

2021 UN Global Survey on Digital and Sustainable Trade Facilitation

METHODOLOGY

Scope

The 2021 Survey includes 58 trade facilitation measures, which are grouped into 4 groups and 11 sub-groups, namely:

A. General trade facilitation

1. Transparency
2. Formalities
3. Institutional Arrangement and Cooperation
4. Transit Facilitation

B. Digital trade facilitation

5. Paperless Trade
6. Cross-Border Paperless Trade

C. Sustainable trade facilitation

7. Trade Facilitation for SMEs
8. Agricultural Trade Facilitation
9. Women in Trade Facilitation

D. Other trade facilitation

10. Trade Finance Facilitation
11. Trade Facilitation in Times of Crisis

Full list of trade facilitation measures¹ under each group and sub-group is listed in table 1:

Table 1: List of trade facilitation measures in each group and sub-group

Groups	Sub-groups	Question #	Measures	Relevant TFA Articles
General Trade Facilitation	Transparency (5 measures)	2	Publication of existing import-export regulations on the Internet	1.2
		3	Stakeholders' consultation on new draft regulations (prior to their finalization)	2.2
		4	Advance publication/notification of new trade-related regulations before their implementation (e.g., 30 days prior)	2.1
		5	Advance ruling on tariff classification and origin of imported goods	3

¹ The question numbers correspond to those in the UNTF Survey questionnaire, available at <https://www.untfsurvey.org/files/documents/2021-Survey-Questionnaire-English.pdf>

Groups	Sub-groups	Question #	Measures	Relevant TFA Articles
	Formalities (8 measures)	9	Independent appeal mechanism (for traders to appeal customs rulings and the rulings of other relevant trade control agencies)	4
		6	Risk management (as a basis for deciding whether a shipment will be physically inspected or not)	7.4
		7	Pre-arrival processing	7.1
		8	Post-clearance audits	7.5
		10	Separation of release from final determination of customs duties, taxes, fees and charges	7.3
		11	Establishment and publication of average release times	7.6
		12	Trade facilitation measures for authorized operators	7.7
		13	Expedited shipments	7.8
		14	Acceptance of copies of original supporting documents required for import, export or transit formalities	10.2.1
	Institutional arrangement and cooperation (5 measures)	1	Establishment of a National Trade Facilitation Committee or similar body	23
		31	National legislative framework and/or institutional arrangements for border agencies cooperation	8
		32	Government agencies delegating border controls to Customs authorities	
		33	Alignment of working days and hours with neighbouring countries at border crossings	8.2(a)
		34	Alignment of formalities and procedures with neighbouring countries at border crossings	8.2(b)
	Transit facilitation (4 measures)	35	Transit facilitation agreement(s) with neighbouring country(ies)	
		36	Customs authorities limit the physical inspections of transit goods and use risk assessment	10.5
		37	Supporting pre-arrival processing for transit facilitation	11.9
		38	Cooperation between agencies of countries involved in transit	11.16
Digital Trade Facilitation	Paperless trade (10 measures)	15	Automated Customs System (e.g., ASYCUDA)	
		16	Internet connection available to Customs and other trade control agencies at border-crossings	
		17	Electronic Single Window System	10.4
		18	Electronic submission of Customs declarations	
		19	Electronic application and issuance of import and export permits	
		20	Electronic submission of Sea Cargo Manifests	
		21	Electronic submission of Air Cargo Manifests	
		22	Electronic application and issuance of Preferential Certificate of Origin	
		23	E-Payment of Customs duties and fees	7.2
		24	Electronic application for Customs refunds	

Groups	Sub-groups	Question #	Measures	Relevant TFA Articles
	Cross-border paperless trade (6 measures)	25	Laws and regulations for electronic transactions are in place (e.g., e-commerce law, e-transaction law)	
		26	Recognized certification authority issuing digital certificates to traders to conduct electronic transactions	
		27	Electronic exchange of Customs declaration	
		28	Electronic exchange of Certificate of Origin	
		29	Electronic exchange of Sanitary and Phyto-Sanitary Certificate	
		30	Paperless collection of payment from a documentary letter of credit	
Sustainable Trade Facilitation	Trade facilitation for SMEs (5 measures)	39	Trade-related information measures for SMEs	
		40	SMEs in AEO scheme (i.e., a Government has developed specific measures that enable SMEs to more easily benefit from the AEO scheme)	
		41	SMEs access Single Window (i.e., a Government has taken action to make Single Window more easily accessible to SMEs (e.g., by providing technical consultation and training services to SMEs on registering and using the facility))	
		42	SMEs in National Trade Facilitation Committee (i.e., a Government has taken action to ensure that SMEs are well-represented and made key members of National Trade Facilitation Committees (NTFCs))	
		43	Other special measures for SMEs	
	Agricultural trade facilitation (4 measures)	44	Testing and laboratory facilities available to meet SPS of main trading partners	
		45	National standards and accreditation bodies established to facilitate compliance with SPS	
		46	Electronic application and issuance of SPS certificates	
		47	Special treatment for perishable goods at border-crossings	7.9
	Women in trade facilitation (3 measures)	48	Trade facilitation policy/strategy to increase women's participation in trade	
		49	Trade facilitation measures to benefit women involved in trade	
50		Women's membership in the National Trade Facilitation Committee or similar bodies		
Other Trade Facilitation	Trade finance facilitation (3 measures)	51	Single Window facilitates traders access to finance	
		52	Authorities engaged in blockchain-based supply chain project covering trade finance	
		53	Variety of trade finance services available	
		54	Agency in place to manage trade facilitation in times of crises and emergencies	

Groups	Sub-groups	Question #	Measures	Relevant TFA Articles
	Trade facilitation in times of crisis (5 measures)	55	Online publication of emergency trade facilitation measures	
		56	Coordination between countries on emergency trade facilitation measures	
		57	Additional trade facilitation measures to facilitate trade in times of emergencies	
		58	Plan in place to facilitate trade during future crises	

Data collection and validation: a three-step approach

Step 1. Data submission by experts: The survey instrument was sent by the UNRCs to trade facilitation experts (in governments, the private sector and academia) to gather preliminary information. The questionnaire was also made publicly available online. In some cases, the questionnaire was also sent to relevant national trade facilitation authorities or agencies and regional trade facilitation partners or organizations.

Step 2. Data verification by the UNRCs Secretariat: The UNRCs cross-checked the data collected in Step 1. Desk research and data sharing among UNRCs and survey partners were carried out to further check the accuracy of data. Face-to-face or telephone interviews with key informants were arranged to gather additional information when needed. The outcome of Step 2 was a consistent set of responses per country.

Step 3. Data validation by national governments: The UNRCs sent the completed questionnaire to each national government to ensure that the country had the opportunity to review the dataset and provide any additional information. The feedback from national governments was incorporated in order to finalize the dataset.

Implementation rates

For each measure, implementation level is recorded as:

- 3 Fully implemented
- 2 Partially implemented
- 1 Pilot Stage of Implementation
- 0 Not implemented
- NA Not Applicable
- DK Don't Know

The implementation rate of each measure can be calculated based on the fully implemented score of 3. For example, in the case of an electronic single window system that is partially implemented (score of 2), the implementation rate is $2/3 = 0.6667$ or 66.67%. This allows calculation of average implementation rates for groups or sub-groups of measures, expressed in percentage terms to facilitate interpretation and discussion of the results.

Overall rate of trade facilitation implementation (TFI) as well as group or sub-group rates of implementation are calculated using simple averages of implementation rate of relevant individual measures.

The TFI is calculated using measures from the 5 following sub-groups: (1) transparency, (2) formalities, (3) institutional arrangements and cooperation, (4) paperless trade and (5) cross-border paperless trade. Note that there are 34 measures in these 5 sub-groups. However, 3 measures are excluded from the calculation of implementation rates as they are not relevant/applicable to all countries – these are measure related to questions no. 33 and 34, classified under Institutional arrangement and cooperation, and question no. 20 under Paperless trade. Therefore, there are **31 measures** used for the calculation of TFI. All DK and NA responses of these 31 measures are treated as “no implementation” (score of 0).

Overall TFI and implementation rate of each sub-group is therefore defined as follows:

$$IMP_RATE_k = \sum_{n \in S} \frac{Q_n}{3 \times m_k}$$

where $S \in \{s_1, s_2, s_3, \dots, s_9\}$

m_k = total number of measures included in group k

Q_n = scores of question number n, which follows the definition in table 2

Table 2: sub-group s_i , corresponding question numbers (n), and sub-group name for TFI

s_i	n (question number related to each measure included)	m_k (number of measures)	TFI/sub-group (k)
s_1	2, 3, 4, 5, 9	5	Transparency (TRANSPARENCY)
s_2	6, 7, 8, 10, 11, 12, 13, 14	8	Formalities (FORMALITIES)
s_3	1, 31, 32	3	Institutional arrangement and cooperation (INSTITUTION)
s_4	15, 16, 17, 18, 19, 21, 22, 23, 24	9	Paperless trade (PAPERLESS)
s_5	25, 26, 27, 28, 29, 30	6	Cross-border paperless trade (CROSS_BORDER)
s_{TFI}	$\forall n \in \{s_1, s_2, \dots, s_5\}$	31	Overall trade facilitation implementation (TFI)
s_7	39, 40, 41, 42, 43	5	Trade facilitation for SMEs (SMEs)
s_8	44, 45, 46, 47	4	Agricultural trade facilitation (AGRI)
s_9	48, 49, 50	3	Women in trade facilitation (WOMEN)

EXAMPLE: Thailand

TRANSPARENCY	$= (3+3+3+3+2)/15$	$= 0.9333$	$= 93.33\%$
FORMALITIES	$= (3+3+3+3+3+3+3)/24$	$= 1.0000$	$= 100.00\%$
INSTITUTION	$= (3+2+0)/9$	$= 0.5556$	$= 55.56\%$
PAPERLESS	$= (3+3+3+3+3+2+3+1)/27$	$= 0.8889$	$= 88.89\%$
CROSS_BORDER	$= (3+3+2+2+1+3)/18$	$= 0.7778$	$= 77.78\%$
TFI	$= (14+24+5+24+14)/93$	$= 0.8710$	$= 87.10\%$

Calculation of sustainable trade facilitation sub-group implementation rates are subject to extra conditions because the data is less complete compared to the original 5 sub-groups that compose the TFI. For each of the SMEs, AGRI and WOMEN sub-groups, an implementation rate is computed only if implementation level (0-3) data is available for more than half of the measures in the sub-group. If this requirement is met, the sub-group implementation rate is calculated, with all NA and DK treated as no implementation (score of 0).

EXAMPLE: Austria

Data for Austria on trade facilitation for SMEs (5 measures) in Survey 2021 are: DK, 3, DK, 1, and 3. SMEs implementation rate for Austria can be calculated since data is available for 3 of 5 measures. DK is treated as zero. Rate of implementation for SMEs for Austria is $(0+3+0+1+3)/(3 \times 5) = 7/15 = 46.67\%$. AGRI and WOMEN implementation rates are not calculated and are shown as missing values due to data insufficiency (implementation levels available for only 2 of 4 measures, and 1 of 3 measures in AGRI and WOMEN sub-group, respectively).

Note that transit facilitation is the only sub-group that allows DK and NA as missing values, because not all transit facilitation measures may be applicable to all countries. The rate of implementation is calculated using simple average based on measures for which data is available only. If all measures are missing, implementation rate is not calculated.

EXAMPLE: AUSTRALIA

Responses in Survey 2021 for transit facilitation (question 35-38) are NA, 3, 3 and 3, respectively. Thus, rate of implementation is $(3+3+3)/9 = 100\%$.