

# THE SUSTAINABILITY OF THE PUBLIC PORT GOVERNANCE MODEL- TRINIDAD AND TOBAGO



# PORT OF PORT OF SPAIN TRINIDAD AND TOBAGO

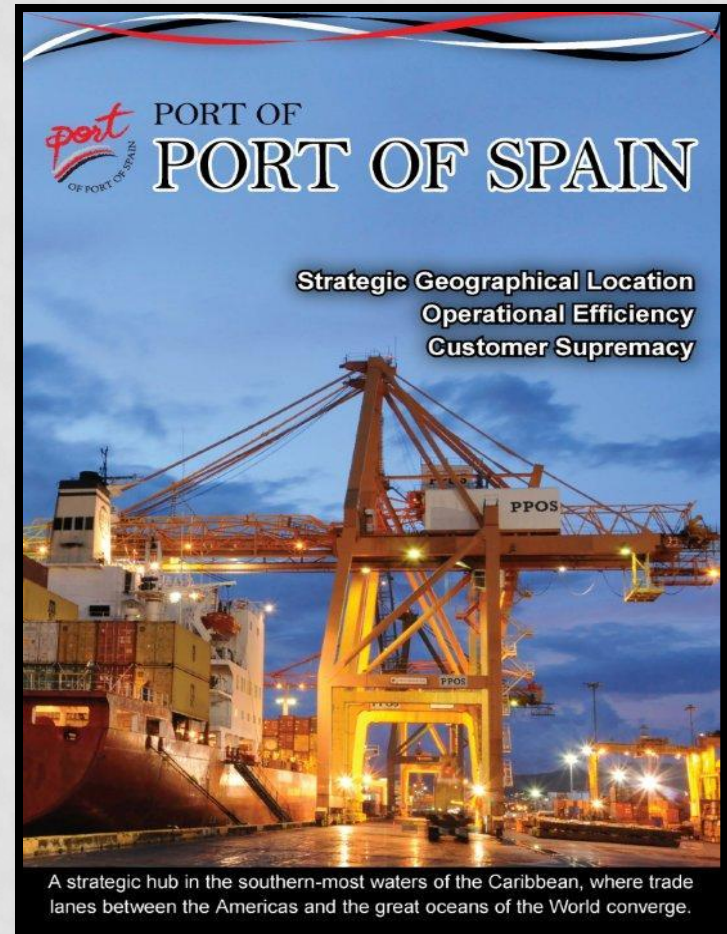


# PPOS VISION AND OBJECTIVES

To be a sustainable, innovative, customer driven and productive Caribbean Port, through our focus on operational efficiency and aggressive and strategic marketing.

## **Mandate for PPOS Operations:**

Utilize best working practices,  
Deliver a cost-effective & timely customer service,  
Produce & sustain positive financial results

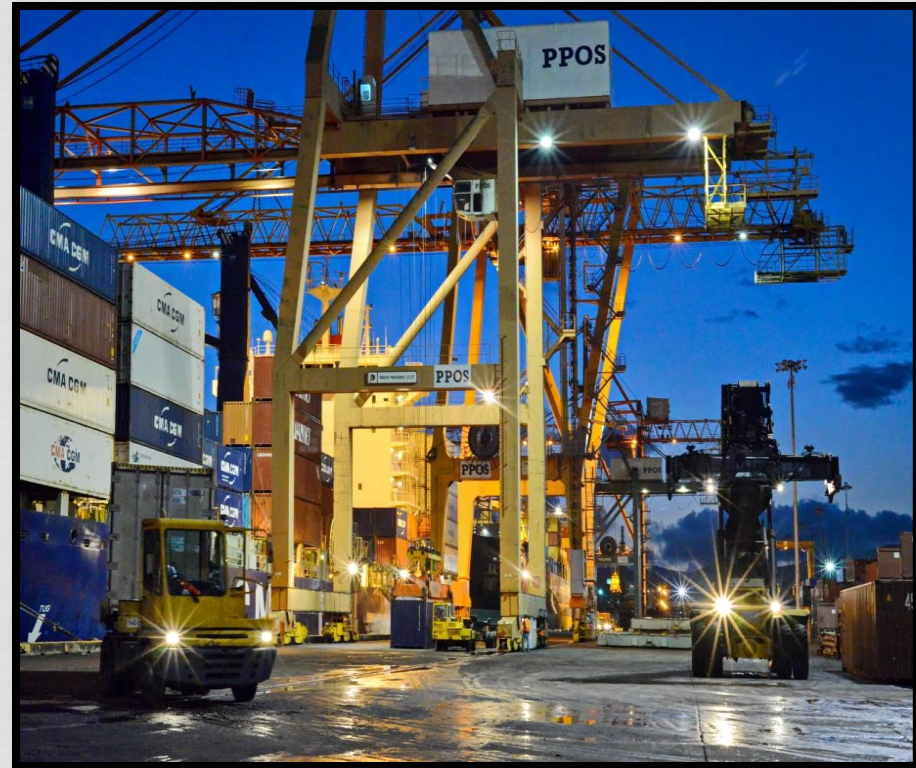


# PORT OF PORT OF SPAIN BERTHS

- Length of marginal quay wall: 2000 metres
- (1) Cruise ship and terminal berth no. 3
- (1) Break bulk and transit shed berth no. 4
- (1) Multi-purpose container berth no. 5
- (4) Container STS berths no. 6; 6AE; 6AW; 7
- (1) Bulk berth with Gantry no. 8
- In addition;
- The CARICOM wharves area is designed for handling inter island schooners
- 2 passenger and vehicle ro-ro ferries, which service the two islands
- 1 ro-ro cargo ferry services the two islands

# PORT EQUIPMENT

- 2 Panamax STS rail mounted cranes 12 w x 40 tons
- 2 Post Panamax STS rail mounted cranes 18 w x 50 tons
- 1 Mobile Harbour crane 40 m radius x 41 tons
- 14 Rubber Tyred Gantry Cranes 5 high x 6 wide
- 6 Reachstackers
- 9 Empty container handlers
- 2 Full container handlers
- 45 Tractor trucks
- 6 x 20 foot trailers
- 26 x 40 foot trailers
- 28 x 45 foot trailers
- Dynastar system



# CONTAINER TERMINAL AREA

- The total area of the container terminal is 45 ha
- Terminal Storage capacity: 500,000 TEUs per annum



# INFORMATION AND COMMUNICATIONS TECHNOLOGY

- The Terminal is outfitted with NAVIS SPARCS N4 for cargo manifest document processing, vessel planning, storage, tracking and control of container movements from ship to yard storage and gate delivery
- The Customs and Excise Division is outfitted with the ASYCUDA system for the declaration and assessment of customs duties and border control procedures
- The Ministry of Trade and Industry is outfitted with the Single Electronic Window: TT Bizlink for online government trade transactions
- The offices of shipping agencies, brokers, transport operators and shippers are all computerized and there is a high level of internet connectivity.

# HEALTH SAFETY SECURITY ENVIRONMENT

- The Port Authority is responsible for 24 hour port security surveillance
- The Container Terminal is outfitted with high mast lighting and CCTV cameras
- The Customs and Excise Division is responsible 24 hour cargo examination using X ray container scanners and 10% inspection at the Container Examination Station
- PPOS is responsible for Health Safety and Environment management of port operations
- PPOS is compliant with ISPS, Port State Control and IMDG codes
- Dedicated areas are allocated for the storage of hazardous chemicals and dangerous goods

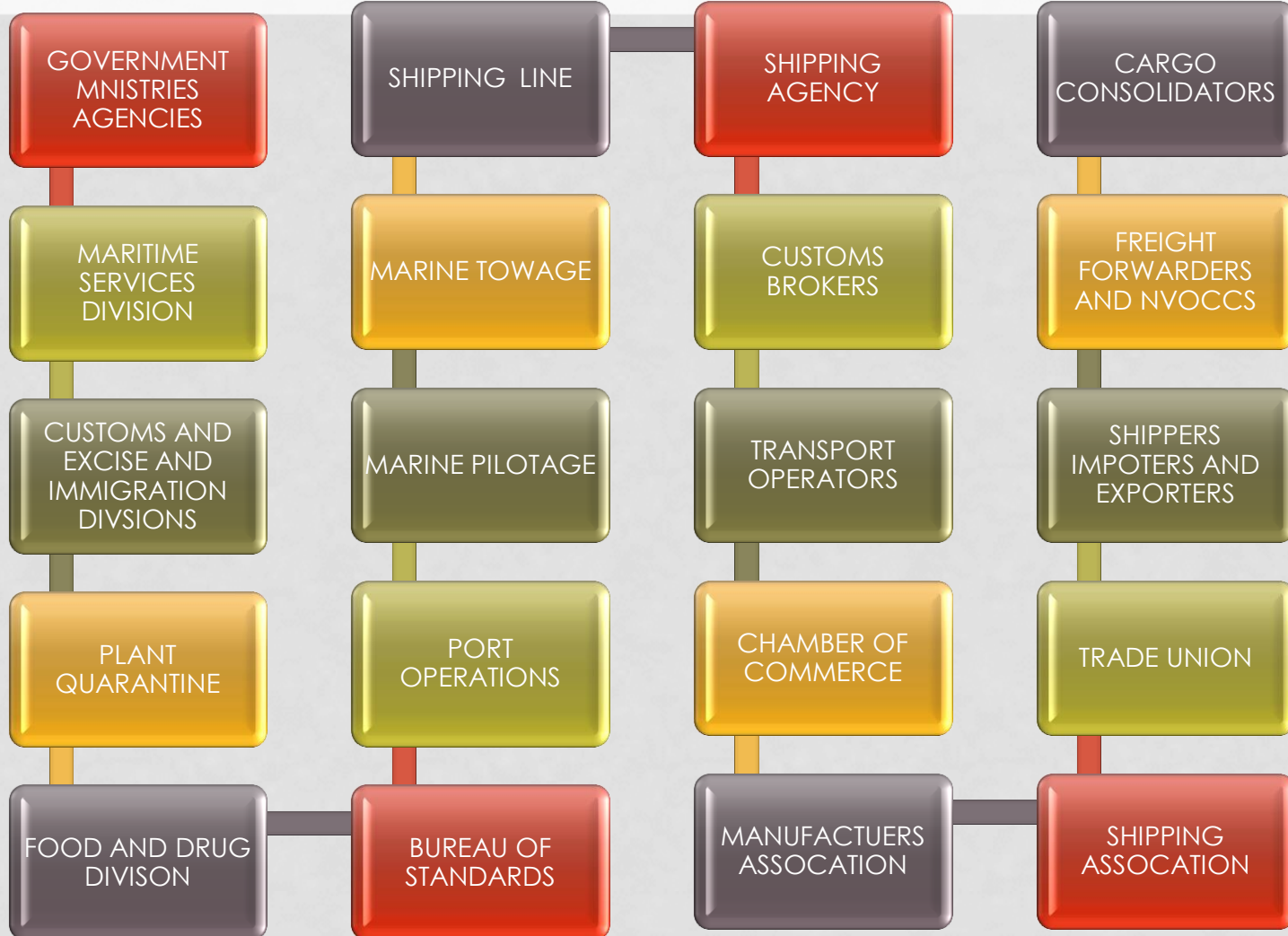


# PPOS PORT OPERATIONS

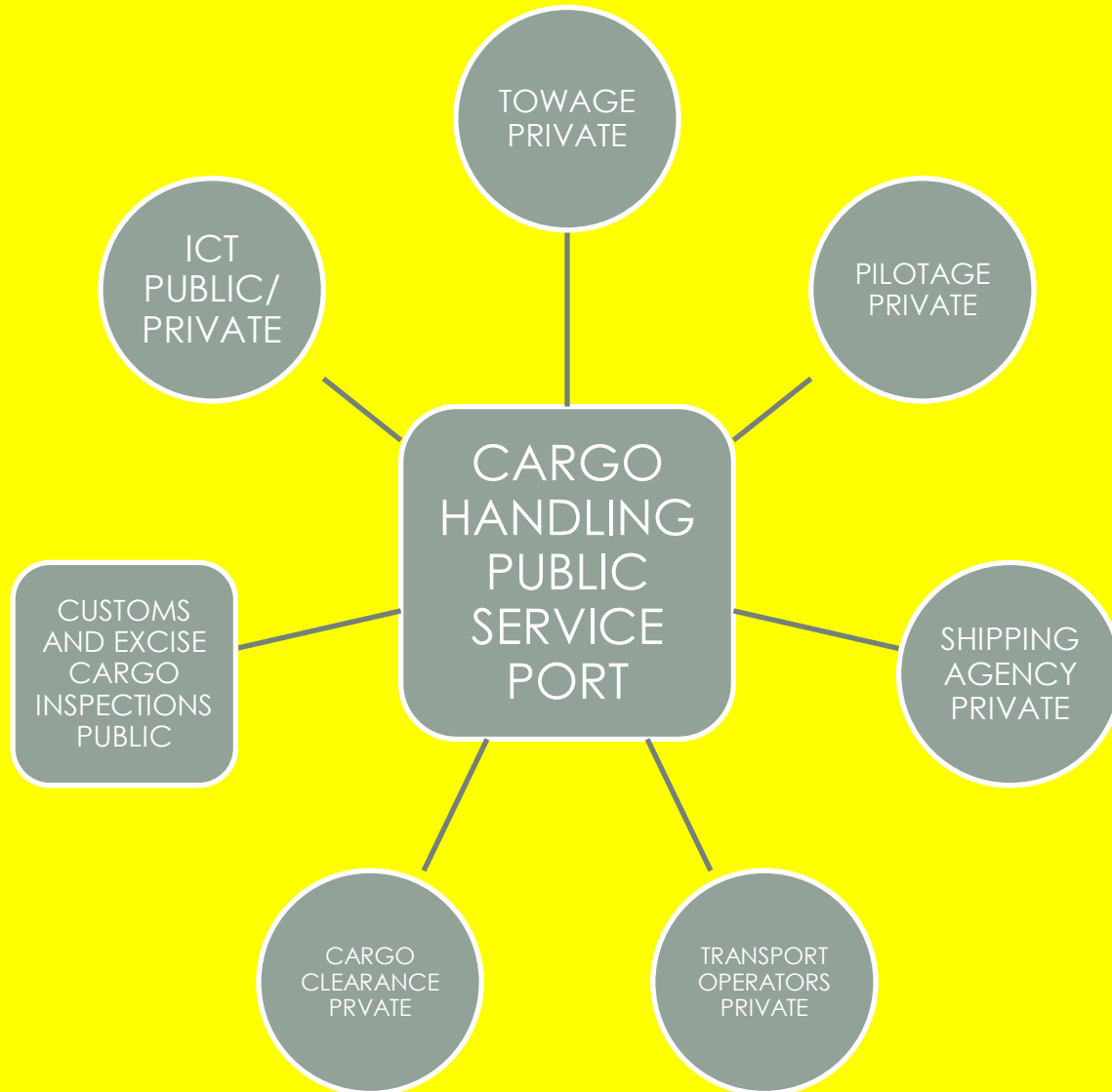
## **PPOS Operations include handling:**

- Berthing Vessel Operations
- Container Vessel Operations
- Container Yard Operations
- Car Carrier, Vehicle Operations
- Container Freight Station, Stuffing & Un-stuffing Operations
- Break-bulk Operations
- Bulk Operations
- Gate Operations (receipt & delivery)
- Cargo Accounts Process
- Logistics Analysis

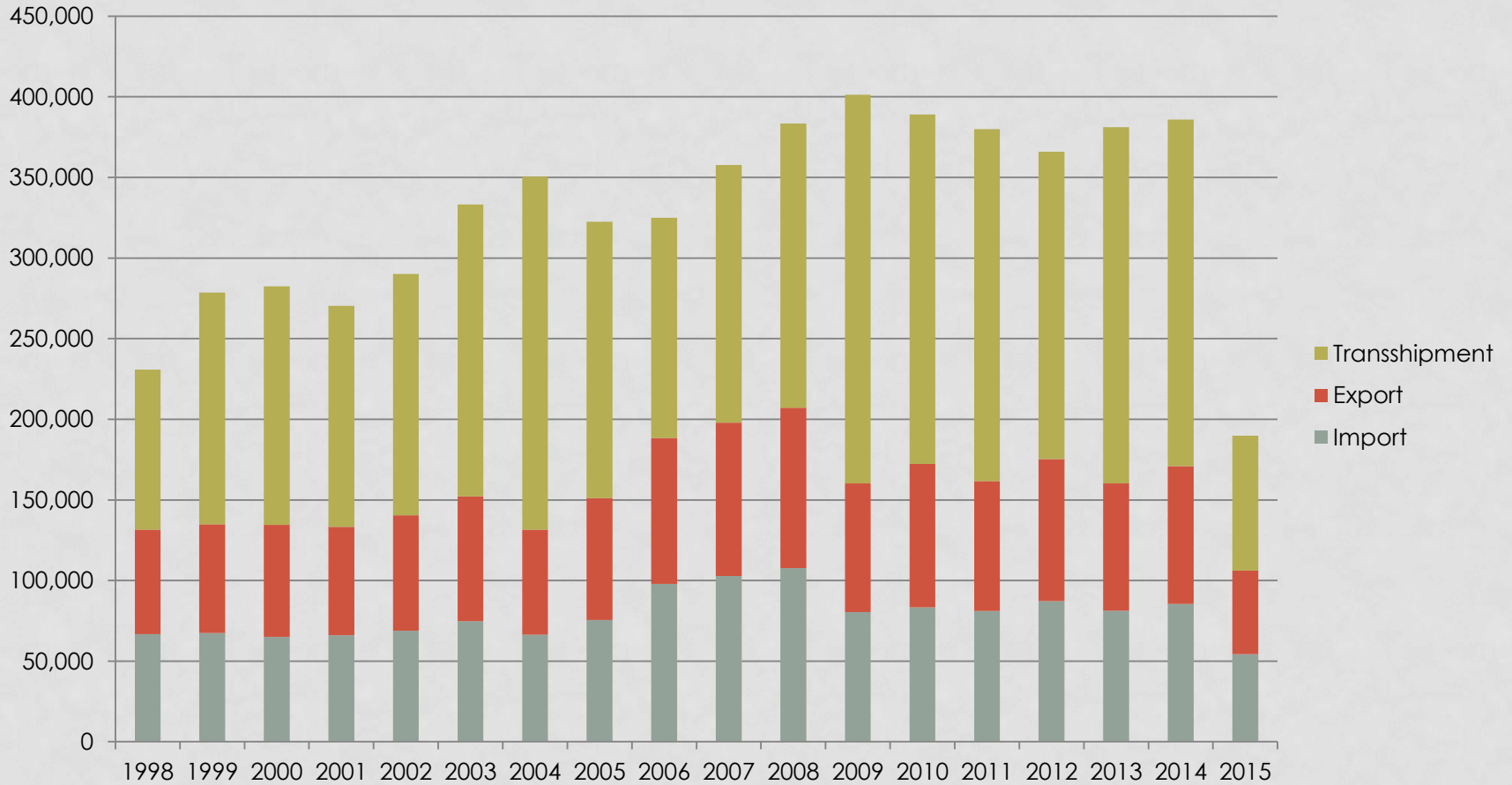
# STAKEHOLDERS IN THE PORTS LOGISTICS COMMUNITY



# PUBLIC PORT AND PRIVATE SECTOR RELATIONSHIPS



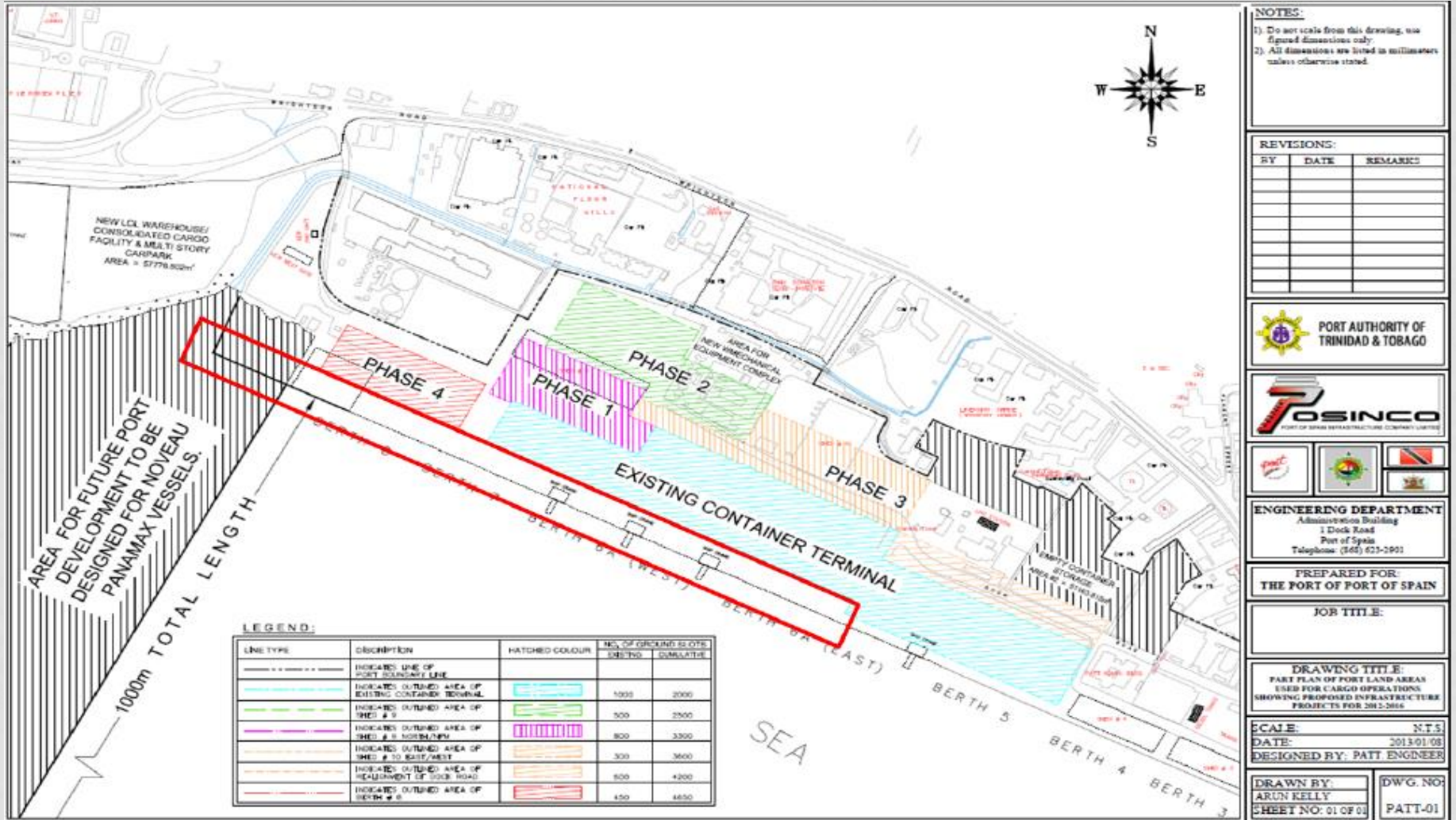
# THROUGHPUT PERFORMANCE TEU



# TEU PERFORMANCE STATISTICS

| 2004    | 2005    | 2006    | 2007    | 2008    | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 66,413  | 75,535  | 98,001  | 102,865 | 107,737 | 80,428  | 83,458  | 81,154  | 87,239  | 81,282  | 85,477  | 54,310  |
| 65,199  | 75,683  | 90,463  | 94,953  | 99,449  | 79,890  | 88,827  | 80,480  | 88,137  | 78,914  | 85,408  | 51,892  |
| 218,857 | 171,249 | 136,474 | 159,850 | 176,212 | 240,946 | 216,675 | 218,203 | 190,519 | 221,036 | 215,007 | 83,575  |
| 350,469 | 322,467 | 324,938 | 357,668 | 383,398 | 401,264 | 388,960 | 379,837 | 365,895 | 381,232 | 385,892 | 189,777 |

# PROPOSED NEW PANAMAX PORT EXPANSION PLAN AT BERTHS 8 AND 9



**NOTES:**  
 1) Do not scale from this drawing, use figured dimensions only.  
 2) All dimensions are listed in millimeters unless otherwise stated.

**REVISIONS:**

| BY | DATE | REMARKS |
|----|------|---------|
|    |      |         |
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**ENGINEERING DEPARTMENT**  
 Administration Building  
 1 Dock Road  
 Port of Spain  
 Telephone: (682) 623-2901

PREPARED FOR:  
**THE PORT OF SPAIN**

JOB TITLE:

DRAWING TITLE:  
 PART PLAN OF PORT LAND AREAS  
 USED FOR CARGO OPERATIONS  
 SHOWING PROPOSED INFRASTRUCTURE  
 PROJECTS FOR 2012-2016

SCALE: N.T.S.  
 DATE: 2013/01/08  
 DESIGNED BY: PATT ENGINEER

DRAWN BY:  
 ARUN KELLY  
 SHEET NO: 01 OF 01

DWG. NO:  
 PATT-01

**LEGEND:**

| LINE TYPE | DESCRIPTION  | HATCHED COLOUR | NO. OF GROUND SLOTS (METRO) | SUMMATIVE |
|-----------|--|----------------|-----------------------------|-----------|
| -----     | INDICATES LINE OF PORT COASTLINE LINE                  |                |                             |           |
| -----     | INDICATES OUTLINED AREA OF EXISTING CONTAINER TERMINAL |                | 1000                        | 2000      |
| -----     | INDICATES OUTLINED AREA OF TIME # 3                    |                | 500                         | 2500      |
| -----     | INDICATES OUTLINED AREA OF TIME # 3 TO EAST/ARISE      |                | 800                         | 3300      |
| -----     | INDICATES OUTLINED AREA OF TIME # TO EAST/ARISE        |                | 300                         | 3600      |
| -----     | INDICATES OUTLINED AREA OF RELOCATION OF DOCK ROAD     |                | 600                         | 4200      |
| -----     | INDICATES OUTLINED AREA OF BERTH # 8                   |                | 450                         | 4650      |

# ESTIMATED COST OF NEW PANAMAX PORT EXPANSION PROJECT AT BERTHS 8 AND 9

- In 2012 the estimated cost of construction of the new panamax port expansion at berths 8 and 9 was TT\$0.9 billion, or US\$ 142.2 million.
- Assuming a cost escalation of 5% per annum this is equivalent to TT\$1.08 billion, or US\$161.7 million.

# EXISTING PORT LAYOUT





# WATERFRONT DEVELOPMENT PLAN PROPOSED



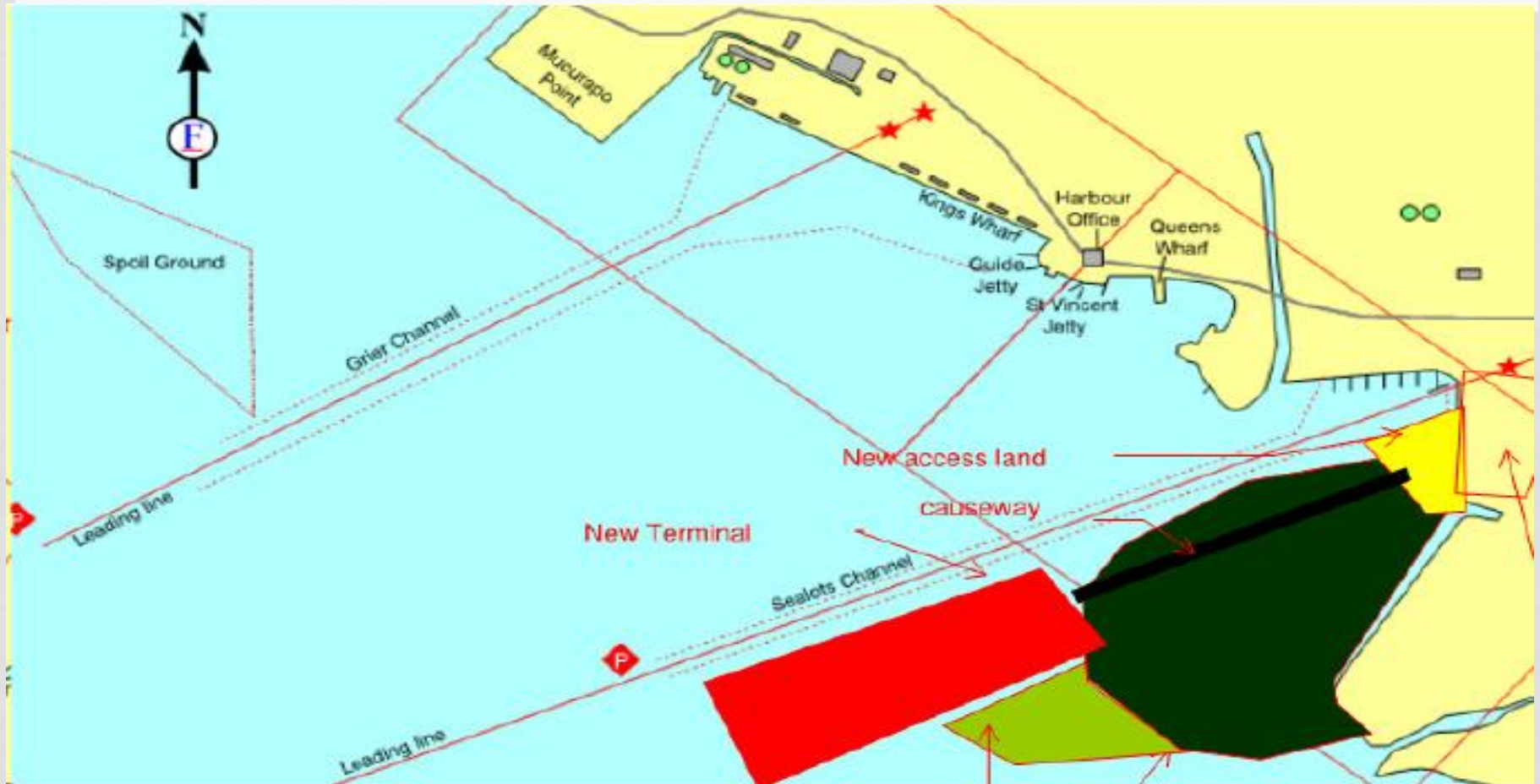
# FEATURES AND BENEFITS OF WATERFRONT DEVELOPMENT PLAN

- The Westward extension of the Port of Spain Central Business district to include all lands southwest of Wrightson road including lands vested in the Port Authority of Trinidad and Tobago
- Conversion of low value port lands King's wharf and King's Wharf Extension to high value real estate
- Construction of an International Waterfront Complex
- Construction of an International Financial Complex
- Construction of a 5 star luxury Hyatt hotel and car park
- Construction of high rise commercial and office space overlooking the Waterfront.
- Connection of the city with the Waterfront through a promenade and boardwalk along the Waterfront
- Financial returns from the Waterfront development is proposed to fund the relocation of the Port of Port of Spain

# MODEL OF STANDARD NEW PANAMAX PORT DEVELOPMENT COST

|   | BASE COST<br>US (\$) | ESCALATED<br>US (\$) COST<br>(5% TO 2014) | DREDGING<br>US(\$)<br>2014 | EQUIPMENT<br>US(4)<br>2014 | TOTAL<br>COST US(\$)<br>2014 | ESCALATED<br>COST US (\$)<br>2016 |
|---|----------------------|---|----------------------------|----------------------------|------------------------------|-----------------------------------|
| Port of Lazaro Cardenas<br>Container Terminal<br>Phase 1 (2012)               | 300                  | 331                                       | 45                         |                            | 376                          | 415                               |
| Hai Phong International<br>Port (Lach Huyen<br>Project) Component B<br>(2013) | 321                  | 337                                       |                            | 94                         | 431                          | 474                               |
| Felixstowe South<br>Reconfiguration Phase 1<br>(2008)                         | 330                  | 421                                       |                            | 94                         | 515                          | 567                               |
|   |                      |   |                            | USD (\$) Million           | 441                          | 485                               |
|   |                      |   |                            | Standard<br>Deviation      | 70                           |                                   |

# EAST SEA LOTS ONSHORE OPTION A



Approx location of Mangrove that seems to have grown since 1988 - possibly due to proximity of sewage works.

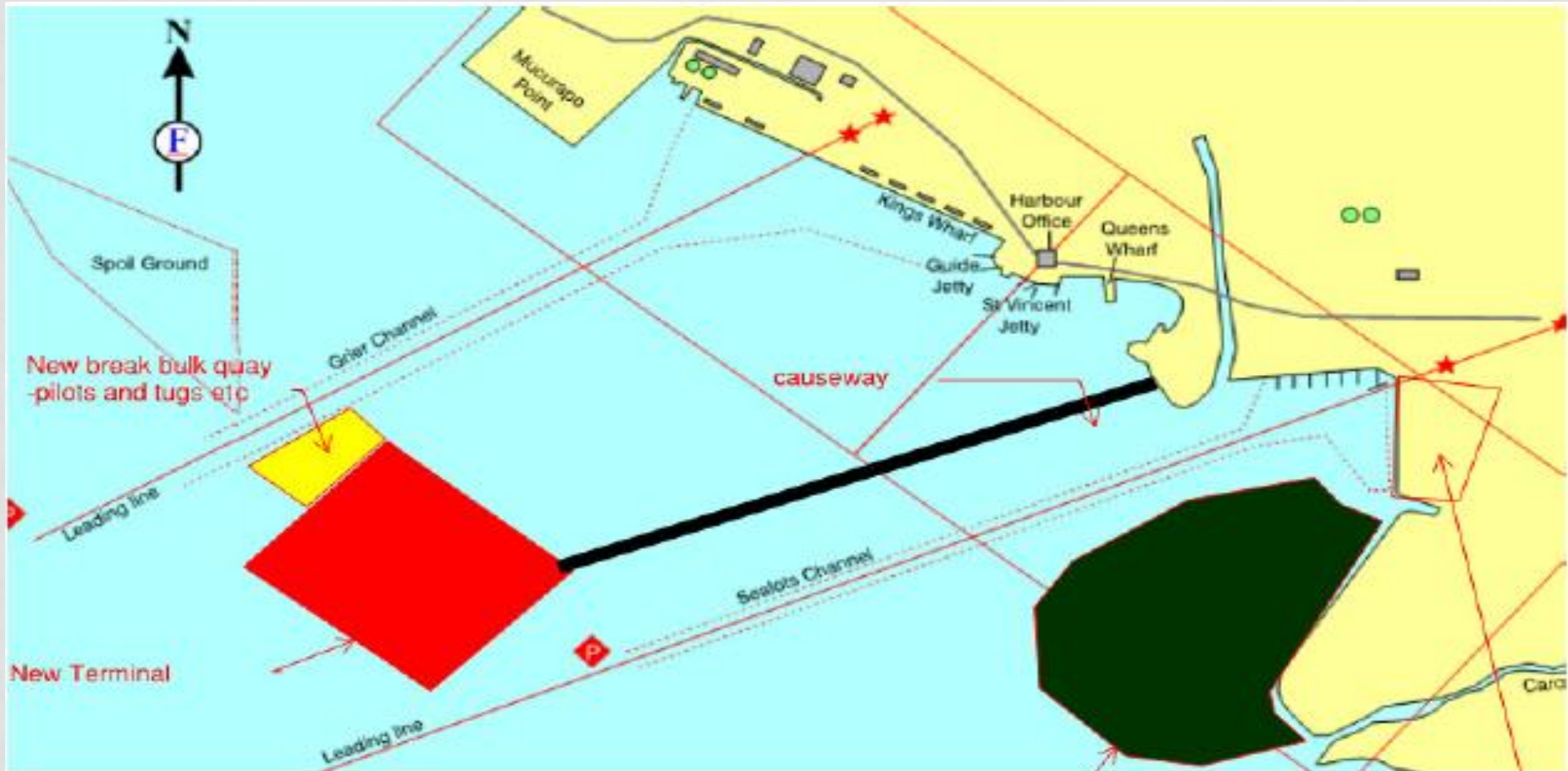
replacement mangrove

East Sealots reclamation - approx 30ha

# ENVIRONMENTAL ISSUES

- MANGROVE WETLANDS
- ECOLOGICAL SYSTEM
- CARONI RIVER ESTUARY
- EFFLUENT AND SILTATION
- SHALLOW DRAFT
- LOCATION OF CHANNEL ACCESS AND BASIN

# EAST SEA LOTS OFFSHORE OPTION B



Approx location of Mangrove that seems to have grown since 1988 - possibly due to proximity of sewage works.

East Sealots reclamation - approx 30ha

# STAGES IN THE DESIGN BUILD PROCESS

- Site investigation coordination and supervision
- Completion of development plan
- Environmental Impact Assessment submission
- Environmental Management Authority Clearance Certificate
- Front End Engineering Design (up to 20%)
- EPC document preparation and Call for Tender
- Tender evaluation and recommendation
- Supervision of construction
- Design build contract (design detail 80%)
- Construction cost

# OVERALL PROJECT 5% ESCALATED COST ESTIMATE 2016

| Service                        | D&B Stages | Description                           | Consultant's Independent Estimate US(\$)<br>million |             |
|--------------------------------|------------|---------------------------------------|---|-------------|
|                                |            |                                       | Lower bound   | Upper bound |
| <b>Consultant's service</b>    | Stage 1    | Up to and including feed design (20%) | 5.16  | 5.76        |
|                                |            | EPC documents up to award             | 2.27  | 2.27        |
|                                | Stage 2    | Supervision                           | 22.45   | 24.58       |
| <b>Design build contractor</b> |            | Detailed design (80%)                 | 11.68   | 12.86       |
|                                |            | Construction cost                     | 931.44  | 1,138.43    |
|                                |            | Total                                 | 972.90  | 1,183.87    |



# STRATEGIES AND REFORM OPTIONS FOR CONSIDERATION

Modernization of  
Port Administration  
and Management

Liberalization or  
Deregularization of  
Port Services

Commercialization

Corporatization

Privatization

# PORT MANAGEMENT MODELS

