossing points serve as nodes that link different points along a corridor and are vital for international trade. By facilitating international trade and cross-border movement of people, border crossing points contribute to national, regional, and global economies. The situation is particularly acute for landlocked countries in Africa, a continent where border delays and transport costs are among the highest in the world. In addition, depending on the level of interdependence, the social and economic welfare of people living in border communities is also affected by border operations.[18]

One approach to improving border operations is the establishment of One-Stop Border Posts (OSBPs).[19] In the 2000s the OSBP concept began to be applied across Africa. In 2004, the East African Community (EAC) together with the Northern Corridor Transit and Transport Coordination Authority (Northern Corridor) developed the East African Transport and Trade Facilitation Project, which, among other activities, called for the development of OSBPs in the region. OSBPs have since been opened at Malaba and Busia on the Kenya-Uganda border, Mirama Hills/Kagitumba border post between Uganda and Rwanda, Moyale between Kenya and Ethiopia, Nimule/Elegu border post between South Sudan and Uganda, Koberu/Kabanga border post between Burundi and Tanzania, Mutukula/Mutukula border post between Tanzania and Uganda, Taveta/Holili border post between Kenya and Tanzania Namanga on the Kenya-Tanzania border, Rusumo on the Rwanda-Tanzania border and at Nakonde/Tunduma on the border between Zambia and Tanzania.

[18] Excerpts from *One Stop Border Post Source Book Second Edition, 2016* available at https://www.tralac.org/documents/resources/african-union/1682-osbp-sourcebook-2nd-edition-may-2016/file.html.

[19] The OSBP legal and institutional framework, facilities, and associated procedures enable goods, people, and vehicles to stop in a single facility in which they undergo necessary controls following applicable regional and national laws to exit one state and enter the adjoining state without duplication of processes and waiting times.

In Southern Africa, the Chirundu OSBP between Zambia and Zimbabwe, considered to be the first fully functional OSBP in Africa, opened in 2009. Kazungula OSBP, between Zambia and Botswana opened in 2021.

In West Africa, OSBPs are referred to as Joint Border Posts, or JBPs, but the process of establishing JBPs in West Africa has been much slower and more difficult than the establishment of OSBPs in Eastern and Southern Africa.

In West Africa, despite the high costs, intra-regional trade constitutes an important proportion of the sub-region's total trade (13.2 percent). Any improvement in removing administrative bottlenecks will reduce trade transaction costs, enhance export competitiveness, and increase intra-regional trade. For these reasons ECOWAS and UMEOA have embarked on a program to design and implement Joint Border Posts along the main transport and transit corridors.

A Joint Border Post is a one-stop form of border crossing point jointly managed by the two neighboring countries. Activities are streamlined to maximize efficiency by reducing bottlenecks and avoiding duplication of clearance procedures at borders for people and goods. JBPs are expected to assist the ECOWAS/UEMOA region in addressing the following challenges:

- Eliminate the redundant and lengthy customs and other required control procedures (immigration, sanitary and phytosanitary, veterinary, etc.) of passengers and vehicles, the handling/inspection of freight/livestock and ensure compliance of these procedures with the protocol on the free movement of persons and goods and relevant international conventions.
- Lack or poor co-operation and coordination amongst customs and other border control agencies within and across borders.
- Lack of, or weak coordination and poor information sharing between agencies operating along the corridor and those located at the border.
- Reluctance to share data and intelligence and foster collaboration amongst border agencies in combatting fraud, human trafficking, and illegal migrants.

The management of the JBP is assumed to ensure better trade facilitation through a "one-stop" customs/official procedure check, simplify customs and other required controls procedures, improve cooperation, and coordinated controls, encourage the sharing of data and intelligence, and set up the fight against fraud.

In designing JBPs there is a need to ensure that coordinated border management systems are in place and functioning. The WCO uses the term Coordinated Border Management to give prominence to the principle of coordination of policies, programs and delivery outcomes while avoiding the perception of favoring a single system. Emphasis is put on the pillars relating to domestic (intra-service co-operation and inter-agency co-operation) and international co-operation).

The main instrument governing the establishment and operation of Joint Border Posts at Community borders is the ECOWAS Supplementary Act/SA.1/07/13 of 2013 relating to establishing JBPs in the ECOWAS Member States. This was supplemented by bilateral agreements amongst the pairs of countries concerned. The ECOWAS JBP Program is a key component of the 2003 Regional Road Transport and Transit Transport Facilitation Program supporting intra-community trade and cross-border movements adopted through Decision A/DEC.13/01/03 dated 31st January 2003 in Dakar by the Heads of State and Governments.

The ECOWAS Commission and the Member States have co-responsibility to implement JBPs legislation. In that respect, Article 49 of the Act bestows upon the Commission oversight functions to coordinate, monitor, and manage the development, construction, equipment, and operationalization of JBPs. Alongside the Commission's responsibility, Member States have responsibility for operating procedures outlined in an Operating Manual of Procedures. However, the provision does not clearly mention whether the Member States or the Commission should initiate the operating manual of procedures.

ECOWAS and UEMOA have identified locations for seven JBPs, with the ECOWAS JBPs located mainly on the Abidjan-Lagos Corridor and UEMOA JBPs located mostly on the North-South (vertical) corridors linking the region's landlocked countries to their neighboring coastal ones.

Three JBPs have been completed at the borders of Ghana/Togo (Noepe), Benin/Niger (Malanville) and Nigeria/Benin (Seme-Krake). A further three are ongoing at the borders of Cameroon/Nigeria (Mfum), Cote d'Ivoire/Liberia (Prollo), and Cote d'Ivoire/Guinea (Gbapleu). The construction of the ECOWAS and UEMOA JBPs has been mostly funded by the European Development Fund, with other support from bilateral Development Partners. This pattern (exclusively donor-funded) has not proved to be optimal in terms of access to funding and coordination of interventions.

There has been excessive time taken between the opening and the commissioning of the JBPs. For example, the Noepe/Akanu border post was started on 3rd November 2014 and was commissioned in October 2018. There needs to be a trial period before the JBP can become fully operational, even after opening. This means that the period from the project's launch to its full operational status is about five years, and the initial design and equipment used may no longer be suitable to address the current requirements.

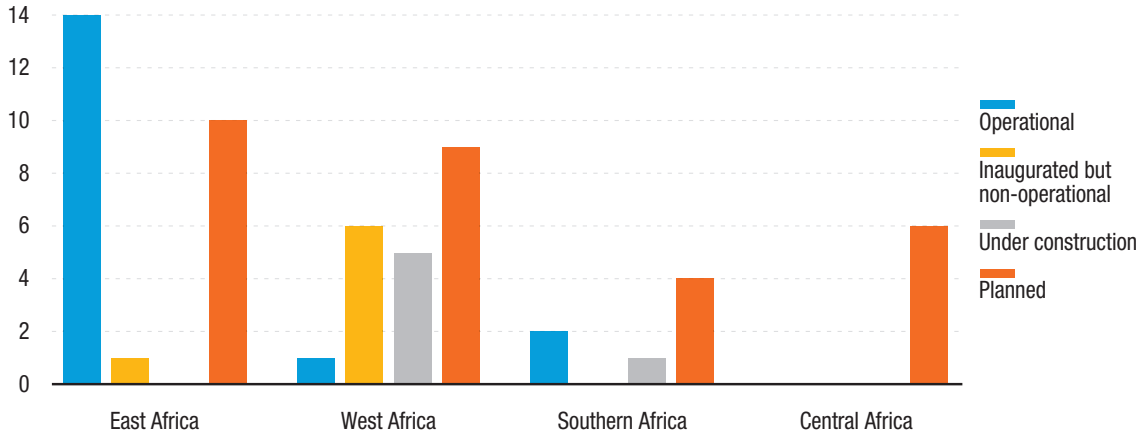
The Transport Facilitation Program 1 under the 9th EDF has, among other activities, financed the construction of several JBPs, including the Malanville JBP between Niger and Benin, with the management of the project entrusted to UEMOA. The JBP, built on 9ha, is located north of Malanville shortly before the bridge over the Niger River. The river forms the natural border between the two countries. The JBP is therefore built on Beninese territory and is fully fenced.

The State Agencies of both countries are located at border post but not all border operations take place there, as each of the two countries continue to conduct clearance operations in their own territories.

According to tralac,[20] in 2017 over 80 OSBPs were planned and implemented in various parts of Africa but not all OSBPs these OSBPs are actually being built and not all the OSBPs that have been constructed are functioning as OSBPs.

For an OSBP to be fully functional a very high degree of cooperation between the Customs of each country the OSBP services, and a very high degree of cooperation between national border agencies is required. In addition, border processes need to be digitized and the digital systems need to be integrated.

Figure 8 Level of Implementation of Trade Facilitation instruments in African Sub-Regions



Source: Corridors without Borders in West Africa.[24]

[20] https://www.tralac.org/news/article/11453-one-stop-border-post-osbp-sourcebook-2nd-edition.html.

[21] https://documents1.worldbank.org/curated/en/585581637328017410/pdf/Corridors-without-Borders-in-West-Africa.pdf.

Finally, all border agencies require well-trained staff for it to operate effectively and efficiently. Not many sub-Saharan African countries that have constructed OSBPs can meet these pre-requisites and it is probably true to say that OSBPs have, in general, not delivered the expected level of trade facilitation benefits, although most likely the OSBPs have led to some facilitation improvements.

4.6. Trade Information Portals

A trade information portal (TIP) is an interactive website dedicated to enabling trade to and from the country, by offering a 'one-stop shop' for all relevant trade information, such as: Directory of major importers and exporters, governmental trade agencies and trade-related entities and chambers; General documentary and regulatory requirements; Specific requirements by product category, such as procedures, SPS and TBT requirements; and Market intelligence and opportunities.

Over the past few years African countries have established trade information/intelligence portals to facilitate trade through transparency and sharing of information.

According to a tralac Trade Brief of July 2019, authored by John Stewart,[22] the main areas of common deficiency in African trade information portals (TIPs) are the absence of social media integration and a lack of market intelligence and information on market opportunities. On the other hand, most of the TIPs comply well with language options, a repository of documentation and trade sector highlighting. Funding and technical assistance seem to be the main determinants to success in developing and maintaining a successful TIP in Africa. The author evaluated the TIPs for Zimbabwe, Mauritius, Rwanda, Uganda, Tanzania, Cameroon, Kenya, Botswana, and Lesotho and ranked them according to the ITC Guide. Zimbabwe and Mauritius, respectively, were ranked two highest of the nine countries assessed, mainly because these two countries provided "trade intelligence" as opposed to "trade information" and had links to a host of useful smart tools.

4.7. Port Community Systems

Most major ports have systems for exchanging information between clients and national Customs and other authorities, referred to as port community systems, which are a form of Single Windows for Trade and are similar to Airport Community Systems.

A Port Community System handles electronic communication in ports between the private transport operators (shipping lines, agents, freight forwarders, stevedores, terminals, depots), the private hinterland (pre- and on-carriage by road, rail, and inland waterways), the importers and exporters, the port authorities, Customs and other authorities.

Typical services of a Port Community System are:

- Information exchange between transport operators in the port and for hinterland connections, the port users, Customs, port, and other authorities.
- Electronic exchange of Customs declarations and Customs responses, and cargo releases between private parties and Customs.
- Electronic handling of all information regarding import and export of containerized, general, and bulk cargo for the port community.
- Status information and control, tracking and tracing goods through the whole logistics chain.
- Processing declarations of dangerous goods with the responsible authorities.

One of the most useful functions of a Port Community System is to automatically derive, from information exchanges between the private port operators, that information needed by Customs, such as the

[22] Initial Assessments of Africa's New Trade Information Portals. https://www.tralac.org/documents/publications/trade-briefs/tb2019/2957-s19tb082019-stuart-initial-assessments-of-africas-new-trade-information-portals-31072019/file.html.

Customs manifest. This information can then be sent to Customs without further manual intervention. Most Port Community Systems have their own internal standards but communicate with other Port Community Systems or Trade Communities using international standards, in particular those developed by UNECE-UN/CEFACT.

4.8. Corridor Management Authorities

Most African Regional Economic Communities (RECs) promote trade and transit facilitation by establishing multimodal transport and transit corridors, usually using road and sea transport. These corridors merge activities to improve infrastructure and trade and transit facilitation measures.

Infrastructure improvements include improvements at ports (such as constructing new berths and installation of equipment to allow the port to function efficiently), border posts (such as the construction of, often, one-stop border post facilities and equipment to enable them to function as OSBPs, such as shared digital weighbridges and scanning equipment); and roads (usually full reconstruction of failed sections of road that make up the corridor or building of new bridges).

The trade and transit facilitation measures that are promoted can be summarised as promoting the Trade Facilitation Agreement Articles that relate to Article V (Freedom of Transit) and Article VIII (Fees and Formalities connected with Importation and Exportation) of the General Agreement on Tariffs and Trade (GATT), these being Articles 6-11 and Article 12 (Customs Cooperation – which relates to Articles V, VIII and X of GATT).[23]

Figure 9 shows the main transport and transit corridors in West Africa and Figure 10 shows the main transportation and transit corridors in Eastern and Southern Africa.

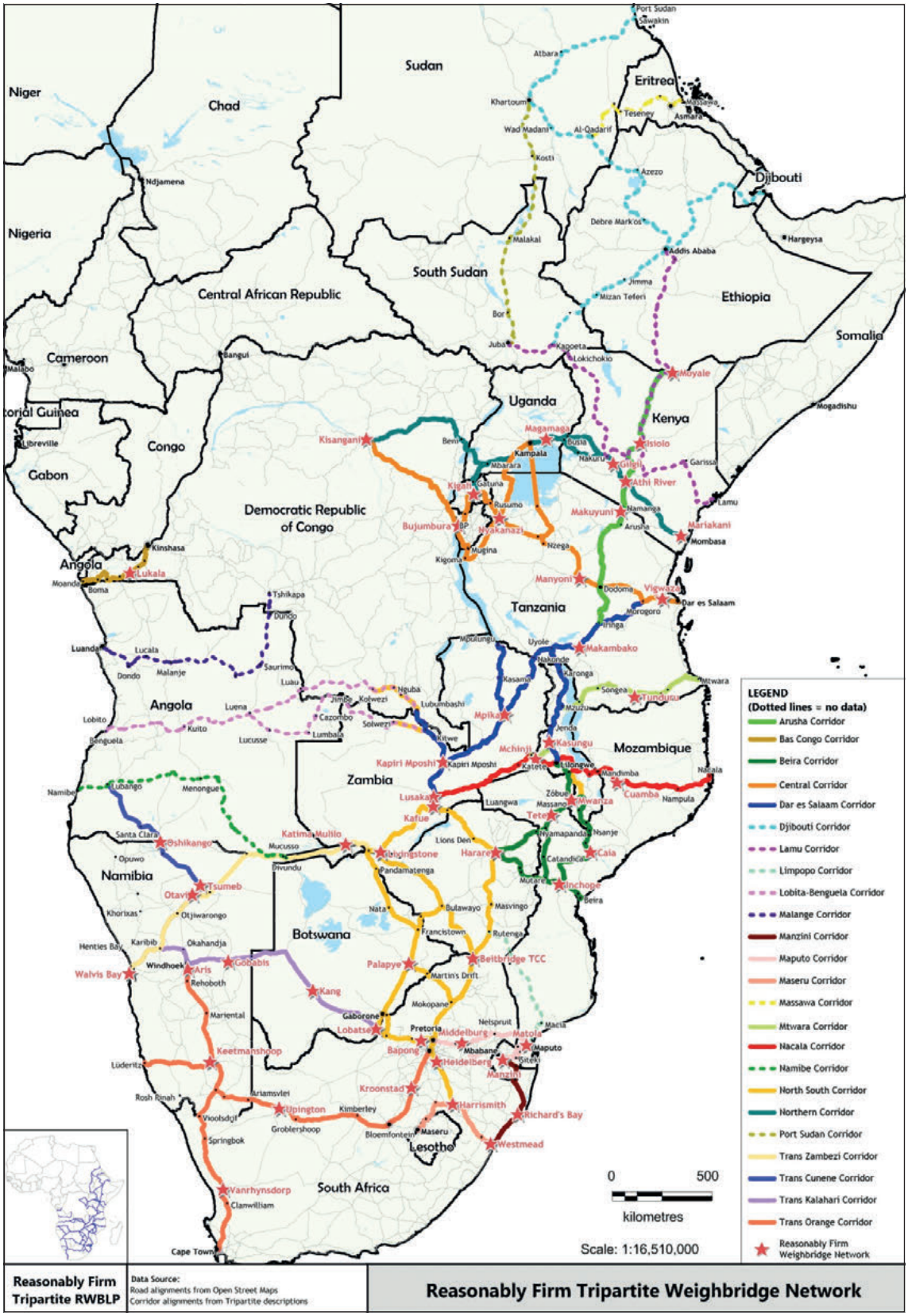
Figure 9 Map of the Main Transport and Transit Corridors in West Africa

Source: SSATP.[27]

[23] There are 12 Articles in Section I of the TFA and all relate to implementation of Article V (Freedom of Transit), Article VIII (Fees and Formalities connected with Importation and Exportation) and Article X (Publication and Administration of Trade Regulations).

[24] Logistics Cost Study of Transport Corridors in Central and West Africa. SSATP. Nathan Associates 2013. https://www.ssatp.org/sites/ssatp/files/publications/SSATP_Logistics_Cost_Study_Complete%20with%20annexes%20Final%20September%202013.pdf.

Figure 10 Map of the Main Transport and Transit Corridors in Eastern and Southern Africa



Because there are multiple transport and transit corridors in each region of Africa, although more in the eastern and southern half of sub-Saharan Africa than in the western half of Africa, there is more than one corridor in each region covered by each REC, in addition, not all corridors service the needs of all REC members. Therefore, although transport and transit corridors are an important component of regional integration, they are usually managed through corridor management authorities (CMAs) rather than through RECs, although, in most cases, the appropriate RECs have an oversight role for the CMAs.

In Africa, there are two main structures for corridor management authorities, these being:

- CMAs that are established through government-to-government agreements. These are by far the most common type of CMA in Africa. The structure of such a CMA is usually a council of ministers from the countries' corridor services, with a Senior officials committee below the council and sector-level technical committees below that. A secretariat usually services the CMA structure. The whole structure, at least in the African context, is usually heavily dependent on support from international cooperating partners.

  An example of this corridor type is the Northern Corridor in East Africa. The Northern Corridor is a multimodal trade route linking the landlocked countries of the Great Lakes Region with the Kenyan maritime seaport of Mombasa. The Northern Corridor Transit and Transport Agreement (NCTTA) is a treaty coupled with 11 protocols signed in 1985 and revised in 2007 for regional cooperation with a view of facilitating interstate and transit trade, between the Member States of Burundi, Democratic Republic of Congo, Kenya, Rwanda, and Uganda. South Sudan acceded to the Agreement in 2012.

  The NCTTA is a comprehensive agreement with defined 11 Protocols on strategic areas for regional cooperation relating to: Maritime Port Facilities, Routes and Facilities, Customs Controls and Operations, Documentation and Procedures, Transport of Goods by Rail, Transport of Goods by Road, Inland Waterways Transport of Goods, Transport by Pipeline, Multimodal Transport of Goods, Handling of Dangerous Goods and Measures of Facilitation for Transit Agencies, Traders and Employees.

  The objectives of the agreement are based on three pillars of sustainable transport namely the economic pillar aiming at promoting efficient and competitive transport; the social pillar with the view to fostering inclusive transport and the environmental pillar for green freight transport.

  The Northern Corridor Transit and Transport Coordination Authority (NCTTCA) was established and mandated to oversee the agreement's implementation, monitor its performance, transform the Northern trade route into an economic development corridor, and make the corridor a seamless, efficient, intelligent and green.

- Private sector initiatives, with the Maputo Corridor Logistics Initiative (MCLI) being the outstanding example. The Maputo Corridor is a transport corridor linking the east coast port of Maputo in Mozambique with the highly industrialized and productive regions of the Gauteng province in South Africa. The key elements of the corridor are the N4 toll road, the rail corridor, the Lebombo/ Ressano Garcia border post and the port and terminal facilities at the Port of Maputo. In the absence of an institutional framework, MCLI was established in 2004 by users, infrastructure investors, cargo owners and service providers looking for logistics solutions on the corridor.

  At its peak, MCLI had about 170 members and successfully improved the Maputo Corridor logistics by assisting with the brokering of the N4 Trans Africa Concession, one of the most successful bilateral road infrastructure PPPs on the continent; a port concession at Maputo port and investments in port equipment and infrastructure; and rehabilitation of the railway line.

  A major failure of MCLI was its inability to broker improved services at the border between South Africa and Mozambique. This stemmed from the inability of MCLI, as a purely private sector association, to influence government policy and, more importantly, to influence public sector administration and processes. This disconnect was the main cause of the closure of MCLI, because of the excellent political will at the executive level and the capacity for implementation at the administrative level.

Table 2 provides a summary of profiles of Corridor Management Authorities in Africa.

Table 2 Profiles of Corridor Management Bodies of Africa

No	Name of Corridor Management Body	Member States	Corridor Management Body		Key Roles	Major Success/Failure Stories
			Governing Body	Composition		
1	Northern Corridor Transit and Transport Coordination Authority	Burundi DR Congo Kenya Rwanda Uganda South Sudan	Council of Ministers	Ministers are responsible for transportation matters in each contracting State	Policy direction	• Enhanced cooperation among the Member States. • Elimination of multiple security bonds and multiple customs declarations. • Creation of the implementing institutions in the Member States such as Road Authorities, Road Maintenance Funds, National Road Safety Authorities, Revenue Authorities, etc. • Interfacing of Customs Systems and joint verification of multiple Customs documents. • Reduction of roads, police, and customs roadblocks. • Introduction of High Speed- Weigh-In-Motion Systems to reduce multiple weighbridges along the Corridor. • Decongestion of Mombasa Port by streamlining and automating the procedures and operations. • Domestication of some RECs policies such as the implementation and effective monitoring of EAC Vehicle Load Control (VLC) and some COMESA Trade Facilitation Instruments. • Harmonization of National Customs Laws and Instruments. • Mobilization of funding for rehabilitation of major highways. • Advocacy for adequate border infrastructures such as One-Stop Posts and related facilities to minimize Customs procedures and transit times. • Improved planning and decision-making on transport and trade facilitation issues in the Member States. • Effective Monitoring System through Transport Observatory and Dashboard.
			Executive Committee	Inter-governmental committee. Permanent Secretaries or equivalents	Responsible for initiating general principles and policies governing the Secretariat	
			Transport Policy and Planning Committee	Technical staff from the countries' civil service members of the NCTTCA	Each Committee has its own specialized work plan	
			Customs and Transit Facilitation Committee			
			Infrastructure Dev and Management Committee			
			Private Sector Investment Promotion Committee			
			Public-Private Partnership Committee	Public and private sector stakeholders dealing with trade and transport	Identifying challenges faced by stakeholders and proposing solutions	

No	Name of Corridor Management Body	Member States	Corridor Management Body		Key Roles	Major Success/Failure Stories
			Governing Body	Composition		
3	Dar es Salaam Corridor	Tanzania Zambia Malawi	The World Bank supports the Secretariat and all the activities of the Secretariat			• Providing coordination platforms to corridor participants. • Reducing cargo and truck turn-around times. • Reduction of storage and demurrage charges. • Provide relevant performance benchmarks to all stakeholder categories. • Support improved decision-making through cause-effect analysis.
4	North-South Corridor	South Africa Zimbabwe Botswana Zambia DR Congo	The North-South Corridor, in terms of traffic, and value of the cargo, is the busiest in Africa. Numerous attempts have been made to establish the North-South Management Authority. The Authority would harmonize trade and transport facilitation regulations and mechanisms and monitor the condition of infrastructure as well as the performance of the corridor in terms of time taken and costs. However, South Africa has consistently blocked the establishment of a Corridor Management Authority and so no CMA exists.			
5	Abidjan Lagos Corridor	Benin Ghana Ivory Coast Nigeria Togo	The Abidjan-Lagos Trade and Transport Facilitation Project (ALTTFP) was initially initiated by the World Bank and the Corridor's five member countries. ALTTFP focussed on four main components: Trade Facilitation, Improvement of the road infrastructure, project management/coordination and the HIV/AIDS Programme and Corridor Performance monitoring and evaluation.			
6	Maputo Corridor Logistics Initiative	South Africa Mozambique Eswatini	The Maputo Development Corridor (MDC) was launched as a Spatial Development Initiative (SDI) in 1996 as the governments of South Africa and Mozambique sought to rebuild their economies and restore trade and investment ties. Both governments agreed on the enormous potential benefits of rehabilitating the key elements of this vital strategic transport corridor which links the Port of Maputo with Johannesburg. The Maputo Corridor Logistics Initiative (MCLI) was a non-profit organisation that brought together infrastructure investors, service providers, and stakeholders from Mozambique, South Africa and Eswatini who had a common interest in promoting and furthering the development of the MDC as the region's primary logistics transportation route. It closed in February 2019.			

Table 2 Profiles of Corridor Management Bodies of Africa *(cont.)*

No	Name of Corridor Management Body	Member States	Corridor Management Body		Key Roles	Major Success/Failure Stories
			Governing Body	Composition		
2	Central Corridor Transit Transport Facilitation Agency (CCTTFA)	Burundi DR Congo Rwanda Tanzania Uganda	The Interstate Council of Ministers	Ministers of Transport from the Partner States, meet once a year	Responsible for coordinating policy issues of TTFA	• Enhanced cooperation among the Member States. • Reduction of roads, police, and customs roadblocks. • Improved planning and decision-making on transport and trade facilitation issues in the Member States. • Effective Monitoring System through Transport Observatory and Dashboard.
			Executive Board	Permanent Secretaries from the Ministries of Transport and one Private Sector representative (Public & Private sectors). Meets twice a year	Formulates general principles and policies to govern TTFA	
			Stakeholder's Consultative Committee (STACON)	Meets twice a year but may meet more regularly at the request of a member	Provides feedback on projects and activities	
			Stakeholder's Representative Group (STAREP)	Established by STACON to oversee its affairs between meetings	Develops targets and monitors performance	
			Permanent Secretariat	Technical facilitation, organizational and logistical services. Technical advice to the governing organs. Collecting data on the corridor operations	Responsible for implementing decisions and resolutions of the Interstate Council of Ministers and Executive Board	

5

LESSONS FROM REGIONAL TRANSPORT AND TRANSIT SYSTEMS

African countries have been liberalizing trade and establishing Free Trade Areas at the regional level. This is the case for COMESA, EAC, SADC and ECOWAS. This has now been replicated with the African Continental Free Trade Area at the continental level.

Trade in Africa is highly dependent on a good transport network and accompanying simplified transit procedures, processes, and documentation. FTAs, be at the regional or continental level, are unlikely to post meaningful benefits for citizens unless the transport and transit systems are adequately addressed.

Hence, the corridor approach taken by Regional Economic Communities and the African Union to develop both transport networks and improve the transit systems holds the key to successful free trade areas.

Transit systems implemented across all regions have recorded mixed results. For COMESA, the Yellow Card, the CVTFS and regional bond guarantee systems may present important lessons for the AfCFTA. SADC has done well in document simplification through the SADC Single Administrative Document (SAD). The EAC has developed truck/cargo tracking and monitoring systems that ensure goods are offloaded where they are intended and declared to be. ECOWAS has gained experience with security, revenue guarantee and transit facilitation across the region.

The AfCFTA has also adopted most of the trade simplification measures and systems already in operation at the regional level, and so the learning curve and implementation of free trade at the continental level should be much easier and smoother at the continental level.[25]

5.1. Trade and Transit Facilitation Measures

The scope of the guidelines for a cross-border transit system offered in the World Customs Organisation's *Transit Handbook to Establish Effective Transit Schemes for LLDCs*[26] include the following:[27]

a) **Legal framework:** Governments should conclude/accede to, and implement, existing bilateral, regional and international agreements/arrangements with other governments to provide a framework for cooperation on transit. For sub-Saharan Africa, as well as the international legal frameworks, such as the TFA and RKC, regional agreements and arrangements that should be taken into account, depending on the country and region, are:

- ECOWAS Community Transit System.
- The Economic and Monetary Community of Central Africa (CEMAC) Framework for Multimodal Transport Operations.
- Central Corridor Transit Transport Facilitation Agency Agreement.
- COMESA-EAC-SADC Tripartite Transport and Transit Facilitation Programme.
- Recommendation No. 02/2002/CM/UEMOA on the Simplification and Harmonization of the Administrative Procedures and Port Transit within the West African Economic and Monetary Union (UEMOA).

b) **ITC and effective information sharing** – to enable border agencies of each country to prepare for and process goods in transit faster and more effectively, reducing transaction costs for the traders, transporters, and border agencies themselves;

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[25] UNCTAD has also developed a webtool to remove trade barriers in Africa. The tool, tradebarriers.africa, will help African governments monitor and eliminate such barriers, which slow the movement of goods and cost importers and exporters in the region billions annually.

[26] http://www.wcoomd.org/-/media/wco/public/global/pdf/topics/key-issues/ecp/2015/transit-handbook-for-upload-en.pdf?la=en.

[27] There is some overlap with recommendations on what to include as trade facilitation measures, but it was decided to include the full suite of transit facilitation measures as listed in the WCO handbook, with the understanding that when a specific programme is developed for a specific region the duplications will be removed.

c) **Guarantee system** – implementation and use of a well-functioning guarantee-system speeds up transit operations and allays the revenue concerns of transit countries;

d) **Simplification of Customs formalities** – simplification of Customs formalities, including accepting electronic copies of transport documents and advance declaration of manifests;

e) **Implementation of an AEO system** – design and introduction of an Authorised Economic Operator (AEO) program as part of the risk management process for transit operators who maintain high compliance;

f) **Customs seals and other security measures** – use of Customs seals and fastenings, affixed to the goods and the transport unit. Customs may allow flexible and facilitative measures, such as acceptance of special seals affixed by transit operators;

g) **Coordinated Border Management** – transit operations inevitably involve various regulatory requirements imposed by government agencies other than Customs. Transit goods are stacked up at the border without cooperation and coordination between the relevant government agencies;

h) **Advanced Ruling system** – In an Advanced Ruling system: Customs shall provide a written ruling on the request of a trader concerning the tariff classification or origin of his goods; the ruling shall be binding on Customs and remain valid for a reasonable period of time; a trader shall have rights to be notified if Customs takes certain actions adverse to his interests (such as a refusal to issue a ruling or a decision to revoke or modify a ruling); and Customs must publish certain information about the ruling process;

i) **Pre-arrival processing system** – traders shall be permitted to submit the import documentation and other information required for the release of imported goods, in electronic format where appropriate, prior to the arrival of the goods in order to expedite the release;

j) **Electronic payments accepted** – Countries should allow electronic payment of duties, taxes, fees and charges;

k) **Separation of release from Final Determination of Customs Duties, Taxes, Fees and Charges** – Customs of the countries concerned shall allow importers to obtain the release of their goods, under a guarantee, if required, prior to the final determination and payment of customs duties, taxes, fees and charges where the final determination is not done prior to, upon arrival or as rapidly as possible after arrival. Any required guarantee shall be limited in amount to the equivalent of duties, taxes, fees and charges to which the goods may be liable, as determined by Customs. If the importer commits an offence, Customs may require a guarantee for the potential fine or penalty as a condition for release of the goods (however, release of goods in cases of violations of law or fraud shall be determined by each country's law). Customs shall discharge the guarantee without delay when no longer required for its intended purposes/when all requirements have been met;

l) **Post-clearance audit system** – allows for Customs verification of compliance with Customs and related laws and regulations through examination of the trader's books and records at his premises following the release of the goods;

m) **Priority release of perishable goods** – Countries should adopt or maintain procedures for the importation of perishable goods that allow release within the shortest possible time; provide for release, where appropriate, outside Customs normal business hours; give priority to such goods when scheduling examinations; allow such goods to be stored in appropriate conditions for their conservation, where facilities approved by the relevant authorities are available; where practicable, and upon request, allow the release to occur at these storage facilities; and require Customs to give a written explanation to the importer, on request, when there is a significant delay in the release of the goods.

5.2. Non-Tariff Barrier Reporting System

Non-tariff barriers (NTBs) and non-tariff measures (NTMs), in the form of roadblocks for document checks, cargo inspection and verification, vehicle inspection for roadworthiness, confirmation of payment of toll fees where applicable, an inspection of drivers' license and its class, confirmation of weigh-bridge reports and receipts, and a myriad of police, local authorities, immigration and checks by other agencies, are a significant barrier to intra-regional trade.

The COMESA-EAC-SADC Tripartite NTB Removal, Monitoring and Elimination (RME) system[28] enables stakeholders to report and monitor the resolution of barriers encountered as they conduct their business in the COMESA, EAC and SADC regions. It enhances transparency and easy follow-up of reported and identified NTBs and NTMs. This web based NTBs reporting, monitoring and eliminating mechanism are accessible to economic operators, government functionaries, academic researchers and other interested parties.

The AfCFTA has adopted this system and the recommendation is for it to be rolled out in all African RECs.

5.3. Implementation of Trade and Transit Facilitation Measures

The generic approach to trade facilitation implementation is a simplified mapping and description of how to plan for trade facilitation reforms and to monitor their challenges. It was developed using the experience of trade facilitation implementers from different areas of expertise within UN/CEFACT.

The approach consists of a sequence of steps that policymakers and managers need to take in formulating and implementing trade facilitation initiatives. Such steps range from assessing performance in trading goods and services across borders, to following up on the impact of the reform and the achievement of its objectives. As it is a generic model, adaptation to a specific country or organisational context, needs and capacities are necessary.

Figure 11 Trade Facilitation Implementation - Steps of the Generic Approach

Source: UNECE Trade Facilitation Implementation Guide (https://tfig.unece.org/contents/generic-approach-TF-implementation.htm).

[28] https://www.tradebarriers.org/.

From Figure 11:

- **Assess needs** means identifying obstacles to fast, efficient and secure trade transactions.
- **Decide** is about what measures to adopt and where they are most needed for trade facilitation.
- **Analyse implementation** to narrow the scope of which processes and procedures are to be improved and in which areas or sectors. It is a crucial step as a phased; sectoral approach is often to be preferred to a horizontal, global one.
- **Identify standards and solutions** is the next critical element of the approach, as time, money and resources can be saved by using existing, widely implemented standards, measures and instruments for all aspects of international trade.
- **Analyse application** aims at ensuring the best possible use and application of international standards and tools already identified as supporting the objectives of the trade facilitation effort.
- **Implement** is about putting into practice the outcome of previous steps, and it suggests perspectives and aspects to be considered.
- **Follow-up** is about judging the impacts and benefits of measures undertaken.

Trade facilitation indicators should be used throughout the process, to guide and evaluate the reform activities. It is important to consult and cooperate with relevant stakeholders in the reform program, including government entities and private sector users. If consultative bodies exist in any reform area, they should be used to coordinate the discussion of necessary measures to be adopted.

5.4. Digitalisation

SMART Corridor

All RECs should endeavor to implement the SMART Corridor and Cross-border Intelligent Transport Systems (ITS) that simplify the administrative procedures and logistics processes, monitor traffic movements along the corridor and provide real-time information to stakeholders to enable them to manage the following:

- Cross border Trade Community Data Hub (TCDH) and Electronic Data Interchange (EDI).
- Customs Management Systems (CMS) connected through the TCDH/regional network.
- Customs Risk Management Systems for cargo physical examination selection.
- Electronic payment systems between stakeholders' banks via the TCDH.
- Real-time monitoring and tracking system for cargo and vehicle movements – GPS/GPRS tracking devices and electronic seals for all types of cargo transport vehicles.
- Corridor Coordination Entity (CCE) statistical performance monitoring and reporting system.
- Customs Transit Security Bond Guarantee monitoring software at the regional level.
- X-ray Cargo Scanners remote image analysis at destination for cargo examination.
- Weigh-in-motion weighbridges automated and interconnected to the TCDH.
- Electronic toll portal equipment on highways.
- Electronic application/delivery of authorizations/credential by government agencies.
- Traffic information/route status/alerts – data collection and report delivery to corridor users.

All individual systems should be connected to one central ITS system which allows all the stakeholders to access a given set of specified data while ensuring the confidentiality of information. Whenever necessary,

corridor countries must issue appropriate regulations to recognize the use of electronic documents in their legal system for the ITS system to operate legally.

The operations of the ITS should be financially sustainable through the “users pay principle” while their overall impact shall be a reduction in trade and transport costs.

The trade facilitation tools that are proposed for use on SMART Corridors include National Single Windows; Coordinated Border Management; One-Stop Border Posts; a common Customs declaration form – Single Administrative Document (SAD); customs procedures modernization and streamlining (e.g., pre-arrival clearance); and risk management-based procedures for Customs physical examination. These are generic recommendations and care should be taken to tailor each of these trade facilitation tools to the specific needs of the Corridor being designed.

Smart Corridor countries should implement the agreed measures such as:

- Authorised size and axle load of vehicles.
- Liberalisation of the trucking industry.
- Vehicle and freight insurance laws and regulations.
- Regional Customs Transit Bond Guarantee regulations.
- Selection and control of vehicles authorized to operate along the corridors.
- Electronic Certificate of Rules of Origin.
- Standardisation and harmonization of processes, procedures, fees, taxes, etc.

6

ANNEXES

6.1. Annex 1: Digitalisation of Freight Logistics Supply Chains

Over the last five years of less there have been major advances in the digitalization of the supply chain, improving freight logistics efficiency. Some of the main recent initiatives, which are being adopted by industry, globally but also in Africa, are discussed below.

Intelligent Containers – Private Sector Initiatives

As defined by MSC (Mediterranean Shipping Company), one of the shipping lines offering smart containers, a smart container is a standard marine container permanently fitted with electronics. Smart container electronics can be built during manufacturing, retrofitted to all types of existing containers, or embedded within the contents of the container.[29]

Cargo monitoring through smart devices and sensors is one of the most independent and reliable means to trace and track the movement of goods in transit. Smart devices, also called cargo trackers, container security devices, or container tracking devices are removable, Internet of Things (IoT) enabled devices with built-in sensors that can be attached to any container. The devices can be used not only in marine containers but also with air cargo, pallets, or trucks. The independent devices can make any container smart; they can be fitted to any container before the journey begins, and containers' doors are closed.

Real-time monitoring of cargo with smart containers or smart devices is taking the digital age of shipping one step further, making supply chains more transparent, reliable, agile, secure, resilient, connected, and sustainable. They eliminate milestones-based visibility from the supply chain as they provide data on the location and condition of the goods in transit. The sensor devices ride along with the cargo and provide real-time information on the geographic position and the state of the cargo. Depending on the type of sensors used, different parameters can be monitored throughout the whole transport process from source to destination, e.g., temperature, humidity, shock, light and door openings. The generated data can be accessed via web portals or through an API.[30]

Real-time monitoring data can be fed into analytics programs powered by Artificial intelligence (AI) and machine learning technology. Data analytics helps analyse supply chain and logistics performance and streamline supply chain operations. Supply chain managers can anticipate supply chain disruptions with reliable real-time data and adjust routing accordingly.

The data can even be shared easily between manufacturers and retailers to coordinate in advance of predicted delays. Thanks to improved data accuracy and accessibility, supply chain professionals are empowered to make educated, well-informed operational decisions while staying in control of their cargo from its origin to its destination. Moreover, with reliable cargo shipment data, inventory safety stocks can be reduced, dock scheduling improved, warehouse resources used more efficiently, and better planning can be done around shipping estimated arrival times (ETAs). This empowers decision-makers to make well-funded tactical and strategic management decisions.

However, generating and collecting smart container data is insufficient to make supply chains fully "smart". It is essential that the collected data can be easily analyzed. Additionally, it is one of the needs of shippers to deliver independent data in a standard format for easy integration into different systems. Most shippers, importers, and exporters favor a readily available, reliable, and deployable solution with on-demand requirements.

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[29] For a more detailed discussion and analysis on smart containers, see https://arviem.com/a-smart-container-or-smart-device-for-containers-what-fulfill-your-organizations-need-for-real-time-cargo-monitoring/ and the UNECE UNIFACT White Paper on Smart Containers – Real-time Smart Container data for supply chain excellence.

[30] An API, or application programming interface, is a connection between computers or between computer programs. It is a type of software interface, offering a service to other pieces of software.

Digitalization of the Supply Chain – Private Sector and UNCTAD Initiatives

Ports are rapidly transforming digitally and declaring themselves "smart".[31] Processes are digitalized, communities within the port are connected, and impressive gains in operational efficiency, regulatory compliance, and customer satisfaction are emerging.

As ports digitalize their processes, they also establish a platform for providing benefits to freight logistics and supply chains to other participants. Ports and supply chains involve thousands of independent companies and individuals depending on each other's policies, plans, and actions to make the right business decisions and run operations effectively. The smart port uses digital data streams to boost collaboration, align activities, and make decisions that improve vital processes across its operations. Some of the more relevant trends that assist in improving freight logistics include the following:

- Cargo handling that is digitally connected and helps ports to increase their handling capacity and productivity by ensuring that stacking cranes, straddle carriers, forklifts, and other equipment are correctly maintained and operate at peak efficiency. This also includes the automatic identification and detection of containers.
- The introduction of appointment systems for sea-borne and intermodal traffic enables just-in-time arrivals and reserving specific times for trucks to drop off or pick up freight from ports, eliminating truck queues outside of the port.
- Digital tools that provide notifications on sea and land-borne carrier movements within or closely associated with the port, via GPS-based traffic monitoring systems and traffic monitoring sensors along major port roads.
- The use of digital technologies in safety and security to protect port employees, facilities, and assets. This covers entrance authorization, video surveillance and analytics, behavior analysis, anti-theft and anti-fraud, biometric authentication solutions, and sensor-based systems that help vehicles and cargo-handling equipment to be aligned appropriately safety and physical and cyber security.
- The use of digital solutions to help identity, monitor, and aggregate data needed to support environmental and regulatory compliance initiatives, including the reduction of energy consumption through motion-sensitive lighting systems within terminals and on port roads and air quality sensors enabling government inspectors to receive real-time sulfur dioxide emissions reports from vessel when they enter or leave a port.
- Smart assets are taking the digital age of shipping one step further beyond paperless processes by embracing the Internet of Things (IoT) to support enhanced decision-making by the various sectoral stakeholders.

Numerous initiatives are now building upon the emerging principles of digital collaboration and standardized data sharing, including:

- **The PortCDM concept:**[32] The main objective of PortCDM is to enhance coordination among port call actors. By sharing their time stamp data related to port calls, information is available in real-time which facilitates just-in-time arrivals, increases predictability, berth productivity, punctuality, reduces waiting and anchoring times, and boosts resource utilization. This significantly reduces

[31] This section references "Smart Ports: On the move to become Global Logistics Information Exchange Hubs" by Hanane Becha, TRAXENS & UN/CEFACT, Mikael Lind, RISE (Research institutes of Sweden), André Simha, MSC (Mediterranean Shipping Company SA), and Francois Bottin, CMA CGM. https://smartmaritimenetwork.com/2020/04/20/smart-ports-on-the-move-to-become-global-logistics-information-exchange-hubs/.

[32] https://www.ipcdmc.org/about-ipcdmc.

the administrative burden. The PortCDM project was validated under the Sea Traffic Management (STM) project.[33]

- **The UN/CEFACT Smart Container project:**[34] The United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) has developed the data exchange standards required to promote and simplify the deployment of SMART Container solutions. These have been described and published through its Transport and Logistics Domain Smart Container Project.
- **Port Call Optimisation:**[35] Port call optimization is the process by which new business models, technologies, and operational techniques are developed and implemented to reduce vessel waiting times to zero. For every hour a ship remains idle in port, it loses an hour of steaming time and therefore must sail faster to maintain its schedule. While the speed difference may be marginal, it typically has a huge impact on a vessel's fuel consumption. According to the IMO, a 10 percent reduction in speed can lead to a 30% reduction in fuel consumption and emissions. There are many port call optimization projects ongoing, aimed at the entire ecosystem, ports, and ship operators.

These concepts and initiatives aim to improve the speed and predictability of operations by applying just-in-time thinking and door-to-door visibility of the trip execution.

Ports are well placed to emerge as powerful information exchange hubs deploying data captured from shipping lines, trucking, logistics, and off-dock storage providers to increase the efficiency of the overall maritime transportation system.

There has been considerable progress worldwide in the digitalization of the container supply chain. Collaboration between shipping lines, which was always strong, is now evolving from operational collaboration focused on rationalizing resources and offering more global coverage, to strategic collaboration focused on IoT (Internet of Things) communications and "smart-everything" data exchange. For example:

- Different shipping line alliances, such as 2M and Ocean Alliance have signed cooperative agreements including vessel sharing on major global routes. This can be seen as similar to the aviation sector where different airlines form strategic alliances, such as Star Alliance.
- CMA CGM, MSC, and Maersk have invested in a French start-up called TRAXENS[36] to deploy SMART containers across their fleets and are pushing the use of SMART containers on all routes. This will allow track and trace from source to destination, which will be a major trade facilitation boost.
- The top shipping lines have established a non-profit consortium called Digital Container Shipping Association[37] (DCSA) to develop technology standards to transform inefficient practices and accelerate digitalization through a unified industry effort.
- The TradeLens platform,[38] a collaboration between Maersk and IBM, and now including CMA CGM, MSC, Hapag Lloyd, and ONE, is standardizing all the different cargo movement operations across different means of transport and stakeholders (including cross-border agencies).

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33 https://www.researchgate.net/publication/332223235_PortCDM_Validation_of_the_concept_and_next_steps/link/5ca716a4299bf118c4b34167/download.

34 https://smartmaritimenetwork.com/2020/12/16/un-cefact-smart-container-project-achievements-and-next-steps/.

35 https://static1.squarespace.com/static/5f99ee8b5f20943e0537b23a/t/5fa186a637c48c30bfdddb77/1604421292033/2019-ICS-PCO-Guide.pdf.

36 https://www.traxens.com/.

37 https://dcsa.org/.

38 https://www.tradelens.com/.

- There have been further developments in the Port Collaborative Decision Making (PortCDM) system, which is a product of the European MONALISA project[39] and Sea Traffic Management (STM) efforts.
- MSC has developed a new Track and Trace API connector compliant with DCSA standards[40] and is decommissioned the track and trace web services as of 31 October 2021.

New business models and powerful analysis capabilities provide can enable transparency into the status of goods, infrastructure, and resources which is high on the agenda for the maritime transport sector. Instant visibility into shipping and cargo enables customers to make decisions faster and more confidently. In this journey, smart ports, evolving intelligent, highly sophisticated information hubs, are needed to revolutionize the global transport system.

[39] https://www.seatrafficmanagement.info/projects/monalisa/.

[40] https://www.msc.com/bel/our-services/digital-solutions/direct-integrations?lang=de-de.

6.2. Annex 2: Case Study: Transport of Oranges from Zimbabwe, sold to DRC consumers through Zambia[41]

Mr. Mulenga,[42] not his real name, is a small-scale Zambian cross-border trader. He is based in Lusaka but buys oranges from farmers in the Kwekwe District of Zimbabwe and sells them to other small-scale cross-border traders at Kasumbalesa on the DRC-Zambia border. This is an account of one of the business trips that he undertook in 2019.

Mr. Mulenga left Lusaka on 30th October 2019 to buy fresh oranges from Zimbabwe. He proceeded to the Kwekwe district, some 220 kilometers southwest of Harare. On 31st October, he managed to buy 1,600 pockets of oranges from one farm, each pocket weighing 10kg. As this farm had no more oranges to sell, on 1st November, he bought 917 pockets of oranges, with each pocket weighing 12kg, from another farm. He purchased 2,517 pockets[43] of oranges, weighing about twenty-seven metric tonnes.

On the evening of 1st November, he hired a 30-tonne truck to transport his oranges to Kasumbalesa. The truck was Zimbabwean registered, and the driver was Zimbabwean. They set off at dawn on 2nd November and reached the Chirundu border in the late afternoon. The truck had a Carriers' License and procured a COMESA Yellow Card.

They did border clearance at Chirundu on 2nd and 3rd November and set off for Kasumbalesa around midday on the 3rd of November. At Chirundu, clearance was easy and fast. He dealt with three agencies at the border – Port Health, Ministry of Agriculture and Customs Service of ZRA.[44] Oranges of tariff classification 08051010 attract a duty of 25% when imported into Zambia but are exempt from Excise Duty and VAT. But as Mr. Mulenga's oranges were from Zimbabwe and are on the STR List, he did not pay[45] customs duties and did not have to produce a COMESA or SADC Certificate of Origin. He did not declare the oranges as transit goods as he would sell them on the Zambian side of the DRC-Zambian border at Kasumbalesa.

He arrived at Kasumbalesa in the early hours of 4th November but could not start selling as there was another truck of oranges selling. He queued and was second in line after a truck that had arrived several hours before his.

On the way, he encountered several roadblocks and checkpoints. Still, he did not pay at any of them except at Fitobaula Check Point on the outskirts of Chililabombwe, where he paid K350 to a Chililabombwe Municipal Council revenue collector. He got a receipt for the payment.

He started selling his oranges on 8th November 2019 at the same time as the truck that was ahead of him, after an agreement that their produce may start deteriorating after the four-day wait. He completed his sales of twenty-seven tonnes in 3 days. He mentioned that he did one or two trips a month, depending on how fast business was in Zimbabwe and Kasumbalesa. He pointed out that transport and related logistics were not a limiting factor, though some sections of roads, both in Zimbabwe and Zambia, needed serious attention.

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41 Excerpt from Business Process Analysis Study, Small-Scale Cross-Border Trade at Kasumbalesa Border Post, MPA Development Consultants, November 2019.

42 All commercially sensitive information such as his actual sources (farms he buys from), transport costs, buying and selling prices of oranges were not discussed.

43 He explained that oranges were packed in three sizes – 10Kg, 12 Kg or 15Kg. He preferred 10Kg which he claimed moved faster at Kasumbalesa because of the lower price.

44 He mentioned that he paid Ministry of Agriculture and Port Health inspection fees, but both did not give him receipts claiming that they had run out. They only stamped the ZRA papers as their proof of inspection.

45 He mentioned that his habit was to keep a pocket of oranges in the front cabin of the truck to give to personnel manning roadblocks. He stressed that he did it voluntarily as a PR stint as one pocket did not cost him much.

Mr Mulenga's selling oranges from his hired truck at Kasumbalesa

Source: Photos taken on 8 November 2019 at Kasumbalesa market by the author.

On 8th November, he paid K200 each to Chililabombwe Municipal Council and Ming'omba revenue collectors when he started selling. They both gave him receipts for the payments.

Salient aspects of Mr Mulenga's cross border trade:

i) Three countries are involved – Zimbabwe, the producer, Zambia, the enabler/transit country, and DR Congo, the actual consumer.

ii) When buying oranges, Mr Mulenga reported that both the Zimbabwean farmers he bought from engaged about 10-15 workers to help with harvesting/picking and loading the oranges, creating temporary employment, however short term.

iii) He hired a Zimbabwean truck as Zambian 30 MT trucks are unavailable and would cost more for the Lusaka-Kwekwe-Kasumbalesa trip. Secondly, Zimbabwe appeared to have an economic slump, and trucks were not so busy, so their rates were more competitive. He indicated that two other truckers had offered to transport his oranges. He picked the truck that appeared most roadworthy.

iv) On his first day of sales, most buyers were small-scale cross border traders from the DRC. Still, he had sold about 400 Kgs (8 x 50Kgs)[46] of oranges to two Zambian women traders taking the oranges to Chisokone market in Kitwe, Zambia, for retail sale.

v) At Kasumbalesa, he had engaged three youths to help him sell the oranges, a Zambian and two Congolese, again keeping the youths busy, productive, and economically active, even for a short while.

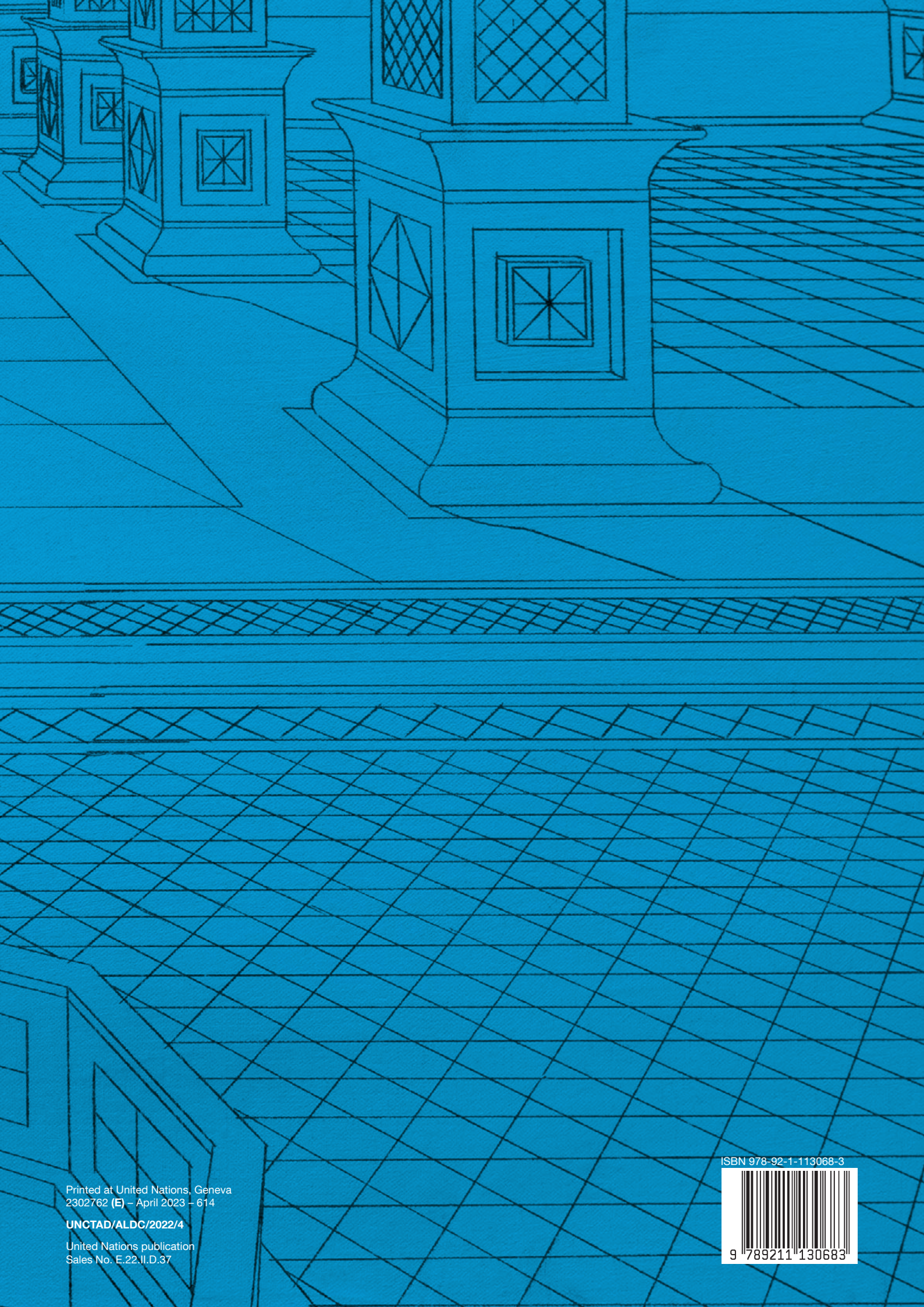
[46] He explained that when selling, buyers prefer to consolidate the 10Kg and 12Kg pockets into 50Kg bags for easier transportation.

vi) Mr Mulenga was a member of the CBTA Zambia (a regional Cross Border Traders Association – Zambia Chapter) and paid a fee to the Association each time he travelled to Kasumbalesa on business.

Asked if he could take his oranges closer to his customers inside the DRC, he explained that he had once visited the DRC on a social visit in 2017. He did not enjoy his stay, the trip cost him a lot more than he expected, and the authorities were neither helpful nor welcoming.

This case study illustrates operations of the Simplified Trade Regime. Legally, it did not involve transit as goods (oranges were sold on the Zambian side of the border and transported to the DRC by bicycle and wheelbarrows). Hence, the destination and actual consumption took place in the DRC. This often happens across East and West Africa at various borders where informal cross-border traders do not cross the border, but the goods do get across informally.

In this case, the STR was fully operational at Chirundu on the Zambia-Zimbabwe border, but not at Kasumbalesa on the DRC-Zambian border as the DRC has not effectively implemented the STR nor the COMESA or SADC FTAs.



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