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PRINCIPLES OF PORT OPERATIONS REGULATION

CAP-HAITIEN PORT REGULATORY STRENGTHENING PROJECT

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PRINCIPLES OF PORT OPERATION REGULATION

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ACRONYMS AND ABBREVIATIONS

ANAREP	National Authority for Port Regulation (Autorité Nationale de Régulation des Ports)
Antifouling 01	International Convention on the Control of Harmful Anti-fouling System
APN	National Ports Authority (Autorité Portuaire National)
BASC	Business Alliance for Secure Commerce
BASCAP	Business Alliance to Stop Counterfeit and Piracy
CCSS Code	Caribbean Cargo Ship Safety Code
CEDA	Centre for Environmental Analysis
CHP	Cap Haïtien Port
COLREG	International Regulations for Preventing Collisions at Seas
CSC Convention 72	International Convention for Safe Containers
CSI	Container Security Initiative
C-TPAT	Customs Trade Partnership Against Terrorism
ESPO	European Sea Ports Organization
FAL 65	Convention on Facilitation of International Maritime Traffic
IACS	International Association of Classification Societies
IALA	International Association of Marine Aids to Navigation and Lighthouse
IAPH	International Association of Ports and Harbors
ICLL 66	International Convention on Load Lines
ICT 69	International Convention on Tonnage Measurement of Ships
IDC	International Dockworker's Council
IFC	International Finance Corporation
ILO	International Labour Organization
IMDG Code	International Maritime Dangerous Goods Code
IMO	International Maritime Organization
IMPA	International Maritime Pilots' Association
INMARSAT OA76	Convention on the International Maritime Satellite Organization
ISM Code	International Safety Management Code
ISO	International Organization for Standardization

ISPS Code	International Ship and Port Facility Security Code
ISSC	International Ship Security Certificate
ITWF	International Transport Workers Federation
London Convention 72	Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter
MARPOL 73/78	Convention for the Prevention of Pollution from Ships
PFSO	Port Facility Security Officer
PFSP	Port Facility Security Plan
PIANC	World Association for Waterborne Transport Infrastructure
PSC	Port State Control
RSO	Recognized Security Organization
SAR Convention	International Convention on Maritime Search and Rescue
SCV Code	Small Commercial Vessel Code
SEMANAH	Haiti Maritime and Navigation Service (Service Maritime et de Navigation d'Haiti)
SFV Protocol 93	Convention for the Safety of Fishing Vessels
SOLAS	International Convention for the Safety of Life at Sea
SONAGEP	National Port Management and Exploitation Company (Société Nationale de Gestion et d'Exploitation des Ports)
STCW	International Convention on Standards of Training, Certification and Watchkeeping for Seafarers
STP Agreement 71	Special Trade Passenger Ships Agreement
UNCLOS	United Nations Convention on the Law of Sea
UNODC	United Nations Office on Drugs and Crime
VTs	Vessel Traffic Service
WB	World Bank
WCO	World Customs Organization

INTRODUCTION

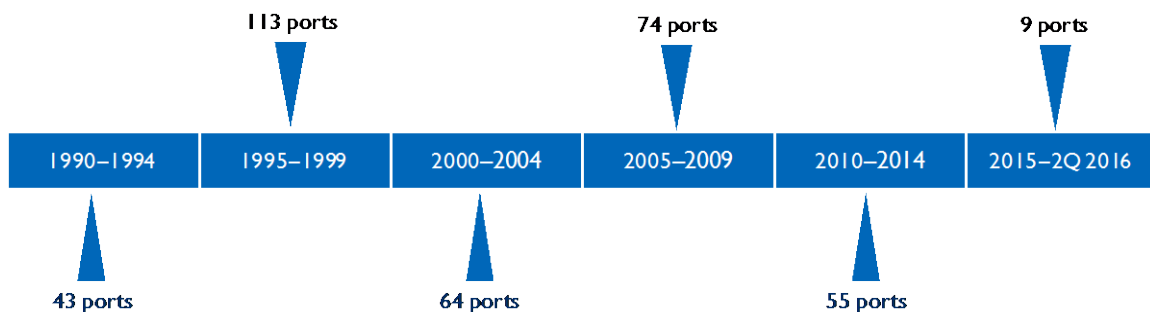
This document examines common topics and best practices in port operating rules and regulations, then provides guidance for Cap-Haitien Port (CHP) in adapting these rules and regulations to its own needs. It describes the legal powers and responsibilities typically covered in these rules and regulations.

PORT INSTITUTIONAL REFORM

Port institutional reform has swept the world since the early 1980s as countries work to improve port performance and enable private investment in needed infrastructure.

Figure 1 shows the growing participation of the private sector in port operations since 1990—358 port projects in developing countries awarded to private companies in different types of public-private partnership (PPP) arrangements.

Figure 1. Private Sector Participation in Port Projects in Developing Countries, 1990–2016



Source: World Bank PPI Database

Many PPP arrangements and contracting structures are used, varying mainly in the degree of private sector participation. According to the World Bank Port Reform Toolkit, the following strategies have been adopted by port authorities around the world:

- Modernization of port administration and management systems, equipment, and technology
- Liberalization or deregulation of port services—changing rules and regulations to enable the private sector to be involved in port operations
- Commercialization—giving the port authority the flexibility to act as a private firm to become customer oriented, develop efficiency, and become profitable

- Corporatization—giving the port authority the legal status of a private corporation while the government retains ownership of the corporation, transferring assets to the corporation and port authority retaining ownership of the land
- Privatization—the public sector transferring assets to the private sector, which invests capital in facilities, equipment and systems.

Few ports are controlled entirely by either the public sector or the private sector. In the most common institutional model, the landlord model, the port authority performs regulatory functions (regulator and management of the public port domain) and entrusts port operations to the private sector. The port authority retains ownership of the land and sometimes facilities and equipment, and the private sector provides services and operations such as pilotage, towage, and stevedoring. This is the model recommended for Haiti and CHP.

ENVIRONMENTAL PROTECTION

Environmental awareness and protection—conserving natural resources and minimizing impact—has also grown in relevance at all levels and in all industries in the past 30 years. Environmental challenges in port operations include air quality, noise, impact of truck traffic, green and brownfields, soil contamination, ocean pollution, waste disposal, and discharges from cargo handling. International conventions and instruments, as well as national and local legislation protecting the marine and landside environments must be followed in port management and operations.

The World Bank has developed environmental and social safeguard policies. Many private port operators also follow ISO environmental standards and receive ISO certification.

HEALTH AND SAFETY

Health and safety in port management and operations have also grown in importance in the last 30 years. The International Labor Organization (ILO), through the Occupational Safety and Health (Dock Work) convention of 1979 (still applicable today), provides safe operating procedures for cargo handling and storage and the International Dockworker's Council (IDC), International Transport Workers Federation (ITWF) promotes safe working conditions for dockworkers. The US Occupational Safety and Health Administration (OSHA) has defined safety standards for every industry and ISO occupational safe and healthy standards are used in many ports around the globe.

SECURITY

Another field that has changed in port operations is security due to the threat of terrorism in recent years. About 90 percent of all trade is maritime trade, making it important target for illicit trade, counterfeit and terrorist activities. The Business Alliance to Stop Counterfeit and Piracy estimated, in 2011, that the counterfeit market grows 22 percent annually. Several global, regional and national initiatives aim to prevent illicit activities in maritime transportation, including those of the World Customs Organization (WCO), the International Maritime

Organization (IMO) through the International Ship and Port Facility Security Code (ISPS Code), United Nations Office on Drugs and Crime (UNODC), Container Security Initiative (CSI), and the US Customs Trade Partnership Against Terrorism (C-TPAT). Additionally, the International Convention for the Safety of Life at Sea (SOLAS) ensures the safety of human lives, working conditions of crew, and maritime safety and safeguards the environment. The above set of norms form the basis for standard operating procedures for many ports.

TECHNOLOGY

Information and communications technology has also transformed port operations. Port users can find up-to-date rules, procedures, tariffs, and other information on a port's website, a great improvement over printed handbooks that quickly become outdated.

I. INTERNATIONAL BEST PRACTICES

The Government of Haiti port sector regulator is responsible for establishing operating rules for port operations and harbor areas in its jurisdiction. This report focuses on Cap Haitien port (CHP). To provide guidance to CHP in establishing operating regulations, this chapter examines common and best practices in port operating rules and regulations, as well as international conventions and IMO instruments. It also describes legal powers and duties typically included in port operating rules.¹

This chapter will serve as the basis for the Counterpart Working Group and the Haitian authorities to develop their own port rules and regulations. These rules and regulations may be prepared or reviewed by different government bodies related to port activities, comprising statutory duties, general common-law, and fiduciary duties.

Seaport operations include marine areas for anchorage, berthing, and navigation as well as landside areas for goods transfer from shore to ship (and vice versa) and storage. These operations require administrative formalities including police, immigration, customs, health, waste disposal, harbor patrol services, and port state control.

Ports are nodes in transport infrastructure and operate in sequence like any industrial activity. The weakest link in the port operating chain determines its capacity and productivity. Because of the international nature of foreign trade and maritime activity, ports must be compliant with international maritime rules and standards, environmental, customs and trade conventions and instruments.

PORT OPERATING RULES AND REGULATIONS

Port authorities around the world, in their landlord role, developed guidelines and information for all port users, including terminal operators, on port operations, standards, procedures and conduct. Rules and regulations are made available to port employees and port users on port

¹ At least 12 operational rules and regulations from ports around the world were used as benchmarks, as well as other documents on environmental, concession agreements, port governance, KPIs, port state control, tariffs, safety and health, international conventions and instruments, and best practices.

websites. The rules and regulations are updated to include changes in conventions, instruments, laws, operating procedures, and industry standards.

Exhibit I lists the main port functions and features that are regulated. These functions vary from port to port depending on national and local legislation, international conventions², contractual agreements with the private sector, and each port's specificities and institutional setting.

Exhibit I. Main functions and features of a port

-
- | | |
|---|--|
| • Sea and land access | • Control of dangerous cargo |
| • Infrastructure for ship berthing | • Safety and security |
| • Road and rail network | • Immigration, health, customs and commercial document control |
| • Industrial area management | • Pilotage, tugging and mooring activities |
| • Control of vehicles entering and leaving the port | • Use of berths and sheds |
| • Environmental control | • Loading, discharging, storage and distribution of cargo |
-

Source: Port Management and Operations by Patrick Alderton, Second Edition

Some ports regulate only certain aspects, while others fully address all aspects of port operations. We recommend that CHP develop and implement comprehensive operating rules and regulations. The following chapters recommend the aspects that CHP operating rules and regulations should address.

Port operations rules and regulations address issues relevant to port operations, standards, procedures, conduct on port premises (water and land side areas), and rules for the use of the port, in general. Port authorities, harbor masters, other governing bodies, operators, pilots, tugs, vessels, stevedores, contractors, and every person working at the port must follow them.

Rules and regulations are documents that are made available to all port employees and users in electronic format on the port website, for those entering, traveling or working at port facilities. Some ports require that port users and visitors read and sign the operating rules and regulations before entering the facilities.

Each port establishes and sets its own operational rules depending on its circumstances and needs. Most of them use local regulations and international standards from the IMO, ILO, World Bank, and ISO and as a reference. Exhibit 2, although not exhaustive, lists international standards, conventions, protocols, rules, and practices commonly used by seaports around the world as the basis for port operating rules and regulations.

² This refers to international conventions ratified by the nation in which the port is located.

Exhibit 2. International conventions, rules, standards, protocols and practices commonly used in ports

Maritime

- SOLAS 1974*
- Load lines convention 1966*
- Tonnage convention 1969*
- COLREG convention 1972
- CSC convention 1972
- SFV protocol 1993
- STCW convention 1978
- STCW-F convention 1995
- SAR convention 1979
- STP Agreement 1971
- INMARSAT OA1976
- Facilitation convention 1965
- MARPOL 1973/78
- London convention 1972*
- Salvage convention 1989
- Bunkers convention 2001
- Antifouling 2001
- Ballast water 2004
- ISPS Code, SOLAS chapter XI-2
- Resolution A 857 (20) Guidelines for vessel traffic service (VTS)

Health and safety

- ILO, International Labor Standards on Dock Workers
- ILO Code of practice Safety and Health in ports
- ISO 45001 Occupational health and safety
- OSHA 1800 Occupational Health and safety

Environmental

- World Bank environmental and social framework
- ISO 14001 environmental management systems
- ESPO green guide

Operational

- ISO/PAS 20858:2004 ships and marine technology–maritime port facility security assessments and security plan development
- WCO Kyoto convention on simplification and harmonization of customs process
- Container Security Initiative (CSI)
- U.S. Customs Trade Partnership against Terrorism (C-TPAT)
- Business Alliance for Secure Commerce
- International Association of Classification Societies Ltd. requirements concerning strength of ships
- World Vessel Traffic Service Guide of the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA), International Association of Ports and Harbors (IAPH) and International Marine Pilots' Association

Note: * indicates ratified by Haiti

The IMO, responsible for prevention of marine pollution by ships, as well as other maritime and ship-related management, administers over 20 environmental instruments for seaport operations. The following inter-jurisdictional bodies also provide guidance on port environmental management: Centre for Environmental Analysis (CEDA), IAPH, and World Association for Waterborne Transport Infrastructure (PIANC).

LESSONS LEARNED

Current best practices emphasize safety of operations, the environmental impact of port operations, and scrutiny from environmental organizations, society, local governments, customers, media and industry organizations. Common issues regarding modern port operating and rules and regulations include:

- the increasing importance of environment, safety, and security;
- the new role of port authorities to incorporate the private sector in port operations;
- the use of technology in port operations as a tool to communicate efficiently with different port actors;
- the necessity to review, update, and change the current rules on a periodic basis thus treating rules and standards as a living document to recognize the evolutionary essence of the transportation industry.

The present document consolidates codes, legislation, standards and best practices to procure safe and efficient port activities.

Several port operating rules incorporate national and international standards and legislations for every aspect of port operations in order to improve efficiency, environmental protection, and safety for port users, workers, ships, passengers, and cargo. Port operating rules and regulations serve as a communication medium for port authorities to set out their powers and duties, adopting best practices.

Port operational rules and regulations should recognize the diverse range of activities in port operations including the following general topics and content which are typically covered:

- **General**: introduction or general information on the port rules including its purpose, definitions, operating rules, the scope, the parties' subjects to the rules, applicable legislation, governing bodies, security, hours of operations, areas and facilities of the port, among others.
- **Reporting and information requirements**: vessel communication protocols, reporting of dangerous goods, vessel waste, general information requirements, damages, deficiencies, notifications.
- **Traffic and port stay**: marine and port pilotage services, tugboat services, operating rules, entry authorization, vessel entering and leaving the port, vessel traffic in port basin, assignment of berthing positions, berthing and anchoring, mooring, equipment and conditions, special instructions for inclement weather, land links to vessels, manning and surveillance of vessels, navigational rules, communications, coordination of marine services.
- **Security and conduct in the port**: smoking, handling fire and open flames, hot works, safe distances when parking road vehicles or depositing goods, bunkering, active cathodic corrosion protection, prohibited activities, hazard statement, port access control, emergency response, surveillance and security, protection of ships and port facilities, port restrictions.
- **Loading, discharging and storage of cargo**: cargo declaration, production of documents, storage and services to the cargo,
- **Environmental**: conservancy, waste and cargo residues, environmental control and pollution prevention
- **Health and safety**: occupational standards, first safety requirements in port and management of rescue operations, health, safety and working environment

PORT STATE CONTROL

Principles

As part of security, Port State Control (PSC) has to be considered in port operations. The 1978 SOLAS³ Protocol extends the responsibility of Port States and Flag States to address safety of ships to also include ensuring that a ship calling to port complies with IMO requirements. Port States can inspect foreign ships navigating in national waters and can have a set of harmonized inspection procedures to target sub-standard ships threatening marine environment and human lives on board them. There are nine MOUs worldwide implementing PSC as follows: (i) Caribbean MOU (Caribbean region); (ii) Viña del Mar (Latin America region); (iii) Paris MOU (Europe and North Atlantic region); (iv) Tokyo MOU (Asia – Pacific region); (v) Mediterranean MOU (Mediterranean region); (vi) Indian Ocean MOU (Indian Ocean region) (vii) Black Sea MOU (Black Sea region) (viii) Abuja MOU (West and Central Africa region); and (ix) Riyadh MOU (Arab States of the Gulf).

The main responsibility of a PSC is to ensure the compliance of the international maritime conventions under the Flag State Control responsibility. This may be considered as a second front assuring international standards and regulations. The member States shall agree the inspection of a percentage of foreign merchant vessels calling at their ports. Inspections are usually carried out unannounced, but all efforts to avoid detention or delays are made. Vessels won't be inspected during a six month period after the last inspections unless there are "clear grounds" for inspections. These inspections are based on the following international maritime conventions:

- International Convention on Load Lines 1996, as amended, its 1998 protocol (Load lines 66/88)
- International Convention for the Safety of Life at Sea (SOLAS) 1974, its protocol of 1978, as amended, and the protocol of 1998 (SOLAS 74/78/88)
- International Convention for the Prevention of Pollution from Ships, 1973, as modified by the protocol of 1978, as amended (MARPOL 73/78)
- International Convention on Standards of Training, Certification and Watch keeping for Seafarers 1978, as amended (STCW 78)
- Convention on the International Regulations for Preventing Collision at Sea 1972, as amended (COLREG 72)
- International Convention on Tonnage Measurement of Ships 1969 (ICT 69)
- Merchant Shipping (Minimum Standards) Convention, 1976 (ILO Convention No. 147)

³ International Convention for the Safety of Life at Sea (SOLAS)

Functions

The PSC function is to ensure that the shipping industry complies and conforms to the regulatory requirements provided by international conventions, memoranda and other legal instruments to ensure the safety of human lives, good working conditions for the crew, maritime safety, and environmental safeguard. Regions set homogenous systems for PSC inspections to eliminate the operation of sub-standards vessels.

Vessels inspections are regularly conducted on risk factors related to owners, vessel type, flag, age, classification society, among others; and covers hardware, documents, requirements of conventions and ISM Code⁴ shipboard maintenance.

PSC involves the following tasks as well:

- Developing and setting safety navigation standards and rules;
- Establishing examination and seafarers' certification systems;
- Detaining sub-standard ships when warranted;
- Conducting search and rescue in accordance to SAR Convention 79 (2);
- Preventing pollution from ships by making regular checks;
- Monitoring ballasting, bunkering and waste disposal;
- Investigating pollution incidents from ships;
- Recommending the adoption of conventions, amendments, regulations and instruments of interest of the country;
- Procuring the country compliance of international convention obligations;
- Carrying out inspections in accordance with guidelines for ship structures and equipment;
- Establishing intelligence and risk assessment procedures to identify potentially risky/sub-standards/unseaworthy vessels and maintain updated records of actions and statistical information;
- Providing technical assistance and training;
- Procuring information system to exchange port state inspections with others PSC in the region.

PORT AUTHORITY TARIFFS

Port operational regulations often set out the list of tariffs charges for port services and are published and made available to port users. For the purpose of ensuring transparency and

⁴ International Safety Management Code (ISM Code)

clarity, the ports that exemplify best practices tend to provide clear and comprehensive lists of tariffs along with explanation of the associated rules and regulations.

2. CURRENT SITUATION

PSC FUNCTIONS IN HAITI AND AT CAP HAITIEN PORT

Caribbean MOU

Main PSC functions include auditing labor conditions of crew on board vessels and enforcing compliance with labor rules, international conventions, and local legislation on safety and pollution. In particular, the Caribbean MOU recognizes “the importance of the safety of life at sea and in ports, and the growing urgency protecting the marine environment and its resources”⁵. The memorandum, like the other regional MOU, are convinced of the necessity of a harmonized system for auditing PSC and the cooperation among the member States in the exchange of information between them.

The responsibilities of each member State include an annual inspection of 15% of the estimated number of individual foreign merchant ships anticipated to enter the ports of the member State. There are a total of 14 relevant instruments, protocols, and amendments to comply with in PSC inspections of which Port Authorities are responsible for enforcing the international conventions and protocols ratified by the State. Those instruments are:

- International Convention on Load Lines, 1966 (LOAD LINES 66)
- The Protocol of 1988 relating to the International Convention on Load Lines, 1966 (LL PROT 88)
- International Convention for the Safety of Life at Sea, 1974 (SOLAS 74)
- Protocol of 1978 relating to the International Convention for the Safety of Life at Sea, 1974 (SOLAS PROT 78)
- Protocol of 1988 relating to the International Convention for the Safety of Life at Sea, 1974 (SOLAS PROT 88)
- International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (STCW 78)
- Convention on the International regulations for Preventing Collisions at Sea, 1972 (COLREG72)
- International Convention on Tonnage Measurement of Ships, 1969 (TONNAGE 69)

⁵ Memorandum of Understanding on Port State Control in the Caribbean Region

- Merchant Shipping (Minimum Standards) Convention, 1976 (ILO Convention No. 147) (ILO 147)
- Protocol of 1996 to the Merchant Shipping (Minimum Standards) Convention, 1976 (ILO Convention No. 147) (ILO 147 PROT 96)
- International Convention on the Control of Harmful Anti-Fouling Systems on Ships, 2001 (AFS 2001)
- Caribbean Cargo Ship Safety Code (CCSS Code)
- Small Commercial Vessel Code (SCV Code)

Each PSC will carry out inspections through visits on board ships to check certificates and documents related to the above mention list of instruments. The inspection also includes reviewing the crew and ship conditions, including the engine, accommodations, and hygienic conditions in accordance with applicable international rules and standards. In case it is established that there are clear grounds to believe that a ship does not meet standards, a more detailed inspection shall be carried out. All inspections must be performed by qualified personnel duly authorized by the Authority. In case the inspection cannot be performed by the Authority, it may be assisted by someone with the required expertise.

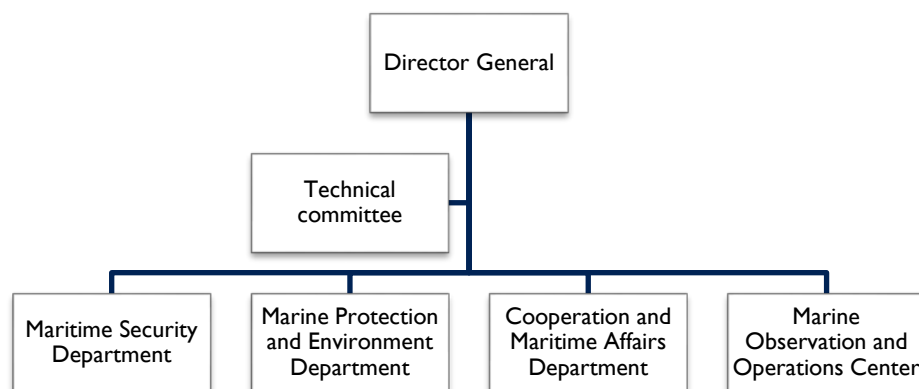
The Authority shall ensure the correction of deficiencies detected during inspections. In case of hazard to safety, health or environment, the Authority ensures that the hazard is removed before the vessel is allowed to proceed to sea. The Caribbean MOU guidelines include:

- Guidelines for surveyors to be observed in the inspection of international shipping
- Guidelines for surveyors to be observed in the inspection of Caribbean cargo ships less than 500 gross tonnage and ships of traditional build
- Exchange of messages by region states
- Report of deficiencies not fully rectified or only provisionally repaired
- Report of inspection in accordance with IMO Port State Control Procedures and amended and the Memorandum of Understanding on Port State Control in the Caribbean Region

PSC IN HAITI AND CAP HAITIEN

Haiti is not a member State of the Caribbean MOU but participates as observer. It has ratified only the following IMO instruments: SOLAS 74, Load Lines Convention 66, Tonnage Convention 69, STCW Convention 78, and London Convention 72.

The Service Maritime et de Navigation d'Haiti (SEMANAH) was created in 1982. Today SEMANAH has a presence in all 24 ports in Haiti, including Cap-Haitien. It has four departments: maritime security, protection and marine environment, cooperation and maritime affairs, and marine observation and operations center (see Figure 2).

Figure 2. SEMANAH Organizational Structure

Source: SEMANAH

The main functions of SEMANAH are:

- Legislation, standardization, cooperation, promotion, modernization
 - Prepare draft laws governing merchant shipping and strengthen related regulations
 - Draft the Maritime Code
 - Enforce adherence to international conventions:
 - International Convention for the Safety of Life at Sea, 1974 (SOLAS)
 - International Convention on Load Lines, 1966 (ICLL 66)
 - International Convention on Tonnage Measurement of Ships, 1969 (Tonnage 69)
 - International Convention for Seafarers, Training, Certification and Watchkeeping, 1978 (STCW 1978)
 - International Convention on Collision Regulation, 1972 (COLREG 72)
 - United Nations Convention on the Law of Sea, 1982 (UNCLOS Convention, 1982)
- Security/safety, control, surveillance, search, rescue, coordination and information
 - Organize security and take other measures concerning:
 - Periodic inspection and issuance of certificates to ships
 - Shipbuilding and repair
 - Operations of ships in Haitian waters
 - Ensuring ships' crews are qualified and granting of licenses to qualified personnel
 - Overseeing security of ships and ports
 - Control
 - Planning and organizing government assistance in the maritime transport sector
 - Ensure the control of vessels construction
 - Inspect and certify the good condition of the ships
 - Ensure the installation and maintenance of navigation accessories
 - Surveillance
 - Coordinate national tsunami contact point
 - Monitoring hurricane season
 - Search and rescue
 - Coordinate search and rescue at sea and maintain relations with different entities

- Implement radio and telephone communications network for the Haitian coast
 - Ensure the identification and counting of passenger before vessel arrival
- Coordination with the Coast Guard
 - Inspection and enforcement
 - Measures related to navigational aids, cabotage vessels, and international trade vessels
- Information
 - Collect data on meteorological and maritime conditions and forecasts
 - Publish the daily Marine Meteorological Bulletin
 - Manage maritime safety information
 - Survey the operation of shipyards in Haiti
 - Manage a website providing useful information (www.semanahaiti.gouv.ht)
 - Provide a maritime emergency number: 8722
- Preservation, prevention, training, planning, pricing, penalties
 - Fight against pollution affecting Haitian waters and implement a strategy for the protection of marine (animal and plant) species by:
 - Pooling of human and material resources
 - Signing a Memorandum of Understanding with the National Association of Fishermen
 - Implementing an awareness campaign through the media
 - Strengthening the response capacity of the Directorate of Marine Environment Protection
 - Pricing
 - Fix and update tariffs
 - Rates and tariffs of the cabotage trade
 - Publish useful information for those involved in maritime transport
 - Collect fees and expenses related to:
 - Registration of ships and seafarers
 - Control of the movement of vessels in cabotage (departure rights)

In addition, SEMANAH is engaged in the promotion and modernization of the Haitian merchant marine fleet development by participating in international conference on maritime transportation, disseminating technical and operational information, provision of port security services, and through the creation of training and staff development.

SEMANAH is responsible for Port State Control and compliance with international conventions, especially IMO instruments. It is the designated authority for ship compliance with international conventions, laws and other legal documents. It also monitors marine areas under national jurisdiction to prevent pollution, marine accidents and illicit activities related to maritime transportation.

CHARGES, RULES AND REGULATIONS APPLICABLE IN PORT-AU-PRINCE

Existing Operational Regulations

Current charges, rates, rules and regulations applicable at the foreign trade facilities in Port-au-Prince, Haiti, by the Autorite Portuaire Nationale (APN) have been in effect since October 1, 1978. This tariff book has never been officially updated⁶ and is not available on the APN website. Cap Haitien

They include nine sections:

1. Alphabetical index
2. Definitions
3. Rules and regulations for jurisdiction, tariff application and interpretation, port user obligations, pilotage, anchorage and vessel movement, loading and unloading, conditions and port working hours, payment for port services and facilities, security measures, responsibility for loss or damage, freight or cargo liable to damage other freight or cargo, cleaning facilities, maximum loads
4. Charges applicable to vessels
5. Charges applicable to cargo
6. Free time and storage
7. Miscellaneous services
8. Rental of equipment
9. Useful information

Sections 4, 5, 6, 7, 8, and 9 address port dues, pilotage and tugboat charges, anchorage charges, dockage charges, line handling, container charges, free time and storage charges for containers and truck trailers, container crane charges, overtime, other services, wharfage charges, private pier franchise, cargo handling charges, free time and storage charges general, breakbulk, and palletized cargo, free time and storage charges for vehicles, cargo handling equipment rental, transportation equipment rental, general, responsibility for rented equipment, description of port facilities, port location, climate, anchorage area, notice of arrival, pilotage service, radiotelephone service, stevedoring, and other private quays in the bay.

In the port operating regulations document, APN is defined as the government entity responsible for operations at Port-au-Prince port. A consistent published set of port operational regulations does not exist. There is also a lack of coherent legal framework, and the country has

⁶ A draft update of the tariff book, dated 2008, has never been approved.

not ratified some major international conventions and instruments. In the case of Cap Haitien, there are no operating rules and regulations specifically for the port.

APN and SEMANAH currently implement some operational regulations. The following documents are in use by local authorities:

- Draft Code Maritime (not an official document)
- Formulaire d'accueil des navires dans les ports (in place and in use)
- Formulaire d'approbation du plan de sureté de l'installation portuaire (in place and in use)
- ISPS procedures (in place and in use)
- Manuel règlementation portuaire – équipe de quarantaine (in place and in use)
- Projet de règlement d'exploitation du port (not an official document)

In addition to the above-mentioned documents, APN and SEMANAH apply and refer to IMO conventions, resolutions, and instruments, even though they have not been ratified by the Haitian government. Most of them are brief procedures manuals of only few pages long.

In the specific case of CHP, the harbor master, pilots and radio control officers are not always available which presents an issue. Tugboat services has just recently been awarded to a private operator.

ISPS enforcement

Port Security Officers (PFSO) and Recognized Security Organizations (RSO) are appointed by the port. In Haiti, an officer candidate must meet 17 criteria. There are also established procedures for a port to obtain ISPS certification that includes the presence of a PFSO and an evaluation of the installation security plan (PFSP).

APN has designed a temporary form consisting of a nine-page procedure document for the implementation of the International Ship and Port Facility Security Code (ISPS Code) for the reception of vessels in Haiti ports facilities. Certain standards of this document or handbook are already inserted in APN "Tarifs Généraux", in order to get information from vessel movement in Haitian territorial waters. The document includes the following forms:

- Notice of arrival
- International Ship Security Certificate (ISSC)
- Non-crew and passenger list
- Dangerous cargo list
- Vessel arrival / departure update
- Crew list
- Berth request

Port Facility Security Plan Approval Form

Port Facility Security Plan Approval Form is also in place and utilized by PFSO. In addition to the general information, the plan follows 15 sections for approval as listed in Exhibit 3.

Exhibit 3. Port Facility Security Plan Approval Form Sections

- | | |
|---|---|
| 1. Organizational structure of the port facility | 9. Safety procedures for access areas |
| 2. Safety and communication equipment | 10. Safety procedures for restricted areas |
| 3. Training and drills | 11. Safety procedures for cargo handling |
| 4. Records and documents | 12. Safety procedures concerning the supply of ships' stores and bunker fuels |
| 5. Communications | 13. Safety procedures for the supervision of the installation |
| 6. Safety procedures during ship / port interface | 14. Management of threats, security breaches and security incidents |
| 7. Security declaration | 15. Audit and changes |
| 8. Measures in the event of a change in the level of security | |

Source: Port Facility Security Plan Approval Form

SEMANAH Draft Maritime Code and reception team

SEMANAH has drafted a Maritime Code to be submitted to Parliament for approval. In the meantime, SEMANAH is using IMO instruments as guidance⁷, even though those instruments have not been ratified by Haiti, as well as International Association of Lighthouse Authorities (ILA), IMO PSC check list as reference, Port Facility Security Plan Approval Form, Ports Maritimes d'Haiti General Tariffs, Montego Bay Convention (1982), Haiti Customs Code, and Haiti Immigration Law. Exhibit 4 shows the table of contents of the draft Maritime Code.

Exhibit 4. SEMANAH Draft Maritime Code Table of Content

- TITLE I GENERAL DISPOSITIONS
- TITLE II STATUS OF MARITIME AREA UNDER NATIONAL JURISDICTION
 - Chap I Maritime public domain
 - Chap 2 Territorial see and other areas under national jurisdiction
- TITLE III PUBLIC AGENCIES DIRECTLY CONCERNED WITH THE PUBLIC DOMAIN
 - Chap I SEMANAH
 - Chap 2 Other public agencies concerned with the maritime sector
- TITLE IV VESSELS
 - Chap I Rules applicable to all vessels in the water under national jurisdiction
 - Chap 2 Haitian vessels
 - Section 1 Haitian flag
 - Section 2 Tonnage and naming
 - Section 3 Registration of vessel and identity marks
 - Section 4 Deregistration, name change, certificate of registration
 - Chap 3 safety of vessels
 - Chap 4 Ship classification
 - Chap 5 Control of foreign vessels in Haitian ports
 - Chap 6 Transfer of property

⁷ PSC ship control procedures under IMO resolution A.787(19) and 1995, resolution A.822(21), ISPS Code,

- Chap 7 Maritime lien
- Chap 8 Maritime mortgage
- Chap 9 Seize of vessel
- Chap 10 Insurance of vessels
- Chap 11 Liability of vessels' owners
- Chap 12 Wreckages

TITLE V MARITIME NAVIGATION

- Chap 1 Definitions, areas and types of navigation
- Chap 2 Rules to prevent collisions
- Chap 3 Rules applicable for collisions and other maritime accidents
- Chap 4 Assistance and sea rescue
- Chap 5 Damages, jettison and contribution
- Chap 6 Signals and maritime radiocommunication
- Chap 7 Nautical information and requested information for vessels
- Chap 8 Pleasure boats

TITLE VI SEAFARERS

- Chap 1 Special status of captain
- Chap 2 Conditions of access for seafarers
- Chap 3 On board functions
- Chap 4 Training and contracts
- Chap 5 End of term for contracts and dispute related to seafarers' contracts
- Chap 6 Training and professional qualification for seafarers

TITLE VII MARITIME TRANSPORT

- Chap 1 Organization of maritime transports
- Chap 2 Economic system of maritime transports
- Chap 3 Chartering
- Chap 4 Maritime transport of cargo
- Chap 5 Maritime transport of passengers
- Chap 6 Subsidiary agents of maritime transport
 - Section 1 Pilotage
 - Section 2 Tug
 - Section 3 Shipping agents
 - Section 4 Cargo handling

TITLE VIII FISHING

- Chap 1 Fishing vessels
- Chap 2 Professional organization of fishing

TITLE IX PROTECTION AND PRESERVATION OF THE MARINE ENVIRONMENT

- Chap 1 Prevention of pollution from land based and general measures to protect marine environment
 - Chap 2 Prevention of pollution from vessels
 - Section 1 General dispositions
 - Section 2 Prevention of pollution from hydrocarbon
 - Section 3 Prevention of pollution from noxious liquid substances transported in bulk
 - Section 4 Prevention of pollution from noxious substances transported in containers or tanks
 - Section 5 Prevention of pollution from vessels' waste water
 - Section 6 Prevention of pollution from vessels' garbage
 - Section 7 Prevention of pollution from dumping of waste from vessels
 - Section 8 Prevention of pollution from rigs
-

Section 9 Prevention of pollution inside ports
Chap 3 Fights against accidental marine pollution
Chap 4 Civil liability for the pollution damages from hydrocarbon
TITLE X PROMOTING OF MARITIME ACTIVITIES
Chap 1 Haitian maritime conference
Chap 2 Contribution of nonpublic sector for the development of the maritime sector
TITLE XI FEES COLLECTED BY MARITIME ADMINISTRATION
TITLE XII POLICE AND PENAL DISPOSITIONS
Chap 1 Police competencies on sea and coast
Chap 2 Detection and prosecution of offenses
TITLE XIII FINAL DISPOSITIONS

Source: SEMANAH

In addition, SEMANAH is one of the members of the “reception team” or “quarantine team,” which is an intergovernmental team of inspectors that boards ships before arrival in port. The reception team is composed of an immigration officer, a customs inspector, the harbormaster, police, doctor, inspector from SEMANAH, and the Port Security Officer (PFSO). Each team member has a mission and specific work to perform on board vessels. The draft operating regulations for the reception team include a code of ethics on board and liabilities of APN. Figure 3 illustrates the vessel reception process, by the reception or quarantine team.

Figure 3. Vessel reception process by the reception team



Source: SEMANAH

Draft port operating regulations

APN drafted a document containing regulations for private and public ports. The draft, dated October 2008 but never approved, describes the installations of Port au Prince and specifies operational planning meetings. Exhibit 5 lists the document’s table of content.

Exhibit 5. APN Draft Port Operating Regulations

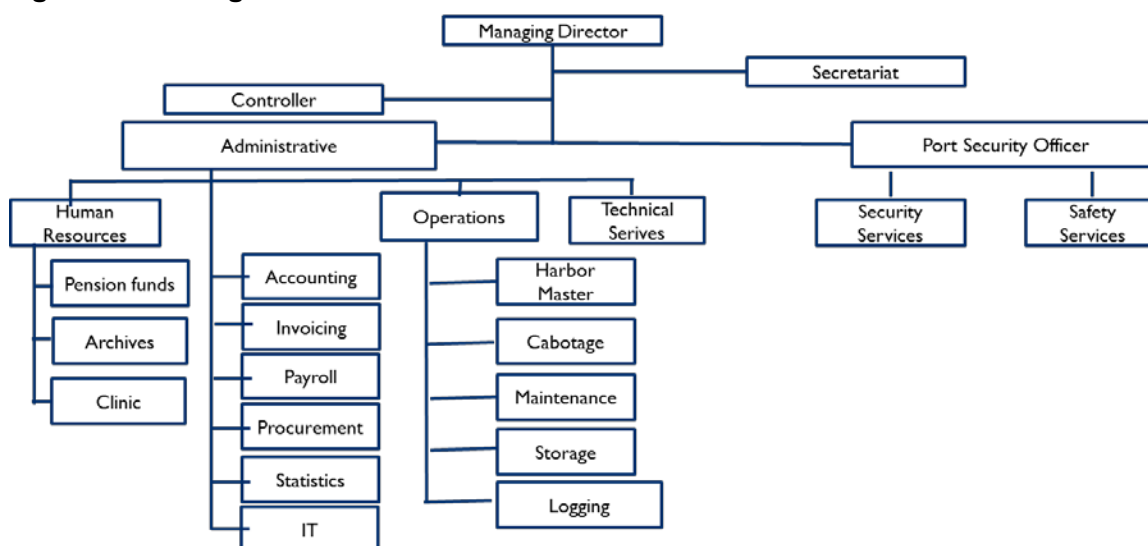
-
- | | |
|--|---|
| 1. Scope of port operating regulations | 7. Employees to drive the handling equipment |
| 2. Description of the public facilities in PAP | 8. General rules of safety for the handling |
| 3. Operational planning meetings | 9. Special measures for mobile equipment and other heavy machines |
| 4. Priority rules | 10. Special measures for warehouses and lands in the port |
| 5. Terms and conditions for equipment operations | 11. Productivity of handling operations at public quays |
| 6. Insurance | 12. Definitions |
-

HAITI PORT ACTORS

There are several players in the Haitian government related to port and maritime activities. The APN is to be restructured and its functions distributed to two new entities. Port operating rules, port state control and port authority tariffs will have to take this restructuring into consideration.

APN is an independent government corporation under the Ministry of Economy and Finance that manages and administers all ports in the country, providing services to ships, ships agents, and other port users. APN will be replaced by two new bodies, the regulatory body ANAREP and the port operations supervisor SONAGEP.

CHP Directorate operates as an extension of the Directorate General of APN headquarters in Port-au-Prince. The director of CHP is in charge of the International Port of Cap-Haitien and oversees the daily management of public facilities according to the standards and procedures established by the Directorate General of the APN. He is appointed by the Director General of APN and reports to him or her on all strategic issues, including the development of the budget, appointment of staff, and legal issues. Figure 4 shows the CHP organizational chart.

Figure 4. CHP Organization

Source: APN

The CHP Directorate provides maritime services, ship and passenger reception, and oversees handling and storage operations and security for cargo, facilities and equipment and guidance services to ships as well as security. It provides harbormaster services (moorage, pilotage, tugboat, public infrastructure management), auto storage and parking, cabotage, and registration. Technical services refer to spatial arrangement and maintenance of port land and facilities.

SEMANAH is the specialized agency (under the Ministry of Public Works, Transport and Communications) responsible for the regulation and control of Haiti's maritime waters including security, safety of shipping and protection of the marine environment. Among its functions are developing draft laws governing the merchant marine, organizing maritime safety, supervising shipbuilding of vessels registered in Haiti, monitoring operations in Haitian waters, port state control, and providing and managing navigational aids. SEMANAH conducts some PSC functions with the "Reception Team" consisting of immigration department, customs, harbormaster, policeman, MSPP and SEMANAH.

SONAGEP will act as enforcement body of regulatory functions set by ANAREP, and reports to the Ministry of Economy and Finance. All services and private operators' administrative and operational issues will be under SONAGEP responsibility, executing statutory power on the ground. Cap Haitien SONAGEP's main functions include:

- Commercial planning
- Construction and maintenance of infrastructure
- Infrastructure management
- Authorization of port operators
- Patents granting
- First level of cooperation with port operator
- Port services provider
- Ship services

- Safety and security
- Enforcement of regulatory functions, executing the statutory power within the regulatory framework set by ANAREP.

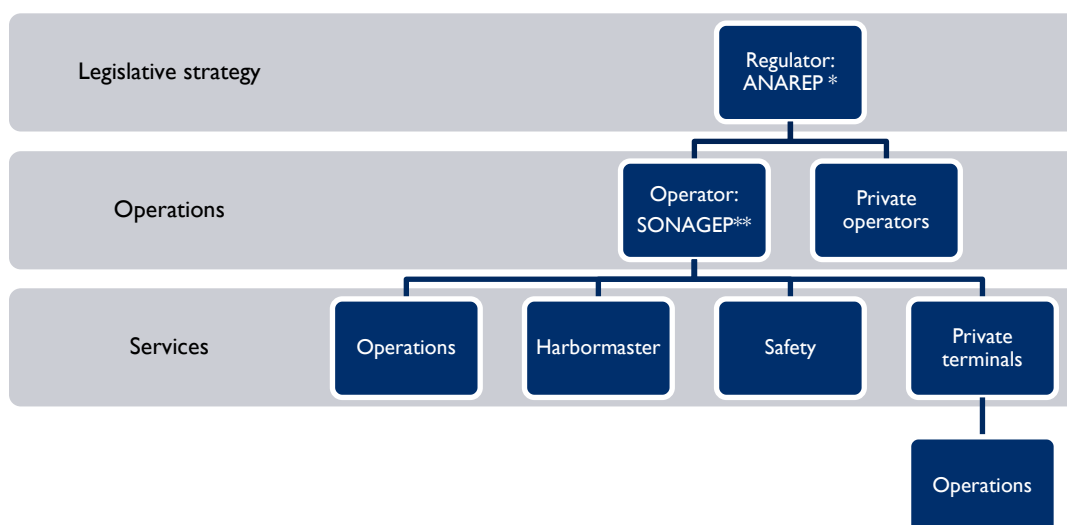
ANAREP, reporting to the Ministry of Public Works, Transports and Communication, will act as port regulator. According to the current port reform proposal, ANAREP will have a strategic role in the guarantee and implementation of plans to promote fair competition, the formulation of policy and regulation of the port sector, the defense and protection of port users, and the promotion of port business. ANAREP will manage regulatory issues and procurement operation licenses under PPP, BOT, or management contracts. It will issue contracts with private operators and will formulate regulation and monitoring and controls.

ANAREP's strategic role will be to develop and manage the port master plan and port planning. In addition, it guarantees and establishes plans for fair competition. Some of its functions include:

- Sector regulation and policy formulation
- Ensure fair competition and users protection
- First and second level of control
- Accounting records
- Port promotion

Figure 5 represents the proposed organizational structure for ANP successors, and Table I shows four key functions and the responsibilities among these new entities. SONAGEP key functions will be authorization and accreditation, and ANAREP key functions will be concessions and contracts management.

Figure 5. Proposed Organizational Structure for ANP Successors



Notes: *ANAREP will report to the Ministry of Public Works, Transports and Communication

**SONAGEP will report to the Ministry of Economy and Finance

Source: APN

Table 1. Key Functions of ANAREP and SONAGEP

	ANAREP	SONAGEP
Authorizations		✓ *
Concessions	✓	
Management contracts	✓	
Accreditations		✓ *

*— for public and private ports

Source: Counterpart Working Group Meetings

REGULATORY FUNCTIONS OF A PROPRIETARY PORT

The national port reform document defines a “Proprietary Port” as the “model where the port authority performs public functions (regulator and management of the public port domain) and entrusts the port operations to the private sector”. The Counterpart Working Group Meeting of November 18, 2016, agreed that the port authority exercises regulatory powers for several functions including navigation, port operations, and port economics. The port authority is responsible for ensuring compliance with international conventions, laws, and regulations on safety, security, environment, navigation, transport of hazardous goods, and health, among others. It also oversees state-owned management of the port, including the maintenance of infrastructure, development of port heritage, implementation of strategies and actions related to the valorization of this heritage.

The private sector is responsible for installing and maintaining its own equipment, running operations, supplying and maintaining its own structures, including buildings such as offices, silos, workshop and warehouses.

The landlord regulatory functions for Cap Haitien have been distributed among five government entities: ANAREP, SONAGEP, SEMANAH, Ministry of Economy and Finance, and Ministry of Transport and Public Works. These regulatory functions are divided in two main areas: (1) safety, security and environmental regulation; (2) economic and contractual regulation (see

Table 2).

Table 2. Current regulatory functions of Haitian government bodies

Function	ANAREP	SONAGEP Headquarters	SONAGEP* CHP	SEMAMAH
Safety, Security, and Environmental Regulation				
Safety	Direction Réglementation, CRI		Harbormaster	SEMAMAH
Security	Direction Réglementation, CRI Direction Réglementation,		Harbormaster	

Function	ANAREP	SONAGEP Headquarters	SONAGEP* CHP	SEMANAH
	Service contrôle pour un contrôle			
Environment	Direction Réglementation, CRI		Harbormaster	SEMANAH
Port State Control				SEMANAH
Port police			Harbormaster	
International protocols and obligations	Direction Réglementation, CRI		Harbormaster	SEMANAH
Economic Regulation, Competition, Contractual Regulation				
Economic regulation, tariff setting, port dues setting, approval	Direction Réglementation		Direction CHP	
Competition regulation	Direction Réglementation		Direction CHP	
Private sector participation PPP	Direction Réglementation		Direction CHP	
Contracts with the private sector	Direction Réglementation for formulation of regulations Direction Commercialisation for monitoring and control of application		Direction CHP	

Source: Counterpart Group Meeting

Under the first main area (safety, security, and environment), the main regulatory functions for Cap Haitien as a port owner include:

- **Safety:** assistance with navigation, towing, pilotage, measures to ensure safety and prevent disaster, and rules for dangerous goods.
- **Security:** protection of harbor waters, protection against intrusion into the port, counter-terrorism, cargo inspection.
- **Environment:** preservation of environment and port operation mitigation, prevention plans against pollution.
- **Port State Control:** inspection of foreign vessels in national ports to verify that the ship and equipment comply with international rules and regulations, and that the vessel is operated in accordance with those rules.
 - **Port police:** port specific police, contributing to the proper functioning of port activities and the protection of installations.
 - **Other international protocols or obligations**

The second category, economic and competition regulation, includes the following functions:

- **Economic regulation and tariff setting for public port services and authorization of private sector tariffs:** analyze the impact of tariffs on traffic for import and export cargos and competitiveness of the country foreign trade. Tariffs must also recover operational and investments costs.
- **Competition rules:** setting competition rules to avoid anti-competitive situations that might impact port users.
- **Private sector/PPP participation:** authorizing a private operator the right to market services in the port area, to provide activities such as commercial activities. In the case of Cap Haitien, container terminal and handling, or public services including pilotage, maintenance of navigational aids, among others.
- **Contractual regulations:** supervision, monitoring of performance indicators, penalties for non-compliance, among others.

REASSIGNMENT OF CHP REGULATORY FUNCTIONS

In Cap Haitien, ANAREP, at the operational stage, will control the compliance with national and international rules, including: hazardous materials, ISPS, sanitary, monitor compliance with port operator tariffs obligations and investment.

SONAGEP, at the project stage, is responsible for elaborating the standards to be applied by public or private organizations, verifying compliance with the standards laid down for the execution of structures by the operator, and managing the realization of the investments that are the responsibility of the public sector according to agreements made with the concessionaire.

Without considering the advisability of creating a SONAGEP Headquarters entity, the regulatory functions related to CHP are not exercised by SONAGEP Headquarters but only at the SONAGEP CAP HAITIEN level.

To avoid duplicating functions in CHP, for ANAREP and SONAGEP, the Counterpart Working Group recommended allocating regulatory functions as indicated in Table 3.

Table 3. Counterpart Group Recommended Allocation of Regulatory Functions for Port of Cap Haitien

Regulatory function	Responsibilities			
	APN - Future ARANEP	APN - Future SONAGEP Headquarters	APN - Future SONAGEP CHP	SEMANAH
Safety, Security and Environment Regulation				
Security	Regulation Department (CRI)		Harbormaster	SEMANAH
Safety	• Regulation Department (CRI) • Regulation Department (Service Control) for control		Harbormaster	
Environment - Port State Control				SEMANAH
Port police			Harbormaster	
Other international protocols and obligations	Regulation Department (CRI)		Harbormaster	SEMANAH
Economic regulation / competition / Contractual regulation				
Tariff regulations for public services and private sector tariffs authorization	• Development Department (Economic Section) • Regulatory Department (Service Control)		Operations Department (CHP)	
Competition rules	Regulatory Department (port legislation) for free competition direction for the edict of the rules is pending		Operations Department (CHP)	
Private sector participation/PPP	Regulatory Department		Operations Department (CHP)	
Contracts with the private sector	Commercial Department		Operations Department (CHP)	

Source: Counterpart Group Meeting November 18, 2016

The support functions supporting the recommended allocation in Table 3 that are not regulatory functions are listed in Table 4.

Table 4. Supporting functions recommended by CGM

Supporting functions	APN – future ANAREP	APN – future SONAGEP CHP
Training	Human Resources Direction	Human Resources Direction
IT	Human Resources Direction	Administrative Direction (Information Services)
Accountant		Operation Services CHP
Statistics		Finance Direction

Source: Counterpart Group Meeting November 18, 2016

ASSESSMENT OF OPERATIONAL RULES AND REGULATIONS IN THE PROPOSED CONCESSION AGREEMENT AT CAP HAITIEN

As part of our appraisal, we have also the proposed PPP contract for Cap Haitien (Operation and maintenance contract for the container terminal at the international port of Cap Haitien, in Haiti), version 2.0 dated January 2017 to identify operating rules included in the proposed contract.

Further in this chapter, we list the typical functions and features of a port, where regulatory functions are enforced. As mentioned in various parts of this report, every port is different and regulatory functions depends on specifics of each port. There is no a single solution for all ports. Another task conducted to develop this document is the “assessment of current situation” in Haiti, the regulatory functions for CPH, agreed by the Counterpart Groups meetings. In following chapters, we mention current limitations in CPH as per our visit to Haiti during the third week of January 2017.

The purpose of this paper is to assess the PPP contract in regards of regulatory functions to be established for CPH and made notes and recommendations. In the particular case of Cap Haitien Port, we have recommended APN regulatory functions are set in two broad categories, as indicated below: (1) safety, security and environmental regulations and (2) economic and contractual regulations; as statutory functions to be enforced by the different government regulating bodies.

APN must ensure that the two broad operational rules and regulations dimensions selected encompass as many as possible of the functions typically in port operations subject to control and monitored by governmental bodies. We recommend, after a thorough review of several sources including International Harbormaster Association, IMO provisions, international best practices and other projects and port examples, the following functions to be included in CHP operating regulations for each of the two regulatory rules and regulations dimensions or categories:

- I. Safety, security and environmental regulations:
 - A. Vessel traffic management
 - B. Sea and land access
 - C. Pilotage, tugging and mooring activities
 - D. Reporting and communication
 - E. Control of vehicles, all modes, entering and leaving the port
 - F. Safety and security within the port area
 - G. Immigration, health, customs and commercial documentary control
 - H. Industrial area management
 - I. Use of berths, sheds, etc.
 - J. Loading, discharging, storage and distribution of cargo
 - K. Environmental control
 - L. Control of dangerous cargo
 - M. Pollution and reception facilities
 - N. Regulation of other port options
2. Economic and contractual regulations:
 - A. Tariffs

Under safety definition, we understand the safe arrival or departure of the vessel into the port with all necessary public statutory functions as for example: the presence of navigation aids, the provision of pilotage and tugging services, berth assignment, mooring, etc. that means all aspects that ensure the “safe” navigation and maneuver of incoming or outgoing vessels. At the same time, we understand under safety, the occupational health and safety for all actors working in the port.

Security deals with threats such as subversive acts of sabotage that led to destruction, injury, loss, injury, thefts, physical security and defense. Security deals with the protection of people, infrastructure, equipment, cargo and vessels and refers to the defense and law enforcement within the port premises. After the terrorist attacks of 9/11, the adoption of ISPS code recommendations and best practices are part of the port security elements.

Port environmental and safety functions sometimes overlap. Most of port operational safety actions are geared to protect environment.

The proposed Operation and Maintenance Contract for the Container Terminal at the International Port of Cap Haitien, in Haiti, consists of eight parts, which are listed below in Exhibit 6. Particular focus is given to port operational rules and regulations: Articles 20 (Environmental and Social Matters) and 21 (Security and Safety), as well as Schedules 6

(Operation and Maintenance Specifications), 13 (Tariffs, Fees and Charges Payable by the Terminal Users) and 17 (Underlying Port Services) of said proposed PPP agreement.

Exhibit 6. Chapters in the Proposed Operation and Maintenance Contract for the Container Terminal at the International Port of Cap Haitien (January 2017 Version)

1. Definition and interpretation
 2. The project
 3. General responsibilities
 4. Financial matters
 5. Changes, changes in law, supervening events, indemnities
 6. Default and termination
 7. Intellectual property, confidentiality and personal information
 8. General provisions
-

ENVIRONMENTAL AND SOCIAL MATTER ASSESSMENT (ARTICLE 20)

According to the World Risk Index (WRI, 2014) of the United Nations University, Haiti is the most vulnerable country in the Latin American and Caribbean region. The environmental performance index place the country in the position 176th out of 178th countries. Main environmental changes facing are land and forest degradation, increasing temperatures, decreasing biodiversity, drought and desertification, coastal erosion, sea-level rise, salinization⁸. It is extremely important for the country to preserve and emphasize on the environmental conservation, in this case, in port and maritime activities. No environmental framework regulating port or maritime related activities in Haiti have been found in our research.

The proposed PPP agreement recommend IFC environmental, health and security standards⁹ to be applied at the operation and maintenance contract for the container terminal at the international port of Cap Haitien.

The proposed PPP agreement mentions construction works to be performed and access to the terminal by government agencies and contractors. It is proposed that the Operator acknowledges certain environmental assessments and decontamination activities that might occur in a period of rehabilitation work. It is advisable that APN establish a minimum set of environmental, safety, and security standards, procedures, or protocols to be applied during rehabilitation work; for example, IFC Environmental and Social Performance Standards and Guidance Notes dated January 1, 2012, ISPS Code and SEMANAH drafted ones in their Maritime Code to be approved.

⁸ Environmental Migration Portal

⁹ Article 20, PPP proposed agreement, articles 20.1, 20.2.2., 20.3.2, Article 21, 21.1.1, 21.1.4, Article 22, 22.1.1, and 22.1.2

We have not found in the proposed PPP agreement that an environmental condition base line assessment will take place before the contract award. It is a common practice in this kind of agreement to have an environmental passive report of existing facilities, as well as conduct periodic environmental surveys during the agreement period. The Port Authority shall also have the right to conduct environmental assessments during the supervision of the operator.

The PPP agreement specifies four environmental documents to be developed by APN and five documents by the terminal operator (see Table 5).

Table 5. Documents to be developed by APN and the Operator

APN	Operator
Environmental and social management standards	Environmental and social management standards Environmental management plan
Emergency management framework	Emergency management plan
Communication and consultation standards	Communication Plan
Security framework plan	Safety plan

Source: Proposed PPP agreement

Under the communication and consultation standards, an environmental and social matters mechanism to receive and resolve complaints from stakeholders shall be established. The complaints process for stakeholders and manual for operator, ideally hosted in the Port Authority or the operator webpage, should also be available not only for environmental and social activities, but also for all port operations activities. All complaints should be numbered and a reasonable period of time should be established for responding, communicating, and resolving them.

The agreement indicates that the operator must transmit certificates to APN confirming compliance with applicable environmental law and environmental and social management standards, as well as reports on environmental management plans, the communication plan, safety plans and policies, and standards for occupational health and safety. In addition, we did not find contract monitoring and supervision systems, any list of environmental metrics or KPI's, nor who will be conducting these functions in the proposed PPP.

During our visit to SEMANAH, in January 2017, they confirmed that there is not a port related environmental law the country. The Ministry of the Environment uses several UN convention and documents as a guidance for the national legislation, while APN and SEMANAH use IMO instruments as reference. SEMANAH's Draft Maritime Code, not yet approved by congress, under Title IX, Protection and Preservation of the Maine Environment, includes four chapters on marine port specific environmental issues, that could be adopted as the base for maritime specific standards:

- Chap I. Prevention of pollution from land and general measures to protect marine environment.

- Chap 2. Prevention of pollution from vessels
 - Section 1 General dispositions
 - Section 2 Prevention of pollution from hydrocarbon
 - Section 3 Prevention of pollution from noxious liquid substances transported in bulk
 - Section 4 Prevention of pollution from noxious substances transported in containers or tanks
 - Section 5 Prevention of pollution from vessels' waste water
 - Section 6 Prevention of pollution from vessels' garbage
 - Section 7 Prevention of pollution from dumping of waste from vessels
 - Section 8 Prevention of pollution from rigs
 - Section 9 Prevention of pollution inside ports
- Chap 3 Prevention of accidental marine pollution
- Chap 4 Civil liability for the pollution damages from hydrocarbon

SECURITY AND SAFETY ASSESSMENT (ARTICLE 21)

The security and safety chapter in the proposed PPP agreement mentions that the operator shall comply with ISPS code and that APN is to prepare a security framework plan while the operator is to prepare a safety plan. It also recommends the IFC Performance Standard 4 for armed security personnel (chapter 21.1.4). It is our understanding that the underlying port services also should be contemplated in the security and safety article. Currently, APN applies some ISPS procedures, through the procedures to designate Port Security Officers (PFSO), as well as the “Mise en Oeuvre du code international pour la surete des navires et des installations portuaries (Code ISPS)”.

This chapter also mentions that security and safety shall be performed during the rehabilitation works. All employees and subcontractors shall follow instruction to maintain security and safety in the port. The operator shall implement a traffic management plant to reduce or minimize the impact of terminal traffic.

OPERATION AND MAINTENANCE ASSESSMENT (SCHEDULE 6)

In this schedule, the minimum operating service requirements are listed. It allows for the exclusive handling of containers, and other cargoes. It lists the cargo handling services obligations, which are the minimum a terminal operator must consider; as well as the auxiliary services.

The article also set the exclusivity of the container quay to the new terminal operator, and the responsibilities of APN in the port, with respect to quay and other areas.

Another article in the agreement sets the facility as a common user one, under “nondiscriminatory basis”, with the purpose of benefiting the country’s international trade and competitiveness.

It also lists the minimum equipment for the terminal requirements, including the mandatory equipment, the terminal operating system specifications, expected the terminal maintenance, and the minimum KPI's, equipment availability, and safety requirements. It is our opinion that those are minimum standard requirements, acceptable for a terminal of this characteristics.

TARIFFS, FEES AND CHARGES PAYABLE BY THE TERMINAL USERS (SCHEDULE 13)

Schedule 13 includes several port services tariffs, fees and charges, all in US Dollars (USD\$). In addition to the ones listed, the operator can charge for other services, which requires the previous approval of APN.

Terms for tariff revision are also specified, as well as an indexation formula for new tariffs entry in to force. In addition to the terminal operator tariffs, there is also a list of APN fees to be paid by users and the terms in which APN may change those fees.

The fees that do not appear to be listed are the gross mass verification (VGM) tariff. Most ports have charged users for this service since July 1, 2016

UNDERLYING PORT SERVICES (SCHEDULE 17)

This schedule sets APN obligations, including the maintenance of a minimum depth of 11.5m at mean low water level in the channel and 11.0 m in the harbor basing and berth. APN must maintain navigational aids around all areas outside the terminal and procure provision of sufficient marine, harbor master, and mooring services.

In addition to APN (or any successor to APN), the proposed PPP agreement only lists the Service Maritime et de Navigation de Haiti (SEMANAH) and the Administration Générale des Douanes (customs). No other Haitian governmental regulating body is specifically mentioned in the contract to perform regulatory functions (health, environmental agency, immigration, waste disposal, security, neither the quarantine team, etc.).

The PPP agreement recognized the different port activities that impact safety, security and environment, including a list of “Underlying Port Services”, basically marine activities. These are listed as:

- Navigational assistance
- Dredging
- Policing and port security
- Harbor master
- Piloting
- Towing

3. CONCLUSIONS AND RECOMMENDATIONS FOR CHP

The purpose of this technical paper is to provide background and guideline for APN to develop their own port rules and regulations.

The development of this document is based on a benchmark of port rules and regulations, port state control functions research and related port authority tariff, an assessment of Haiti's current port operational rules and PSC enforcement, and the revision of the proposed PPP agreement for CHP in reference to operational rules and regulations.

Port management evolution global trend began since the earliest 1980s, where the main distinction is the change of public sector management, operation and ownership to the private sector participation, being the landlord model the most accepted one, in a wide range of arrangements. Since the beginning of the port reform, landlord model has become the most common. Some ports have used other transactions as models, but contractual terms, type of port development, operation and administration, as well as needs and objectives differ. Typically, most terminal operations are carried out by private sector.

There has been a consensus worldwide in the increasing importance of aspects related to environmental, safety and security regulations in the last twenty years. Additionally, the use of technology in the transportation industry has become relevant for competitiveness and efficiency, as well as to provide security information, monitor safety and environmental indicators, and for effective and efficient communication among port and its users.

Port operational rules and regulations are based on local legislation, international conventions and instruments, and best practices provided by industry organizations and standards. Rules include all operative areas of the port: waterfront areas for anchorage, berthing, navigation, equipment for goods transfer between shore and ship, storage, and connection to its hinterland. Each port establishes the operational rules depending on their circumstances and needs.

Most activities require the presence of government agencies such as police, immigration, customs, health, waste disposal, harbor patrol services, port state control representatives, among others.

Port operations rules and regulations are a set of information and guidelines on issues relevant to port operations, standards, procedures, and conduct within the port premises (water and land side areas). These are documents available to port employees and users, typically in electronic format at the port website.

Port State Controls (PSC) ensures the compliance of maritime conventions and extends the enforcement of states to address the safety of ships navigating in national waters. They ensure that the shipping industry complies and conforms to the regulatory requirements agreed by international conventions, memorandums, and other instruments to ensure the safety of human lives, working conditions of crew, maritime safety and safeguard the environment. Regions set homogenous systems for PSC inspections to eliminate the operation of sub-standards vessels. Nine regional MOUs have been implemented, and the relevant one for Haiti is the Caribbean MOU. Haiti is an observer State in the Caribbean MOU and has ratified a limited number of IMO conventions and instruments; SEMANAH uses IMO conventions and protocols as guidelines to conduct their statutory functions.

As most ports are under a PPP transaction arrangement, landlord ports services and operations are provided by private sectors, thus some charges are directly invoiced by private companies.

Port operational tariffs include charges for use of the facilities, services rendered, overtime, equipment, maintenance of navigational aids, navigational channel, turning basins, berth depth dredging, breakwaters, pilotage, towing, mooring, cargo handling, storage, security, water, customs, and many others that generate costs.

APN currently charges, rates, rules and regulations that have been in effect since 1978 and have not been officially updated. This booklet is applicable in all foreign trade facilities in Haiti. There are other applicable guidance and documents used by APN and SEMANAH for vessel arrivals, security, quarantine, and ISPS procedures that are not yet approved by the country authorities.

The proposed PPP concession agreement for Cap Haitien Port includes regulation related articles related to: a) Environmental and social matters (article 20); b) Security and safety (article 21); c) Operation and maintenance (schedule 6); d) Tariffs, fees and charges payable by terminal users (schedule 13); and e) Underlying port services (schedule 17).

The proposed PPP Concession agreement is based in a standard World Bank, IFC document, and it references IFC Environmental, health and security standards, and IFC performance standards for armed security personnel. It is our opinion that the minimum requirements in relation to port operational regulations are included in the proposed PPP Concession agreement.

Port operational rules and regulations also aim to inform all commercial port users of their responsibilities when entry the port by sea and by land. The proposed PPP Concession agreement, being based on international standards, meets the basic terms of agreements for a container terminal managing such throughput. It is a straightforward draft agreement contemplating general aspect of the future contractual relationship. There are currently two quays, and the intention is to refurbish one of them to build a new container quay, that will take, at least, two years. Once built, operational regulations for the entire port complex should be in place, in order to provide clear rules for all port stakeholders (terminal operators, shipping companies, shipping agencies, among others).

No emphasis in port operational regulations rules are established in the PPP agreement. This is not that critical to be included in the PPP agreement; nevertheless, CHP should have and make available to all users its ports operational regulation rules. Currently, there is a limited number of documents used by APN and SEMANAH to conduct their statutory functions. A complete and comprehensive set of rules, in a single document, for all port users is the common practice in most ports.

The port authority and terminal operator should also set operational rules and make them available to the terminal users. For example, environmental, security, and safety regulations and navigational, berthing, and terminal entry rules, among others.

In addition to the list of documents to be developed by APN, it is advisable to consider a port and marine safety standard in order to improve safety of port users and workers, vessels at the terminal, cargo handling, conduct risk assessments and procure a safety management system.

APN should consider that operating rules and regulations includes use of water and land areas of the port, as well as their access. That means that inbound and outbound vessels must be registered, as well as cargo data, report of dangerous goods, storage and services to cargo, access control and roadways, protection of the ships and port facilities, disposal and discharge of vessel waste, among others. Implementing operational controls (rules and regulations) is important to reduce and actual or potential impacts from the land and sea operation of a port in environmental, safety, security and health.

This report contains a list of port specific standards that could serve as guide to develop CHP owns port operational rules and regulations. There are also examples that can be used and downloaded from other port websites.

As stated in different places within this document, every port sets their own rules and regulations based on its needs and circumstances; nevertheless, CHP could consider the contents presented in Table 6. The first example focuses on environmental, health and safety. The second example is geared toward port operational aspects. The third example is a more comprehensive table of contents regarding the port operational functions.

Table 6. Port operational regulation rules table of contents examples from different ports

Example 1	Example 2	Example 3
Introduction	Structure of rules	General provisions
Legal background	Long term capacity	Hours of operation
Consultation	Port operator's obligation	Areas and facilities of the port
Risk assessment & safety management systems	Nominations for shipping windows	Operations committee
Emergency preparedness and response	Shipping stem policy	Construction, use and operation of facilities
Conservancy	Port queue policy	Requisites for the request of provision of port services
Management of navigation	General matters	Assignment of berthing positions
Pilotage		Navigation inside the port
Marine services		Berthing and staying of vessels in the port
National occupational standards for port marine personnel		Port maneuvers
		Storage and services to the cargo
		Access control and roadways
		Surveillance and security
		Health, safety and working environment
		Environmental control and pollution prevention
		The protection of the ship and the port facilities
		Penalties

It is advisable that the operational rules and regulation tool developed for Cap Haitien be an online, living document, contemplating current trends and best practices applicable to port operations activities, emphasizing environment, safety, and security, as well as the new role of the port authority under the landlord model.

All the governmental bodies related to port and maritime activities shall be included in the port operational regulation rules and they must be accountable for their statutory functions.

The template for port operational regulations provided in the Port Operational Tool Users Manual, should be used as the basis for developing a comprehensive set of regulations specific to Cap Haitien and published through its website.

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In developing this document, we conducted in-depth research to identify best practices, standards, international conventions and instruments, and guidelines applicable to port operations. The following categories were researched in extensive detail:

- Caribbean MOU
- Container Terminal Operations
- Pilotage services
- Concession agreements
- Environmental guidelines
- Governance
- Health and safety
- KPIs
- Operational rules
- State control
- Pricing and tariffs
- Tugboat services
- Vessel arrival documents
- VTS Systems
- Port Yard Operations
- Haiti APN Documents
- Haiti SEMANAH Documents
- Counterpart Group Meeting Documents
- World Bank Tool Kit
- Port Security

CARIBBEAN MOU, CONTAINER TERMINAL OPERATIONS, AND PILOTAGE SERVICES

- Memorandum of Understanding on Port State Control in the Caribbean region, as well as SEMANAH's presentation
- For container terminal operations, PIANC report no 115-2012, Criteria for the (un) loading of container vessels, and report No 135-2014, Design principles for small and medium marine container terminals
- For pilotage, IMO Assembly Resolution A960(23), Recommendations on training and certification and on operational procedures for maritime pilots other than deep-sea pilots.

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- World Bank Port Tool Kit, Annex I, Checklist of Concession/BOT Agreement Provisions
- Request for Qualification for “Operation and Maintenance of Container Terminal on PPP Mode “as is where is basis” at Kandla Port Trust”, March 2014
- Document by the European Bank for Reconstruction and Development on Assessment of the Quality of the PPP Legislation and of the Effectiveness of its Implementation, 2011, for Egypt
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- World Bank PPIAF Check List for Operation and Maintenance Agreements (Stand Alone)
- Agreement between the Port Authority of New York and New Jersey and Global Terminal & Container Services, LLC.
- APM Terminals, Stevedoring and Terminal Services Agreement, dated May 9, 2004.

ENVIRONMENTAL STANDARDS AND GUIDELINES

Several environmental standards and guidelines can be helpful and could be used to expedite the 9-month period for the submittal of the environmental and social standards to be developed by APN:

- Port-specific and general European environmental standards and policies of ESPO (<http://www.espo.be/>)
 - ESPO Green Guide towards excellence in port environmental management and sustainability
 - Port Environmental Review System (PERS) ECOPORTS PERS Certification
 - Annex 1 – Good Practices Version 2, July 2013
 - Annex 2 – Legislations Version 1, October 2012
 - Port Environmental Review System (PERS) – the only port-sector specific environmental management standard
 - Self-Diagnosis Method (SDM) – the user-friendly environmental checklist
 - Trends in EU Ports Governance 2016
 - Code of Good Practices for Cruise and Ferry Ports
 - Good Practice Guide on Port Area Noise Mapping and Management
 - ESPO Code of Practice on the Birds and Habitats Directives
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- Environmental Best Practice Port Development: An Analysis of International Approaches, Report prepared for Department of Sustainability, Environment Water, Population and Communities, July 2013, Australia, prepared by GHD

- USA Best Management Practices for port cargo handling equipment and truck operations powered by diesel engines (www.epa.gov/cleandiesel/ports/technologies.htm, www.epa.gov/cleandiesel/ports/portauthorities.htm, clean ports USA www.epa.gov/diesel/ports)
- AAPA Environmental Management Handbook <http://www.aapa-ports.org/empowering/content.aspx?ItemNumber=989>) World Bank environmental and social safeguard policies
- Strategic Environmental Assessment Tool Kit, Natural Scotland Scottish Executive
- ISO 14001 (Environmental Management System (EMS) Standard

GOVERNANCE

- Modelos de gestión y gobernanza portuaria, desafíos actuales y el futuro de los puertos en LAC, from UN ECLAC, by Octavio Doerr
- Adaptación o desadaptación en la gobernanza portuaria: casos de América Latina vs Europa Meridional by Fernando Gonzalez Laxe, Ricardo Sanchez and Lorena García Alonso

HEALTH AND SAFETY

- ILO code of practice, safety and health in ports
- ISO 18001 standards on occupational health and safety
- Code of Practice for Health and Safety in Ports Operations, of New Zealand
- Health and Safety at Work Act, at a Glance, of New Zealand

KPI

- Port Performance Measurement in Practice by Dr. Thomas Vitsounis
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- ISO/PAS 20858:2004 ships and marine technology – maritime port facility security assessments and security plan development

- ISO 28000:2007 Specification for Security Management Systems for the Supply Chain
- IMO – SOLAS Regulation Loaded Container Verified Gross Mass (VGM)
- APN documents
- SEMANAH documents
- Counterpart Group Meeting Documents
- World Bank Tool Kit