

## APPENDIX 7

### APEC SUPPLY-CHAIN CONNECTIVITY FRAMEWORK (SCI/SCFAP) SELF ASSESSMENT SURVEY 2012

#### - Introduction -

In 2010, the CTI agreed to adopt 10% as the overarching target for improving supply-chain performance in terms of time, cost and uncertainty by 2015 under the Supply-chain Connectivity Framework Action Plan (SCI or SCFAP). The Committee also agreed that the basis for measurement of this objective would comprise both internal and external indicators, including the use of data to be obtained from the World Bank's Logistics Performance Index and from the World Economic Forum's Enabling Trade Index, where appropriate.

The internal indicators would be derived from project Completion Reports (CRs), which would allow for the establishment of a basis upon which the implementation progress of individual actions in the SCFAP can be tracked. However, the assessment of internal indicators derived from CRs may not be able to capture all the efforts made by APEC economies in working towards achieving the 10% target improvement. Therefore, to assess the overall progress towards that goal, it will be important to take account of all relevant activities undertaken by economies, and not just those listed in the original Action Plans. Indeed, this approach is consistent with the widely expressed view at the Sendai Symposium that the Action Plans are "living documents" that will be developed and elaborated over time.

To complement the CRs, further efforts are required in order to establish the contribution of the Action Plan's implementation to the 10% target. This could be done in part by using a self-assessment survey that collects economies' views and data on the (potential) impact of SCI actions on policy change and on improvement in Supply-chain performance. The survey could also serve the purpose of gathering policy recommendations in improving the remaining actions under the Action Plan.

The self-assessment survey will provide additional information on the activities undertaken by economies in furtherance of the SCFAP and their state of completion. The ability of economies to respond accurately as to the impact of those actions on the cost, time, and uncertainty associated with supply-chain transactions depends crucially on the availability of follow-up assessments and research within each economy.

Ideally, the assessment of the overall impact would be based on detailed research linking particular actions with observed outcomes, either through a quantitative analysis, or through a qualitative analysis such as case studies and surveys. In the absence of such studies, the impact assessment section of the questionnaire will need to be treated carefully from a data-use perspective. The responses from the self-assessment survey will be compared with those from the internal and external indicators, which will provide economies with a holistic view of the different perceived outcomes as a result of the SCI actions.

As such, the three track assessment framework is based on multi-criteria indicators to enable a holistic assessment of APEC's progress in achieving the 10% target in supply-chain performance.

To summarize, the goal of the self assessment survey is as follows:

1. Identify the progress of SCI Action Plans' implementation.

2. Measure the rate of success of the completed SCI Action Plans, and identify areas in which further improvements can be made.
3. Assess the impact of SCI Action Plans towards improvement in supply-chain performance.
4. Complement the internal indicators assessment acquired through the CRs.

The survey will be directed to member economies, as well as to APEC sub-fora who are actively involved in the implementation of SCI-related activities. More specifically, the targeted respondents of this survey would include:

- CTI representatives of 21 Economies (which includes the leading economies of the specific chokepoints), and
- the Convenor or Chair of the 9 sub-fora and working groups (SCCP, TPTWG, SFOM, EWG, SMEWG, MAG, ECSG, SCSC, TEL).

**APEC SUPPLY-CHAIN CONNECTIVITY FRAMEWORK (SCI/SCFAP) SELF ASSESSMENT  
SURVEY 2012**

IDENTIFICATION AND POSITION OF RESPONDENT [Please mark (√ or x) where appropriate]

**NAME OF MEMBER ECONOMY/SUB-FORA/WORKING GROUP:**

**Respondent's personal data**

First Name:

Last Name:

Gender: Female ( ) Male ( )

Organisation:

Position:

**Contact Details**

E-mail:

Telephone number(s):

Fax number:

Address:

Organisation Website:

**Advice:** If you would like more information or confirmation regarding this survey, please contact Mr Akhmad Bayhaqi at the APEC Policy Support Unit ([ab@apec.org](mailto:ab@apec.org)).

**PLEASE RETURN YOUR COMPLETED SURVEY BEFORE 15 November 2012**

1. List the completed or current SCI Action Plan activities that your economy/sub-fora/working group is actively involved with as a proponent or co-sponsor or participants.

Name of Project	Type of Activity or Project (research projects, workshops and seminars etc)	Listed under chokepoint (1-8)	Completed/ ongoing	(Expected) Date of completion	Completion Report submitted? (Y/N)

2. Please also rate the level of success for the completed SCI projects based on the components below (*circle, highlight or bold your choice*):

2i. Name of completed project: (\_\_\_\_\_).

- a. Effectiveness: The project has been able to achieve its stated objectives on time:

*Excellent – Good – Satisfactory – Poor – Not at all*

- b. Efficiency: The project has been able to achieve its stated objectives on budget:

*Excellent – Good – Satisfactory – Poor – Not at all*

- c. Outcome: The impact of project on supply chain performance:

Overall improvements	<i>Excellent – Good – Satisfactory – Poor – None</i>
Policy/skills/knowledge improvements	<i>Excellent – Good – Satisfactory – Poor – None</i>
Time improvements	<i>Excellent (&gt;10%) – Good (7-10%) – Satisfactory (3-6%) – Poor (1-2%) – None</i>
Costs improvements	<i>Excellent (&gt;10%) – Good (7-10%) – Satisfactory (3-6%) – Poor (1-2%) – None</i>
Uncertainty* improvements	<i>Excellent (&gt;10%) – Good (7-10%) – Satisfactory (3-6%) – Poor (1-2%) – None</i>

\* Supply Chain Uncertainty could be defined as the lack of consistency in supply chain transit time, around which users have organised their activities. Additional explanation and examples are provided in **Annex 1**.

Please provide elaboration on the reasoning of your answer by citing numerical examples or studies whenever possible (sample answers are provided in **Annex 2**, further elaboration or relevant details are much appreciated):

(Please also elaborate on the type of skills being improved for capacity building activities. The same applies for information sharing/awareness building activities).

---



---



---



---

2ii. Name of completed project: (\_\_\_\_\_).

a. Effectiveness: The project has been able to achieve its stated objectives on time:

*Excellent – Good – Satisfactory – Poor – Not at all*

b. Efficiency: The project has been able to achieve its stated objectives on budget:

*Excellent – Good – Satisfactory – Poor – Not at all*

c. Outcome: The impact of project on supply chain performance:

Overall improvements	<i>Excellent</i> – <i>Good</i> – <i>Satisfactory</i> – <i>Poor</i> – <i>None</i>
Policy/skills/knowledge improvements	<i>Excellent</i> – <i>Good</i> – <i>Satisfactory</i> – <i>Poor</i> – <i>None</i>
Time improvements	<i>Excellent (&gt;10%)</i> – <i>Good (7-10%)</i> – <i>Satisfactory (3-6%)</i> – <i>Poor (1-2%)</i> – <i>None</i>
Costs improvements	<i>Excellent (&gt;10%)</i> – <i>Good (7-10%)</i> – <i>Satisfactory (3-6%)</i> – <i>Poor (1-2%)</i> – <i>None</i>
Uncertainty improvements	<i>Excellent (&gt;10%)</i> – <i>Good (7-10%)</i> – <i>Satisfactory (3-6%)</i> – <i>Poor (1-2%)</i> – <i>None</i>

Please provide elaboration on the reasoning of your answer by citing numerical examples or studies whenever possible (sample answers are provided in **Annex 2**, further elaboration or relevant details are much appreciated):

*(Please also elaborate on the type of skills being improved for capacity building activities. The same applies for information sharing/awareness building activities)*

---



---



---



---

2iii. Name of completed project: (\_\_\_\_\_).

a. Effectiveness: The project has been able to achieve its stated objectives on time:

*Excellent – Good – Satisfactory – Poor – Not at all*

b. Efficiency: The project has been able to achieve its stated objectives on budget:

*Excellent – Good – Satisfactory – Poor – Not at all*

c. Outcome: The impact of project on supply chain performance:

Overall improvements	<i>Excellent</i> – <i>Good</i> – <i>Satisfactory</i> – <i>Poor</i> – <i>None</i>
Policy/skills/knowledge improvements	<i>Excellent</i> – <i>Good</i> – <i>Satisfactory</i> – <i>Poor</i> – <i>None</i>
Time improvements	<i>Excellent (&gt;10%)</i> – <i>Good (7-10%)</i> – <i>Satisfactory (3-6%)</i> – <i>Poor (1-2%)</i> – <i>None</i>
Costs improvements	<i>Excellent (&gt;10%)</i> – <i>Good (7-10%)</i> – <i>Satisfactory (3-6%)</i> – <i>Poor (1-2%)</i> – <i>None</i>
Uncertainty improvements	<i>Excellent (&gt;10%)</i> – <i>Good (7-10%)</i> – <i>Satisfactory (3-6%)</i> – <i>Poor (1-2%)</i> – <i>None</i>

Please provide elaboration on the reasoning of your answer by citing numerical examples or studies whenever possible (sample answers are provided in **Annex 2**, further elaboration or relevant details are much appreciated):

*(Please also elaborate on the type of skills being improved for capacity building activities. The same applies for information sharing/awareness building activities)*

---



---



---



---

2iv. Name of completed project: (\_\_\_\_\_).

a. Effectiveness: The project has been able to achieve its stated objectives on time:

*Excellent – Good – Satisfactory – Poor – Not at all*

b. Efficiency: The project has been able to achieve its stated objectives on budget:

*Excellent – Good – Satisfactory – Poor – Not at all*

c. Outcome: The impact of project on supply chain performance:

Overall improvements	<i>Excellent</i> – <i>Good</i> – <i>Satisfactory</i> – <i>Poor</i> – <i>None</i>
Policy/skills/knowledge improvements	<i>Excellent</i> – <i>Good</i> – <i>Satisfactory</i> – <i>Poor</i> – <i>None</i>
Time improvements	<i>Excellent (&gt;10%)</i> – <i>Good (7-10%)</i> – <i>Satisfactory (3-6%)</i> – <i>Poor (1-2%)</i> – <i>None</i>
Costs improvements	<i>Excellent (&gt;10%)</i> – <i>Good (7-10%)</i> – <i>Satisfactory (3-6%)</i> – <i>Poor (1-2%)</i> – <i>None</i>
Uncertainty improvements	<i>Excellent (&gt;10%)</i> – <i>Good (7-10%)</i> – <i>Satisfactory (3-6%)</i> – <i>Poor (1-2%)</i> – <i>None</i>

Please provide elaboration on the reasoning of your answer by citing numerical examples or studies whenever possible (sample answers are provided in **Annex 2**, further elaboration or relevant details are much appreciated):

*(Please also elaborate on the type of skills being improved for capacity building activities. The same applies for information sharing/awareness building activities)*

---



---



---



---

3. From the SCI Action Plans that your economy/sub-fora/working group is actively involved with (question #1), please identify 1 program that you have considered to be the most successful one (\_\_\_\_\_). Please explain the reasoning or criteria for your answer.

---



---



---



---

4. **Between the years of 2010 to 2013** how well has your sub-fora/working group met the objectives of Improving the supply chain performance in terms of time, costs and uncertainty:

Overall improvements	<i>Excellent</i> – <i>Good</i> – <i>Satisfactory</i> – <i>Poor</i> – <i>None</i>
Policy/skills/knowledge improvements	<i>Excellent</i> – <i>Good</i> – <i>Satisfactory</i> – <i>Poor</i> – <i>None</i>
Time improvements	<i>Excellent (&gt;10%)</i> – <i>Good (7-10%)</i> – <i>Satisfactory (3-6%)</i> – <i>Poor (1-2%)</i> – <i>None</i>
Costs improvements	<i>Excellent (&gt;10%)</i> – <i>Good (7-10%)</i> – <i>Satisfactory (3-6%)</i> – <i>Poor (1-2%)</i> – <i>None</i>
Uncertainty improvements	<i>Excellent (&gt;10%)</i> – <i>Good (7-10%)</i> – <i>Satisfactory (3-6%)</i> – <i>Poor (1-2%)</i> – <i>None</i>

Please provide elaboration on the reasoning of your answer by citing numerical examples or studies whenever possible:

*(Please also elaborate on the type of skills being improved for capacity building activities. The same applies for information sharing/awareness building activities)*

---



---



---



---

5a. Please list below any positive aspects such as better policy making, tangible impacts, knowledge sharing etc that are achieved through the activities under the SCI Action Plan.  
Please list as many as you deem relevant along with examples:

---



---



---



---

5b. Can any of the aspects identified under Question 5a be enhanced? *(Tick one option)*

Yes		No		Unsure	
-----	--	----	--	--------	--

If yes, please specify how:

---



---

6. Does your Economy/Sub-fora/Working Group have any suggestions or policy recommendations in how the SCI Action Plan can operate more: *(Please select one option for each category)*

Category								
i) Effectively?	Yes		No		Unsure		Not required	
ii) Efficiently?	Yes		No		Unsure		Not required	

Please provide some explanation to each of the response:

---



---



---

7. To what level do your economy/sub-fora/working groups' general activities support the eight chokepoints under the SCI action plan? *(Please mark relevant box with an X)*

Chokepoints	Not at all	Slightly	Moderately	Very Well
1. Lack of transparency/awareness of the full scope of regulatory issues affecting logistics; Lack of awareness and coordination among government agencies on policies affecting logistics sector; Absence of single contact point or champion agency on logistics matters.				
2. Inefficient or inadequate transport infrastructure; Lack of cross border physical linkages (e.g. roads, bridges).				
3. Lack of capacity of local/regional logistics sub-providers.				

4. Inefficient clearance of goods at Customs; Lack of coordination among border agencies, especially relating to clearance of regulated goods 'at the border'.	<i>Not at all</i>	<i>Slightly</i>	<i>Moderately</i>	<i>Very Well</i>	
5. Burdensome customs documentation and other procedures (including for preferential trade).	<i>Not at all</i>	<i>Slightly</i>	<i>Moderately</i>	<i>Very Well</i>	
6. Underdeveloped multi-modal transport capabilities; inefficient air, land, and multimodal connectivity.	<i>Not at all</i>	<i>Slightly</i>	<i>Moderately</i>	<i>Very Well</i>	
7. Variations in cross-border standards and regulations for movement of goods, services and business travellers.	<i>Not at all</i>	<i>Slightly</i>	<i>Moderately</i>	<i>Very Well</i>	
8. Lack of regional cross-border customs-transit arrangements	<i>Not at all</i>	<i>Slightly</i>	<i>Moderately</i>	<i>Very Well</i>	

Please provide more details and examples whenever possible (including providing the list of activities or projects that are currently not included under the SCI Action Plans but may have considerable impact in improving supply-chain performance):

---



---



---



---



---



---

8. Describe examples of lessons learned or best practices in your economy/sub-fora/working group in implementing the SCI Action Plans. Please also provide any suggested activities that you think it would be useful to further expand the current SCFAP in order to achieve the 10% target in 2015. Please indicate relevant websites or other reference materials whenever possible.

---



---



---



---



---



---



## SUPPLEMENTARY QUESTIONS

9. Whenever data is available, we would like to request your help to fill in the following tables (if the data is not available please put N/A). Also please provide us with the source of information of the data. **Before filling in the tables please read the following explanatory notes (Annex 3).** Preferably the data requested below should be provided as Microsoft Excel files using the template provided. Port-level indicators should be aggregated across up to three ports (the largest in terms of international containerised cargo handled).

Internal Performance Indicators—whole economy	Source of Information	2009	2010	2011	2012	2013
<b>A. Time (economy level)</b>						
1. Border clearance time - all inspections (days)						
2. Border clearance time - secondary inspection (days)						
3. Rate of inspection (%)						
<b>B. Uncertainty/Reliability</b>						
4 Freight vehicle fleet age (years)						
5. Freight rail accidents (number)						

Internal Performance Indicators—port-level	Source of Information	2009	2010	2011	2012	2013
<b>C. Time (port level)</b>						
6. Crane rate (TEU/hour)						
7. Vessel turnaround (hours)						
8. Import container dwell time (hours)						
9. Export container dwell time (hours)						
<b>D. Cost</b>						
10. Indicative cargo handling charges (\$US per TEU)						

>>end of questionnaire<<

## ANNEX 1: A NOTE ON SUPPLY CHAIN UNCERTAINTY

Currently there isn't any authoritative definition of supply chain uncertainty available, although the literature includes many related terms. Several terms which have been clearly defined and which take a broader view of the supply chain are 'robustness' and 'resilience'. Both are properties of the entire supply chain or large sections of it. **Robustness** is the extent to which the operation of the supply chain is affected by disturbances or disruptions, and **resilience** is the ability of the supply chain to return to normal operation after a disturbance or disruption. These definitions are based on Christopher, M., and Peck, H., (2004) Building the resilient supply chain, International Journal of Logistics Management, Vol. 15, No. 2, pp. 1-13. These are two factors which would influence uncertainty/reliability directly, but may be more difficult to measure than uncertainty. Other terms such as 'consistency', 'timeliness' and 'reliability' are also seen to be related with the concept of 'uncertainty'.

The International Transport Forum has prepared a report on transport reliability (which is the more usual way of referring to the concept of uncertainty). The report is available at: <http://www.internationaltransportforum.org/jtrc/infrastructure/networks/index.html>. The ITF have defined transport reliability as: the ability of the transport system to provide the expected level of service quality, upon which users have organised their activities. According to the ITF, unreliability of the transport infrastructure network arises from two primary sources: (1) unpredictable demand-related traffic interactions between users (congestion); and (2) unanticipated supply-related events such as traffic incidents (crashes and vehicle break-downs), natural events (e.g. floods and earthquakes) and network maintenance (causing temporary reduction in supply). Four principal policy options available (according to ITF) to manage reliability are: (a) Physical expansion of capacity; (b) Better management of capacity; (c) Pricing mechanisms to deliver a market for reliability; (d) Information systems intended to mitigate the adverse consequences.

A World Bank report about logistics costs and supply chain reliability (<https://openknowledge.worldbank.org/handle/10986/2489>) mentioned that the main sources of improvement in supply chain predictability and performance are: (i) improved initiation of transit at the gateway (typically the main source of delay and unpredictability), (ii) improved clearance at destination, (iii) more reliable service quality through improved market competition and (iv) improved efficiency of multimodal nodes.

One possible definition of uncertainty, drawing from the above examples, could be:

**Supply Chain Uncertainty:** the lack of consistency in supply chain transit time, around which users have organised their activities.

**ANNEX 2: SAMPLE ANSWERS ON QUESTION 2i to 2iv**

	Possible arguments	Impact to improvements in time	Impact to improvements in costs	Impact to improvements in uncertainty
1	The project addresses the crucial capacity or knowledge gap within the government or industry. ( <i>specify the capacity or knowledge gap clearly</i> )	Satisfactory to excellent	Variable	Satisfactory
2	The project helps to remove burdensome border clearance procedures.	Excellent	Variable	Satisfactory to excellent
3	The project improves transparency and accountability in trade policies and regulations.	Excellent	Variable	None
4	The project enhances certainty and predictability in the trading environment.	None	None	Excellent
5	The project improves collaborative relationships between or within governments and industries.	Satisfactory to excellent	None	None
6	The project create awareness of important policy issues ( <i>specify the issues</i> ) that could lead to important policy reform affecting supply chain performance.	Variable	None	Variable
7	The project improves multimodal connectivity.	Satisfactory	Poor	Satisfactory to excellent
8	The project improves policy coordination, for example, among border agencies or within APEC economies.	Good	Variable	Satisfactory to excellent
9	The project addresses the constraints or capacity affecting engagement of local/regional logistics sub-providers.	Satisfactory	None	Satisfactory to excellent

Please note that the above level of 'impacts' are for examples only. Actual (potential) impacts would depend on the actual projects being implemented within individual economy. Elaboration is required specifically on the 'how' the project actually improves the three supply chain performances.

## ANNEX 3: EXPLANATORY NOTES FOR QUESTION 9

These indicators and their definitions were arrived at as a result of an APEC Transportation Working Group project sponsored by Canada. Nine economies and representatives from the World Bank and APEC Policy Support Unit participated in a workshop in February 2011 in Singapore to define quantitative internal indicators. These indicators relate to three aspects of shipments: Time, Cost, and Uncertainty. A definition is provided for each indicator below, along with possible sources of data. These indicators provide complimentary information to external indicators that will help economies to improve their supply chain performance.

### INTERNAL PERFORMANCE INDICATORS—WHOLE ECONOMY

#### A. Time

##### 1. *Border clearance time—all inspections (days)*

This is the mean time (in days) from the arrival of a container at port to its availability for delivery after clearing all primary and secondary customs and bio-security/other checks.

Primary inspection usually involves document checks with/without x-ray with a focus on determining (a) whether customs duty is payable and how much and/ or (b) whether a container needs to undergo a secondary inspection (for example, is there a risk that the contents in a container are illegal (drugs) or breach laws related to movement of quarantined or dangerous goods. Secondary inspection involves screening, x-ray and physical examination of cargo containers which are flagged as potentially breaching some national law.

Scope: All imported containers (excludes exported or transhipped containers).

Source: Customs and border protection agencies.

Note: The rate of inspection indicator below provides useful context to this measure.

##### 2. *Border clearance time—secondary inspections (days)*

Sometimes containers are removed from port facilities to be inspected at dedicated customs or quarantine facilities. For those containers that undergo secondary inspection (e.g quarantine, security, etc) this indicator gives the mean time in days from the arrival of a container at port to its availability for delivery after the secondary inspections are completed.

Scope: Only imported containers which undergo secondary inspections (excludes exported or transhipped containers).

Source: Customs and border protection agencies.

Note: The rate of inspection indicator below provides useful context to this measure.

##### 3. *Rate of inspection*

The proportion of imported containers subjected to a secondary inspection prior to border clearance. This indicator provides context to the border clearance time indicators above.

Scope: All imported containers (excludes exported or transhipped containers).

Source: Customs and border protection agencies.

#### B. Uncertainty/Reliability

##### 4. *Freight vehicle fleet age*

The average age in years of the road freight vehicle fleet is a measure of truck supply and reliability. This is calculated based on information from vehicle registrations.

Scope: All road freight vehicles over 10,000 lbs (approximately 4.5 tonnes) gross vehicle mass which were registered during the period.

Source: Motor vehicle registration authorities.

## 5. *Freight rail accidents*

This is the number of rail accidents or incidents which resulted in operational disruptions per million train-kilometres for the period. These incidents include derailments, collisions, level crossing occurrences or other adverse events which lead to obstruction of rail traffic for 12 hours or more.

Scope: Only distances travelled by trains on main lines and incidents involving those trains should be included.

Source: Police or rail safety investigator.

## INTERNAL PERFORMANCE INDICATORS—PORT SPECIFIC

### C. Time

#### 6. *Crane rate*

Crane rate is the number of TEUs lifted on or off vessels at a port divided by the number of hours of crane operation (“crane hours”) during the period. The crane rate is a measure of stevedoring productivity.

The crane hours exclude periods where cranes were not performing for operational or non-operational reasons. These include adverse weather, equipment breakdown, delays caused by the need for manual handling of containers, other delays caused by the ship or its agent, or port-wide industrial stoppages.

If there is more than one terminal operator at a port, sum TEU and crane hours across all operators prior to calculating the mean for the port.

Scope: It should be reported for all ports handling international cargo for which data are available. Preference is for data reported at individual port level. However, where required for confidentiality reasons, for example, or for practicality, aggregate the data over a number of ports. Where data has been aggregated please name the ports to which the aggregated data relates.

Source: Terminal operators.

#### 7. *Vessel turnaround*

Vessel turnaround time is the mean time (in hours) spent by a vessel at berth. Vessel turnaround is computed as the difference between the time of arrival of a vessel at a berth and the time of departure of the vessel from the berth.

Scope: It should be reported separately for each of the ports handling international cargo for which data are available. It should cover only fully unitized vessels visiting the port in a given period. Other vessels (such as ro-ro or general cargo vessels capable of carrying some containers) are excluded from the calculation.

Source: Port authorities.

#### 8. *Import container dwell time*

Import container dwell time for an individual container is the elapsed time between the discharge of a container from a vessel to outgate (pick up by customer) – regardless of modes (truck or rail). This measure is per import container and then the simple average taken. Thus the import container dwell time is the mean time (in days) a container spends within the control of the terminal operator.

For imported containers, the time is measured from when a container is discharged from a vessel to the time it leaves the terminal gate (by any mode). If there is more than one terminal operator at a port the figure reported should be a weighted mean dwell time (weighted by number of containers).

Scope: All imported containers. Exclude empty import containers. Also exclude transhipped containers. Report aggregates for up to three ports handling international cargo for which data are available.

Source: Terminal operators.

#### 9. *Export container dwell time*

Export container dwell time is measured from when a container enters the terminal gate to when it is loaded onto a vessel.

Scope: All exported containers. Exclude empty export containers. Also exclude transhipped containers. Report aggregates for up to three ports handling international cargo for which data are available.

Source: Terminal operators.

#### **D. Cost**

##### *10. Indicative cargo handling charges (\$US/TEU)*

Cargo handling charges are the mean per-TEU cost of handling containers at a port, excluding vessel-based charges. These should be reported in US dollars (currency conversion, if required, should use the exchange rate as at the time of reporting).

Cargo-based charges to be included are as follows:

- wharfage charges that are levied on each container by the port authorities,
- harbour dues that are levied on each container by the port authorities, such as channel infrastructure fees, and
- berth charges that are sometimes charged by port authorities.

Scope: It should be reported for at least the largest port, and separately for any additional ports handling international cargo for which data are available.

Source: Port Authorities.