



PORT SECURITY AND COMPETITIVENESS



PORT SECURITY WORKSHOP
April 25-28, 2017, Miami, Florida

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Committee on Ports

[#OAS_CIP](#) [#OEA_CIP](#) www.portalcip.org

Member States



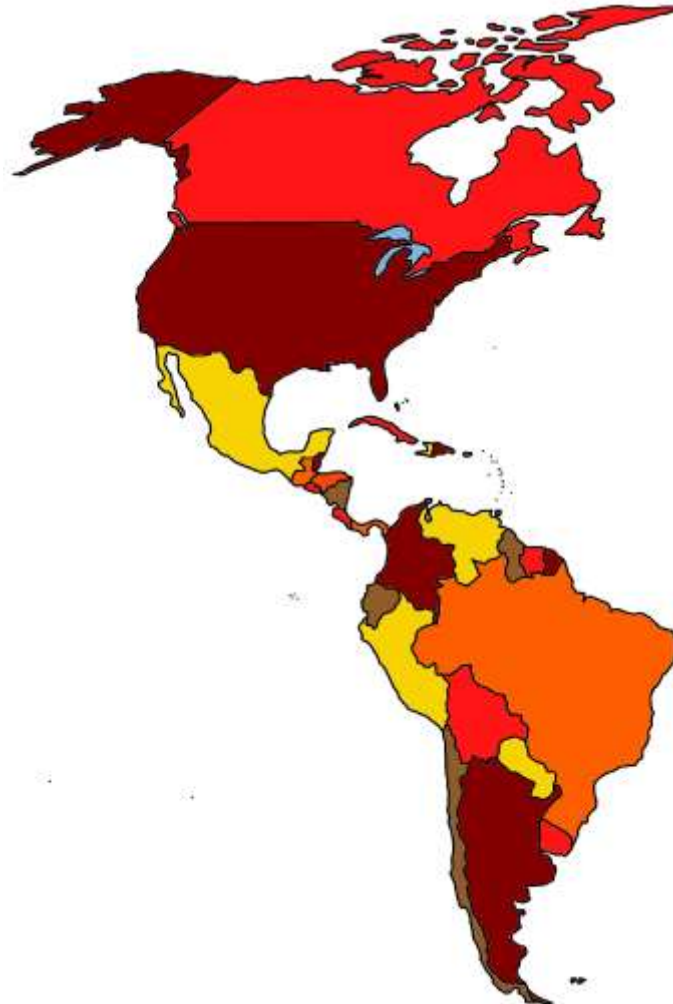
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National Port Authorities

1. Antigua and Barbuda
2. Argentina
3. Bahamas
4. Barbados
5. Belize
6. Bolivia
7. Brazil
8. Canada
9. Chile
10. Colombia
11. Costa Rica
12. Cuba
13. Dominica
14. Ecuador
15. El Salvador
16. Grenada
17. Guatemala
18. Guyana



19. Haiti
20. Honduras
21. Jamaica
22. Mexico
23. Nicaragua
24. Panama
25. Paraguay
26. Peru
27. Dominican Republic
28. St. Kitts and Nevis
29. St. Vincent and the Grenadines
30. St. Lucia
31. Suriname
32. Trinidad and Tobago
33. United States
34. Uruguay
35. Venezuela



1. **Political Port dialogue**

- Only Permanent Inter-American Governmental Forum at the highest level to achieve the development of the port industry in the region.

2. **Capacity Building**

- To promote and improve technical and managerial skills of port officials.

3. **Technical Assistance**

- Assist Member States on issues in which requested and on specific projects.

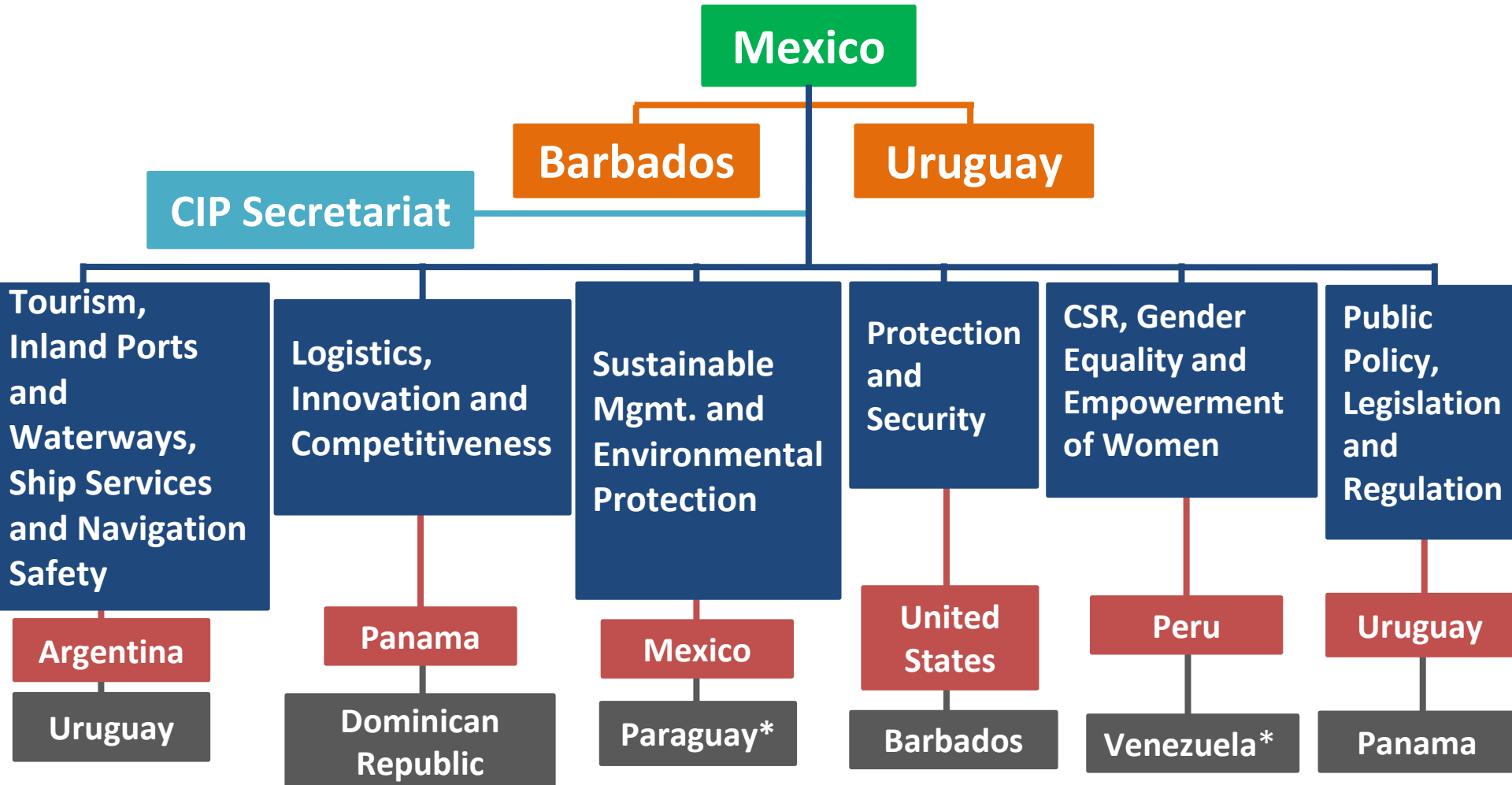
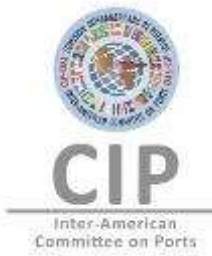
4. **Active cooperation and collaboration with the private sector**

- Promote win-win partnerships with private sector companies of the industry maritime, port and cruise for the development of port projects.

CIP Structure: Board and TAGS



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* To be confirmed

Associate Members/ Strategic Partners

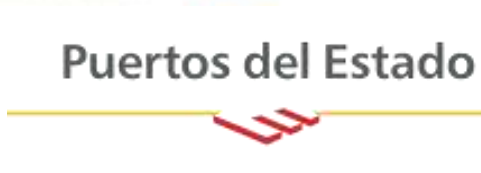


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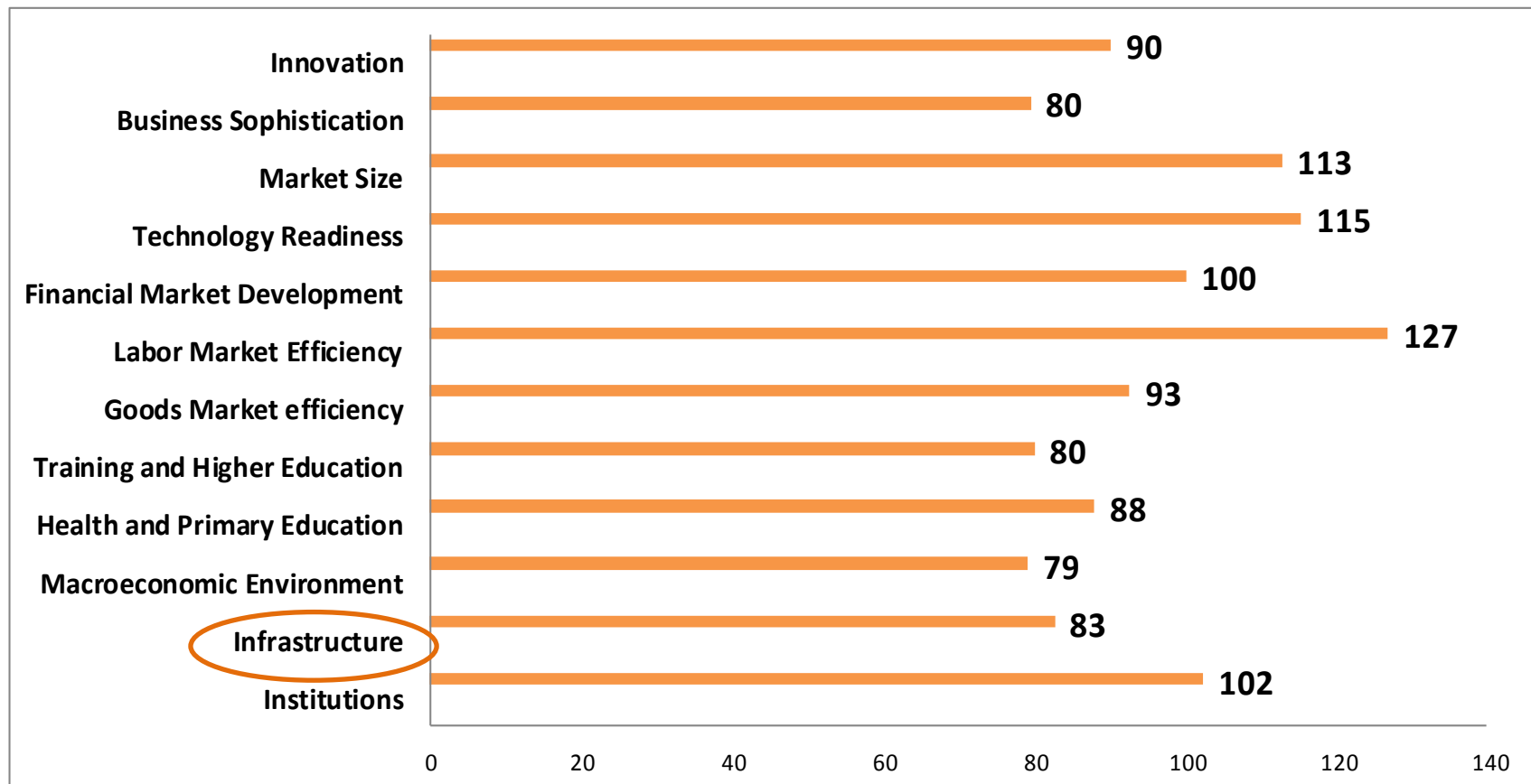
LAC Competitiveness Index 2015-2016



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*“Competitiveness is the set of **institutions, policies** and factors that determine the level of **productivity of a country**”.*



Global Competitiveness Map 2016 - 2017



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The 10 most competitive Latin American and Caribbean economies



Who is the fastest riser ?

Economy	Rank 2016-2017	Rank 2015-2016	Change
India	39	55	16
Albania	80	93	13
Jamaica	75	86	11
Bhutan	97	105	8
Malta	40	48	8
Panama	42	50	8
Botswana	64	71	7
Georgia	59	66	7
Dominican Republic	92	98	6
Mexico	51	57	6

Source: World Economic Forum, Global Competitiveness Report

Global Logistics Performance 2016

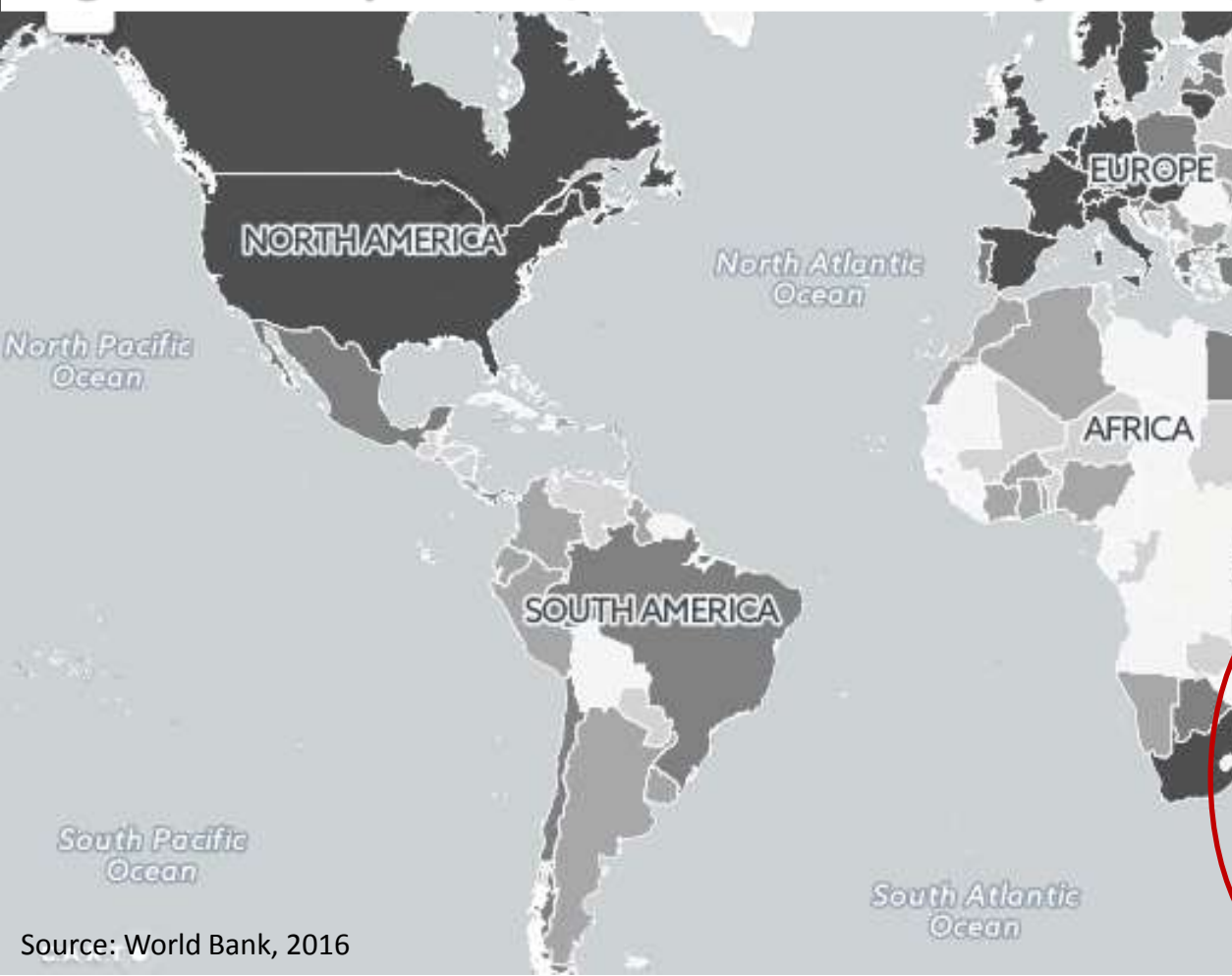


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The LPI analyzes 160 Countries in areas such as *Customs, Infrastructure, Logistics Competence, International Shipments*, among others.

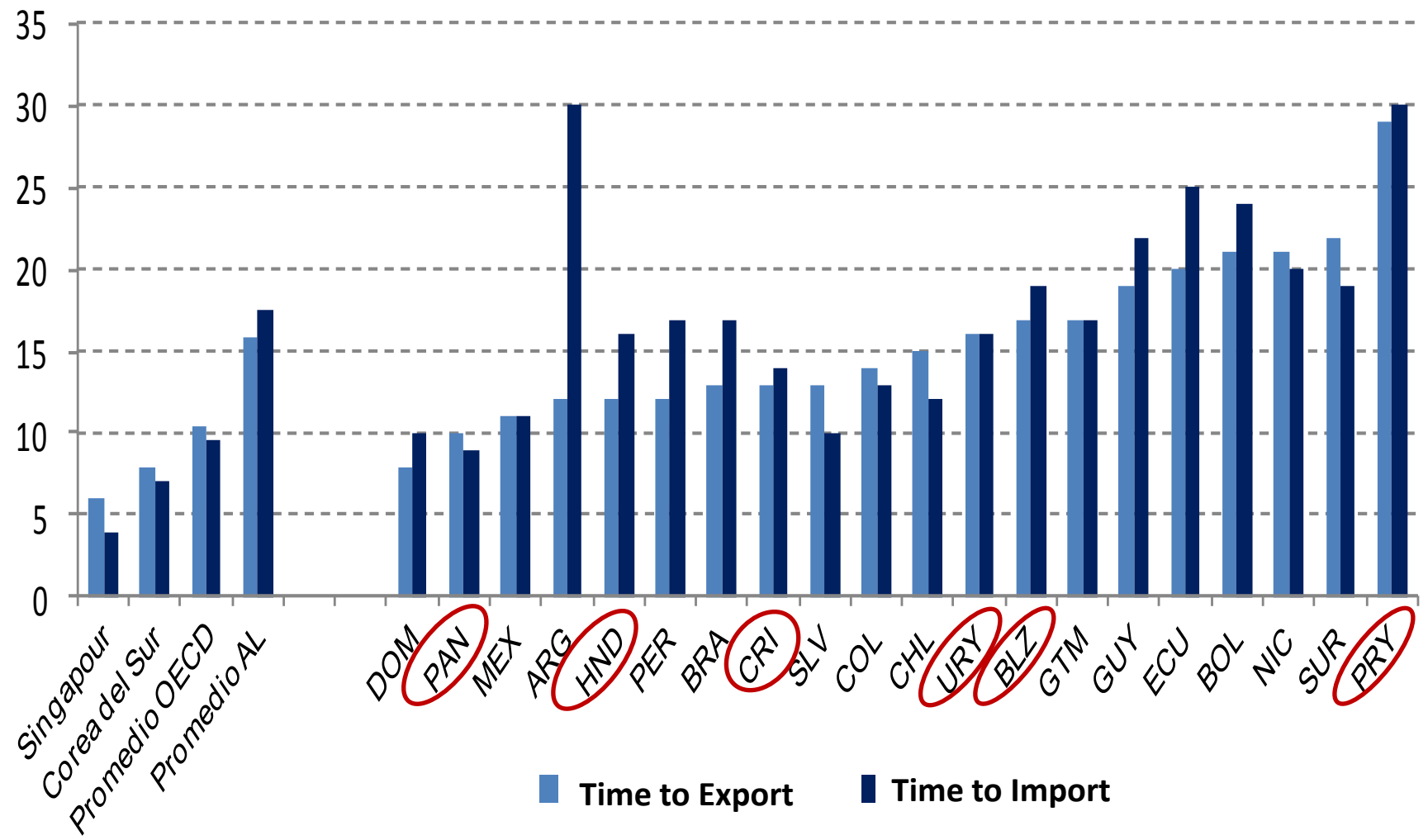
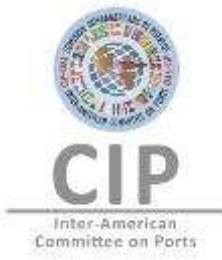


Country	LPI Ranking
Germany	1
Hong Kong, China	9
USA	10
Canada	14
South Africa	20
Republic of Korea	24
China	27
India	35
Panama	40
Chile	46
Mexico	54
Brazil	55
Bahamas	78
Jamaica	119

Time to Export and Import in LAC



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Source: ECLAC with data of Doing Business, World Bank, 2014.

Cost to Export a Container in LAC



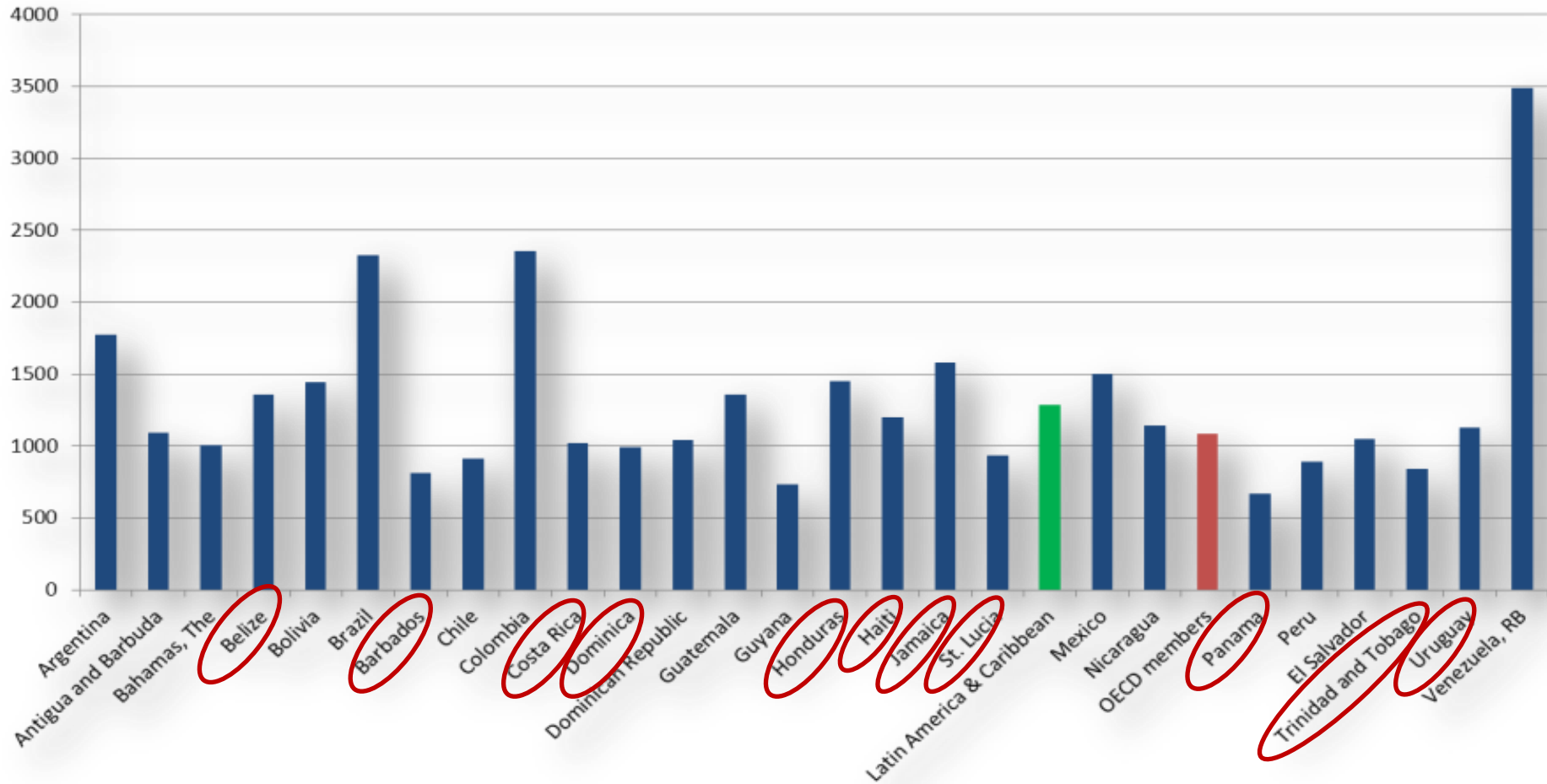
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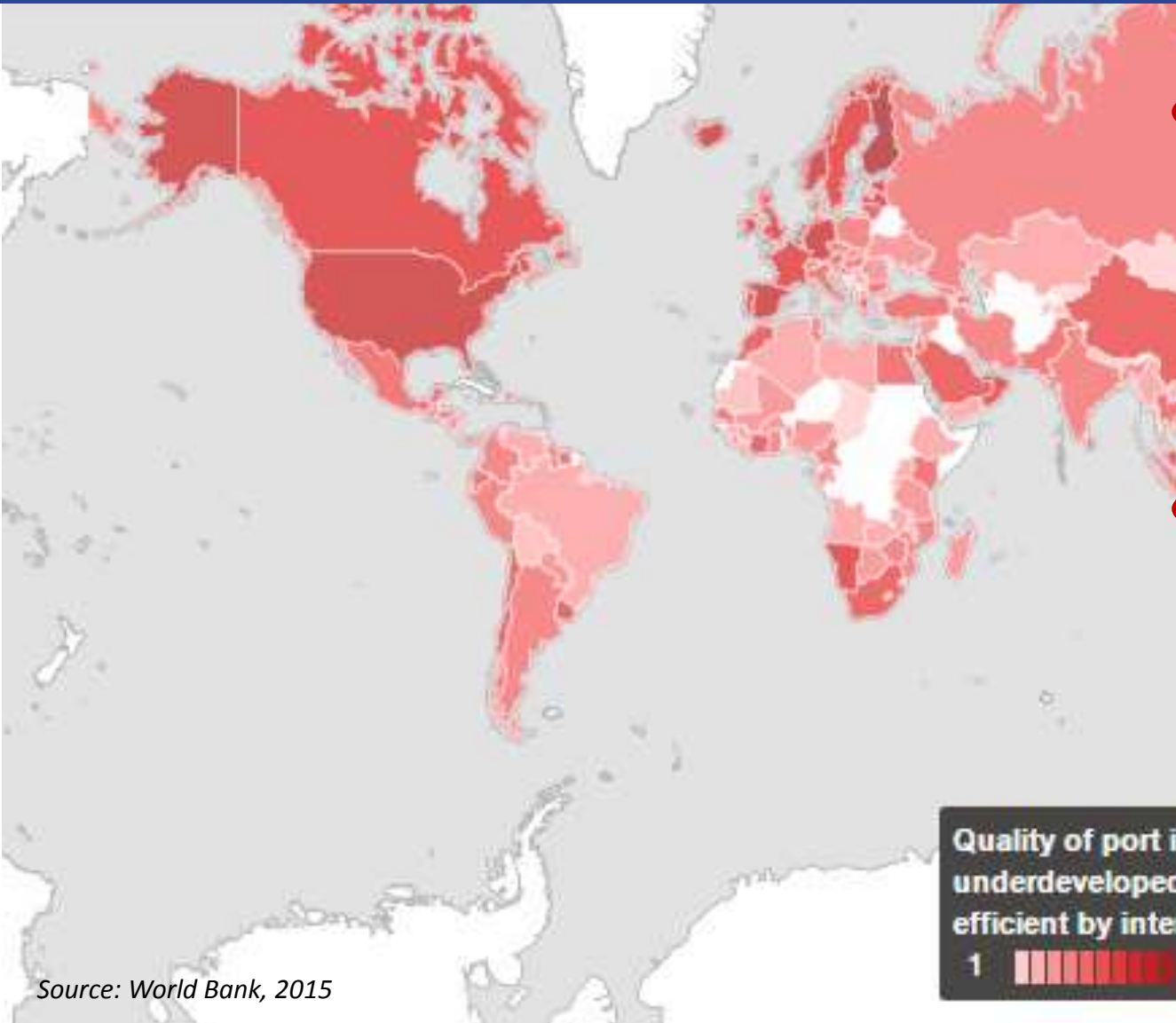
Port Infrastructure Quality 2015



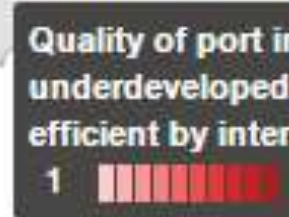
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Country	Quality
Panama	6.3
USA	5.7
Canada	5.5
Republic of Korea	5.2
South Africa	4.9
Jamaica	4.7
Dominican Republic	4.5
China	4.5
Mexico	4.3
India	4.2
Colombia	3.6
Brazil	2.7



Source: World Bank, 2015

2016 Port ranking in Latin America and the Caribbean



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Millions of TEUs

#1 Santos: 3.64

#2 Colon: 3.57

#3 Balboa: 3.29

#4 Cartagena: 2.60

#5 Manzanillo: 2.45

TEU
medición estándar,
equivalente a un contenedor
(20 pies, o 6,25 metros)

- más de 3 millones de TEU
- entre 2 y 3 millones de TEU
- entre 1 y 2 millones de TEU
- entre 700 mil y 1 millón de TEU



Panama Canal Expansion



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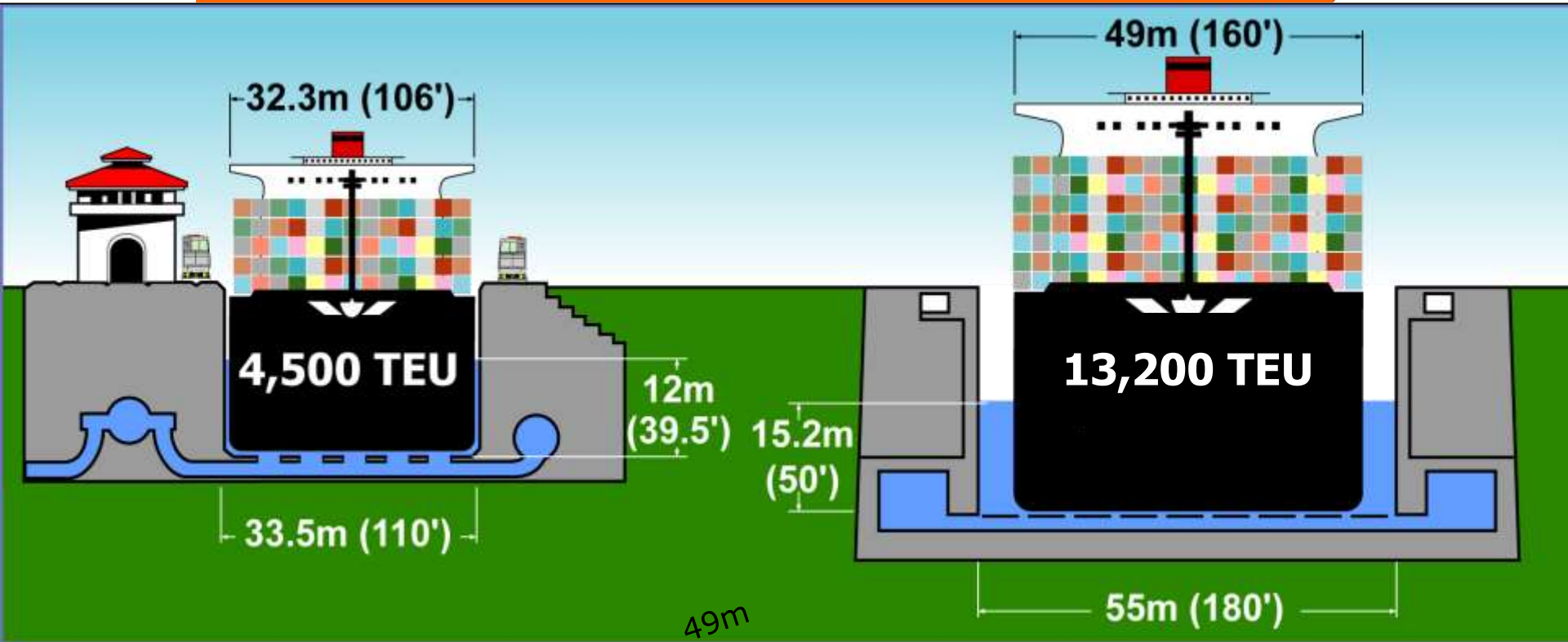
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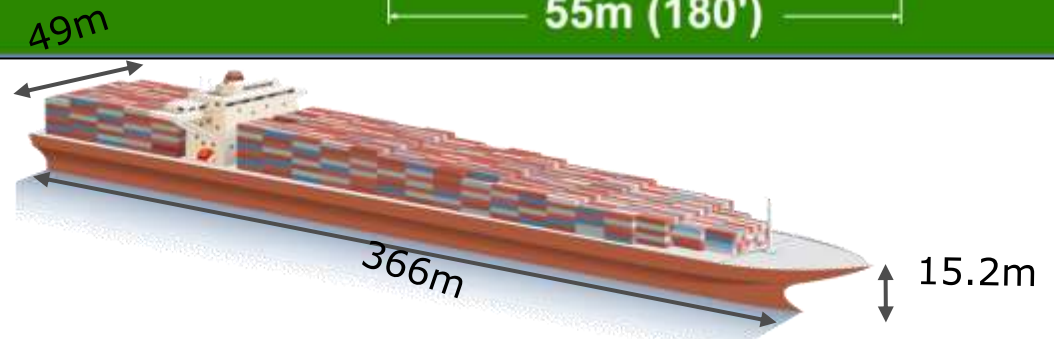
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However, vessels of 16, 18 and 20 thousand TEUs do not fit



Vessel Design:

Capacity: 14.000 TEU
Tonnage: 157.000 DWT
Total Longitud: 365.8 mts
Bao: 48.8 mts
Draft: 15.2 mts



Main Container Ports – Caribbean Basin

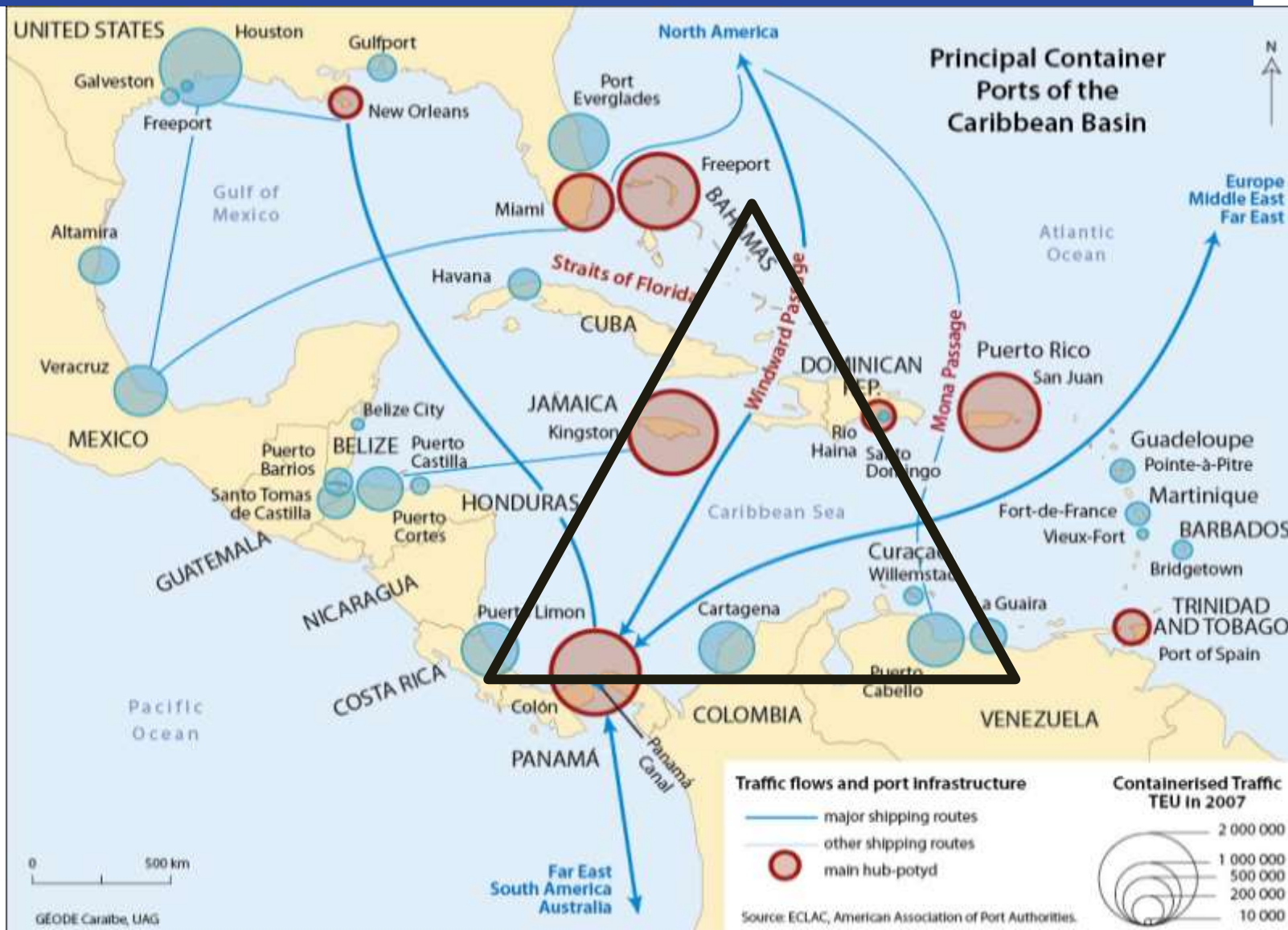


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Investments in Port Modernization



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Investments in Container terminals vs. Cruise terminals



**Bahamas Freeport
Expansion US\$ 250
million**



**Jamaica investing US\$
660 million to become a
Regional Logistics Hub**

Investments in Port Modernization



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Colombia Intermodal Master Plan



**Southern Cone Waterways:
Argentina \$7 Billion**



Brazil: New Logistic Policy



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Brazil: Institutional reform
Reducing logistics costs
→ Improve competitiveness
→ **US \$2.5 billion** in port infrastructure

Mexico: Global Logistic Platform Program



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**Investments in Port Modernization Projects:
Total approx. USD \$ 3,800 million (US \$3.8 Billion)**

\$823 USD Million

Altamira Port
Expansion

\$1.7 USD Million

Veracruz Port Expansion

\$620 USD Million

Mazatlán Modernization
Passenger Terminal

\$345 USD Million

LZC TEC II

\$380 USD Million

Tuxpan Port TUM



SCT

SECRETARÍA DE
COMUNICACIONES
Y TRANSPORTES



PCS – intermodal transportation



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Technology Objectives in Ports

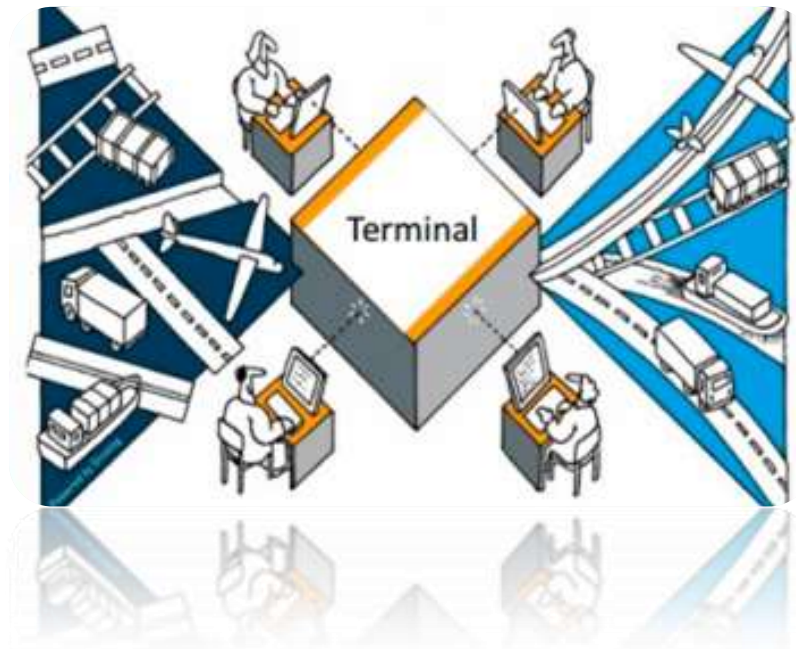
Traceability and safety

- Transport logistics and freight security
- Ensure the quality of the load
- Control location and stage of the process

Efficiency in infrastructure operation

- Elimination face-to-face and manual processes
- Synchronization of the physical and documentary flow of the load
- Efficient allocation of resources and spaces

Sustainability



It is necessary the development of legislation and technology that would allow a national logistics information platform and a well-defined central network of connections with the interior.

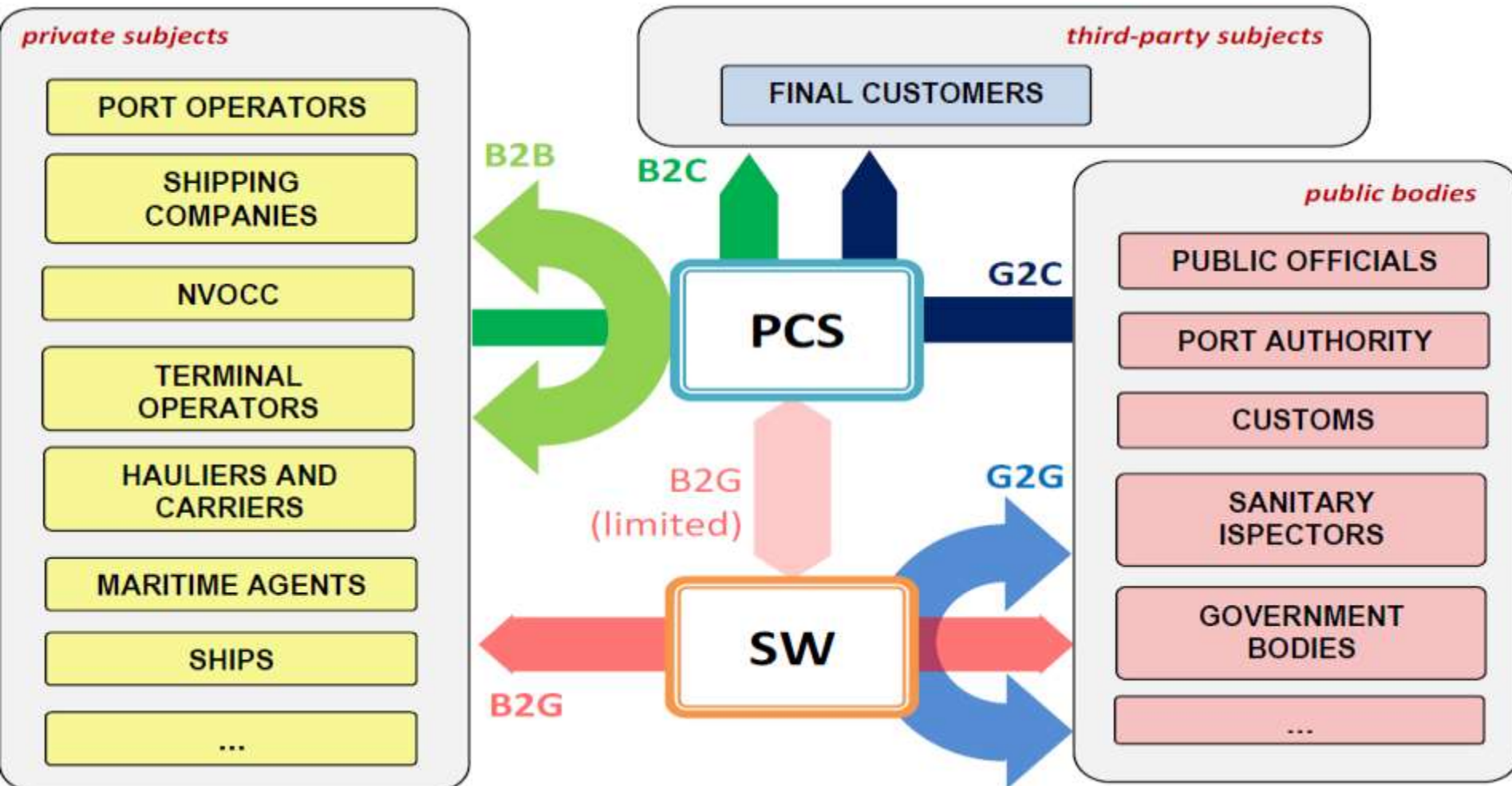
Port Community System / SW



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Cyber Security risk at each step/Institution due to more Automated Processes



- Initiative started in 2005 to increase the safety of navigation by modern technology.
- The scope of the e-Navigation project is defined as:
 - *management of information on board and ashore by electronic means*
 - *enhance berth to berth navigation and related services for safety and security at sea and protection of the marine environment”*
- *E-Navigation foresees progress in the three fields of:*
 - *On-board navigation systems*
 - *Shore side vessel traffic information management and*
 - *Ship-to-ship-, ship-to-shore and shore-to-shore-communication infrastructure.*



Security Threats



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Table 1.1: Top 5 Trends that Determine Global Developments

- 1 Rising Income and wealth disparity
- 2 Changing climate
- 3 Increasing polarization of societies
- 4 Rising cyber dependency**
- 5 Ageing population

- Security Threats connected to Cyberattacks**
1. Critical information infrastructure breakdown
 2. Data Fraud or theft
 3. Terrorist attacks
 4. Failure of critical infrastructure
 5. Failure of financial mechanism or institution
 6. Interstate conflict

Source: World Economic Forum Global Risks Perception Survey 2016.





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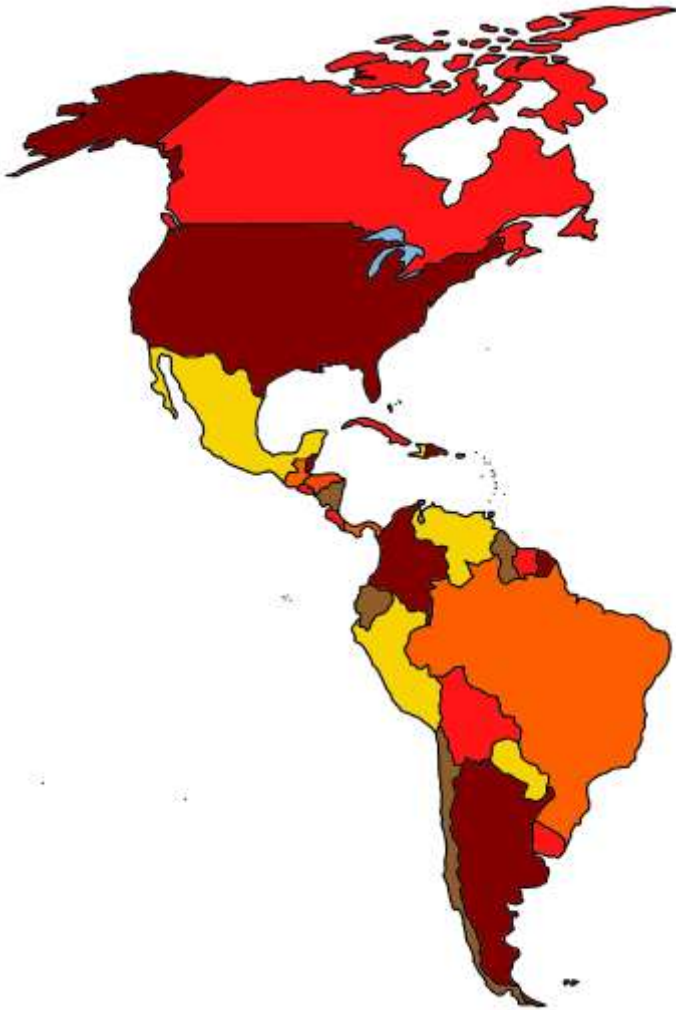
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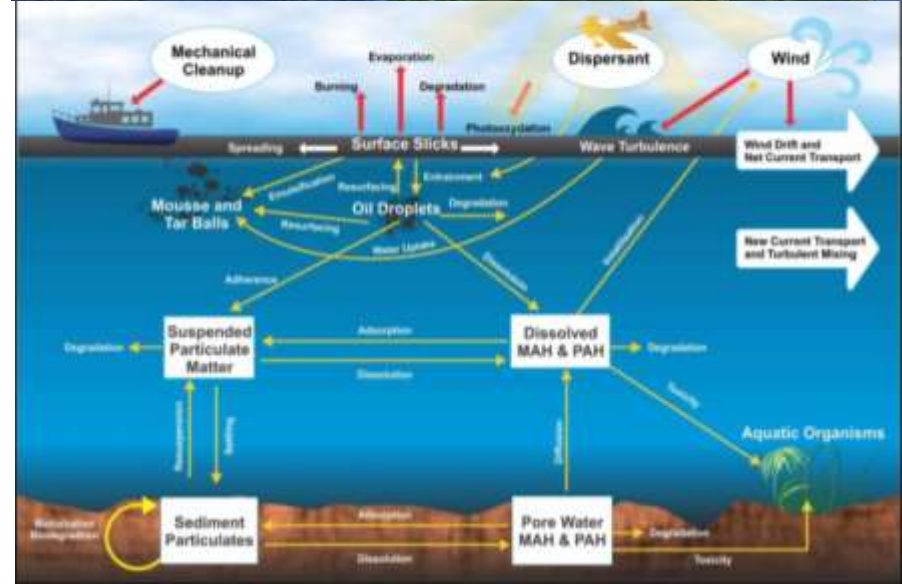
CIP Activities to Promote Secure, Competitive and Efficient Port Operations



Caribbean Risk Assessment (CRISK) with ASA as main partner



- **300 ships** submerged with high risk potential.
- **151,000 to 1.2 million m³** fuel and other hazardous materials.
- Possible leaks put in risk the **tourism economy, valuable ecological resources and fisheries** in the Caribbean.
- **US \$ 53 billion to US \$74 billion** of the tourism economy is in risk.



Assessing the Status Maritime and Security Capabilities



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Technical Advisory Group (TAG) on Port Protection and Security

- S/CIP and the OAS Secretariat for Multidimensional Security
- Joint initiative “*Assessing the Status of Maritime and Port Security Capabilities within OAS Member States*”

•Phase 1 - Maritime and Port Security Survey

- 17 countries reached (four Caribbean, 13 LA)

•Phase 2 – Cyber Risk Awareness Survey

- 17 countries reached, (nine Caribbean, 8 LA)

•Current – Cyber Security Glossary

- For all 34 OAS-CIP Member Countries



HudsonAnalytix

Cyber Security Survey Results



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Hudson Analytix
Complexity made simple.

Key Findings

Training

1. **NO participants have received training** through a web-based program.
2. Most participants have received training **informally**. Training on cyber risk awareness **more common in the Spanish** speaking.
3. Almost 20% stated that there is **no training on cyber risk awareness provided** and no plan exists to do so.

Investments in Cybersecurity

Pending any new IMO regulatory mandates and/or national port state control directives addressing cyber risk, how motivated will your organization be to invest in cybersecurity practices and/or solutions?

- No change – 17% / 6
- **Beginning – 20% / 7**
- **Developing – 28% / 10**
- Maturing – 5% / 2
- Institutionalizing – 26% / 9

Represents confusion in the market on client side. Things are evolving

What CIP Members are Interested In?

- **57%** expressed interest in having a **cyber security assessment** performed for their organization.
- **57%** in learning more about **cyber liability and cyber insurance** and/ or meeting with a port cyber security / cyber risk management expert.
- **30%** in **hosting a cyber security seminar** for their organization.
- **37%** expressed interest in a **confidential maritime cyber risk briefing** for their senior leadership team.

Caribbean Framework of Port Security Officials



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- Initiative was put forth by the Delegation of Barbados consists of two pillars:

- institutional strengthening through capacity building; and
- increased connectivity through a secure online communication platform for security officials in ports.

- Designed in collaboration with CIP Associate Member HudsonAnalytix, this project calls for the establishment of an **on-line, secure, restricted and in real time communication platform**, including a mobile application.
- Intended in the Caribbean Basin countries, **open to all CIP Members**.
- **Users** will be **designated by each National Port Authority (PFSOs)**.
- Port Authorities shall contribute with a **maintenance fee** in order to secure the sustainability of this initiative.

Technical capabilities and processes of the communication network:



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Creation of an efficient, secure, real-time, on-line communication platform for Port Security Officers and other protection officials to improve communication, coordination and cooperation for enhanced port and maritime security.

Meet the operational security requirements of all concerned parties (or has varying levels of security dependent on access);

Can be compartmentalized to enable varying levels of access;

Includes web-based training and awareness modules;

Sharing of international or regional leading and best practices;

Sharing of real-time or near real-time information regarding vessels moving among participants' ports, including notices of arrival, crew lists, cargo information, and incidents or issues of concern;

Sharing of real-time or near real-time information regarding security incidents or response operations that are of interest to, or affect more than one participant.

XI Mexico ISPS Network International Forum on Maritime Security



The Mexico International ISPS Code and the Secretariat of the Inter-American Committee on Ports (S/CIP), are proud to organize the XI International Forum and Fair on Maritime Security, to be **held on September 4-7, 2017, in Puerto Vallarta, México**. The event promotes the identification of the stage of development of the maritime security at an international level.

In addition to exchanging experiences and best practices, the forum will give space for dialogue to address particular issues such as:

- Port Operations;
- Maritime Security, including Cybersecurity;
- Environmental protection;
- Women Participation in the Port Sector;
- Simulation Exercise on Port Security Crisis Management.

Final Considerations



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LAC ports are investing in infrastructure for modernization, updating legislation and policies to cope with new global trends and demands.

- **Improve competitiveness, reduce costs and secure operations.**
- Ports investing in **soft and hard infrastructure Single Window and PCS.**
- There is a need of an **integrated intermodal network** sea-land.
- The **private sector** as catalyst for change, important to promote **PPP.**
- **Customs and ports need to improve cooperation** and exchange of information.
- Improve the **data gathering and statistics** - necessary for planning and seek to be efficient.
- **Security and protection concerns are paramount (ISPS and Cyber).**

Due to their interconnections and dependency on information and communications technology systems and the internet, ports are increasingly vulnerable to cyber-attacks. Need of more Capacity Building Programs such as Seminars and Courses in Cyber Security and Developing a Cyber Security Assessment and Plan.



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Thank You!



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