



# **BRAZILIAN PORT SECTOR AND THE NATIONAL DREDGING PROGRAM II**

**BRAZILIAN PRESIDENCY SECRETARIAT FOR PORTS  
SEP/PR**

April/2014

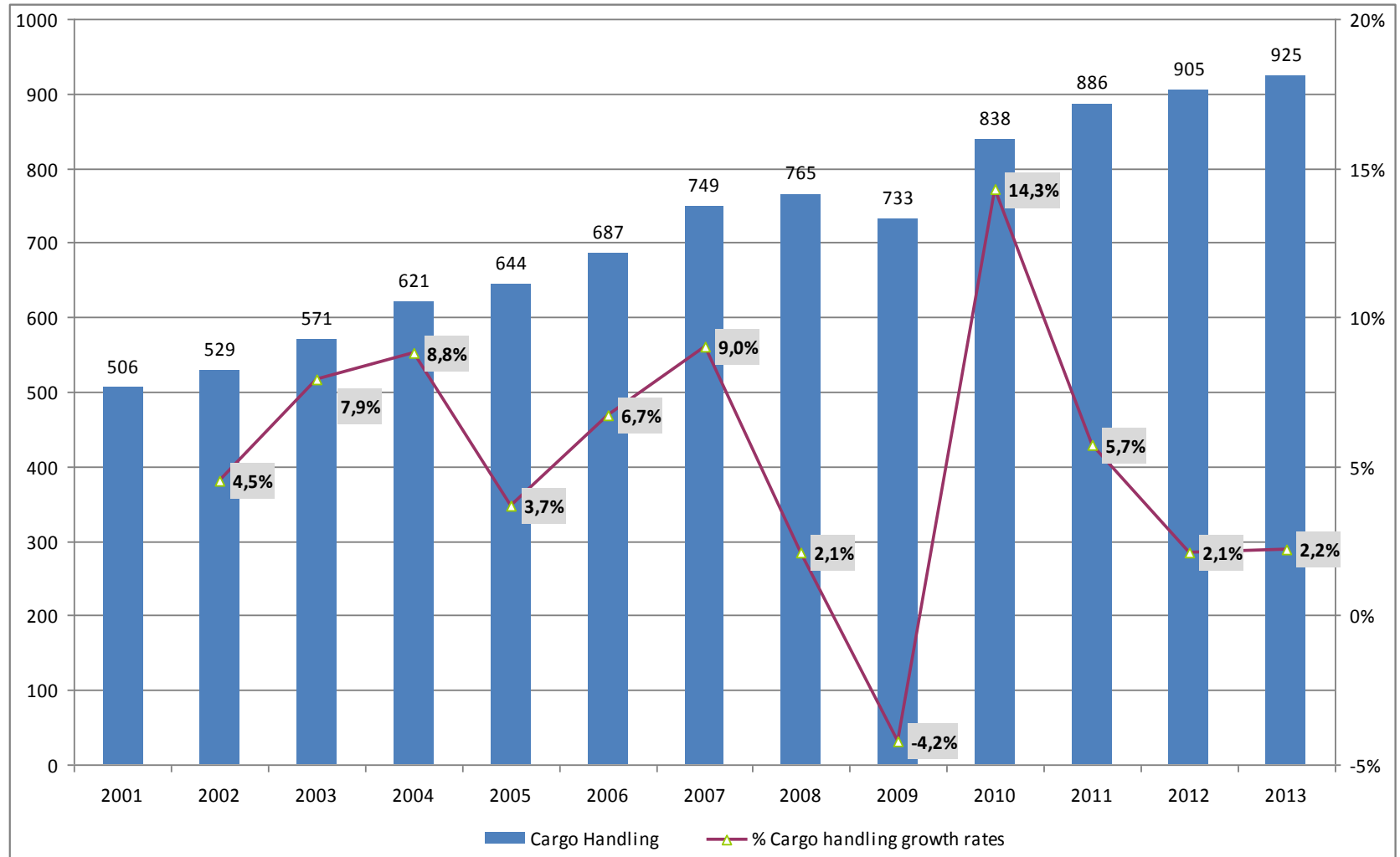
## INTRODUCTION

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### **ACT 8.630/93,**

PREVIOUS PORTS LEGISLATION, BROUGHT IMPROVEMENTS SUCH AS INCREASED PRIVATE PARTICIPATION IN PUBLIC PORT TERMINAL OPERATIONS (LEASINGS) AND PROVIDED AUTHORIZATION FOR THE ESTABLISHMENT OF PRIVATE USE TERMINALS TO HANDLE ITS OWN CARGO. HOWEVER, IN ORDER TO SATISFY THE INCREASED GROWTH IN DEMAND FOR PORT SERVICES, NEW ALTERATIONS WERE REQUIRED.

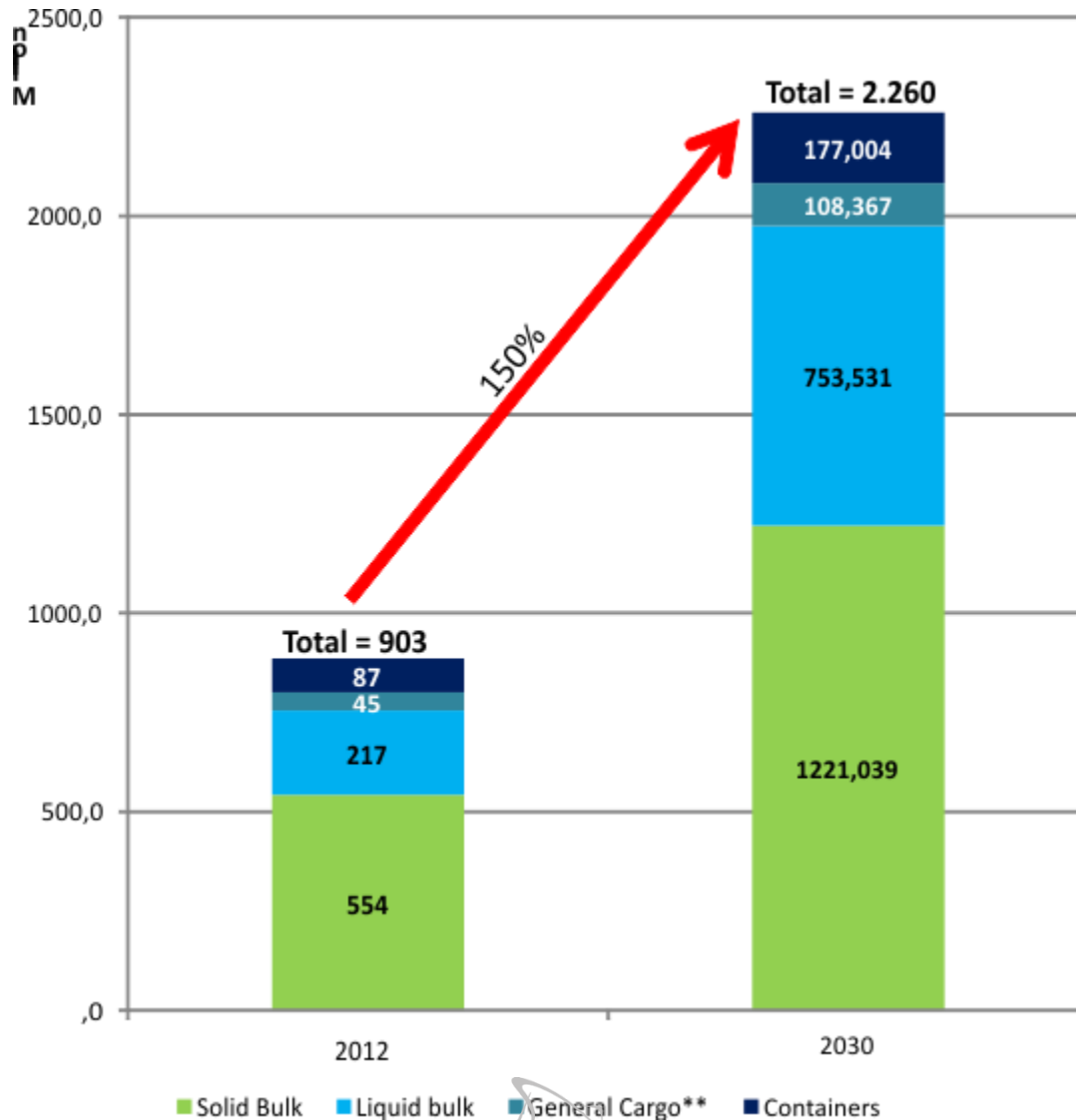
## Cargo handling statistics



Source: PNL P

# Handling forecasts as stated in National Port Logistics Plan

## Forecasts by Cargo Nature

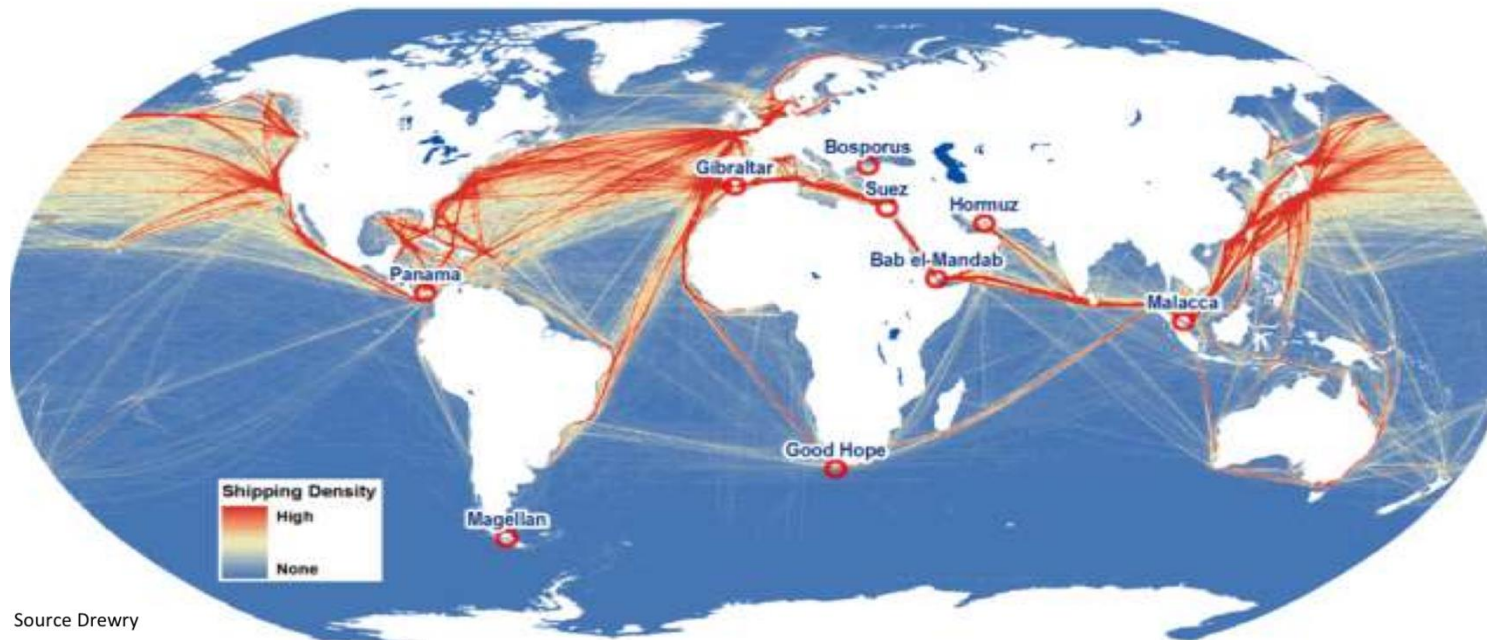


Forecasts of Cargo Handling Growth Rates (2010-2030)

By cargo nature	
Solid Bulk	5.68% per year
Liquid bulk	6.81% per year
General Cargo**	3.37% per year
Containers	6.33% per year
<b>Total</b>	<b>5.70% per year</b>

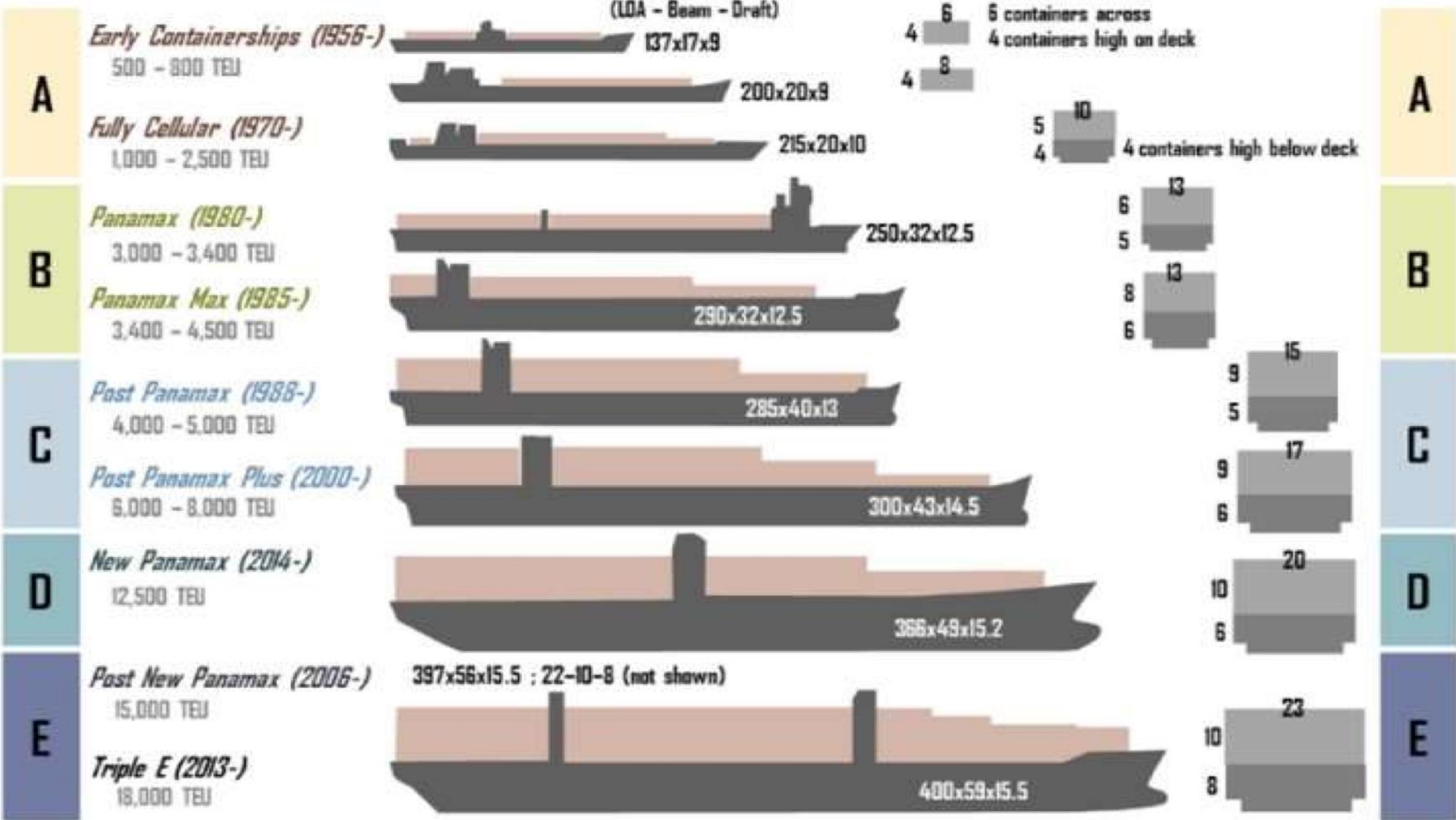
\*\*Except containers

- Maritime navigation trade lane follows the globalized economy, and it is related to Eastern industrial production X Western Consumption
- Global maritime routes were set by the use of large ships



Source Drewry

# SHIPS SIZE EVOLUTION



Fonte: Departmente of Global Studies & Geography, Hofstra University

## OBJECTIVES OF THE PORT REFORM

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- *MAKE BRAZILIAN PORTS MORE COMPETITIVE*
- Targets:
  - Increase port efficiency in order to **reduce costs**;
  - Investment attraction in order to **increase port handling capacity** and consequently absorb growing demand.

## OBJECTIVES OF THE PORT REFORM

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- In order to attain the proposed objectives, the port reform was structured the following way:
  - A new INSTITUTIONAL FRAMEWORK which supports the proposed alterations;
  - Alterations in the PORT ADMINISTRATION;
  - Alterations in PORT OPERATIONS; and
  - More effective Investments in PORT ACCESS (THE SECOND NATIONAL DREDGING PROGRAM – NDP II).



## LEGAL INSTRUMENTS THAT HAVE BEEN ALTERED

### **Act 12.815, Dated June 5th, 2013 (New Ports Act)**

Revoked Acts:

- **Act 8.630/93** (Former Ports Act);
- **Act 11.610/07** (First National Dredging Program);

Altered Acts:

- **Act 10.233/01** (created ANTAQ – National Agency of Waterway Transportation – Waterways Navigation Regulator);
- **Act 10.683/03** (created SEP/PR);

**Decree 7.860/2012 created the National Pilots commission;**

**Decree 7.861/2012 Created CONAPORTOS.**

## PORT INFRASTRUCTURE INVESTMENT OPPORTUNITIES

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### ▪ **NEW CONCESSIONS**

- 159 areas organized in 4 Groups
  - Port Efficiency
  - Goal: to reduce logistic costs in Brazil

### ▪ **PRIVATE TERMINALS**

- Simplified granting proceeding
- No limitation to third party cargo handling
- Trade off: higher investments – lower regulation

### ▪ **2<sup>nd</sup> DREDGING NATIONAL PLAN (PND II)**

- Different contract mechanism
- First group of 20 ports in 2014

## GUIDELINES FOR THE NDP II

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- The establishment and keeping of trade lanes depends on trustable ports draught and operational conditions – long term dredging contracts
- The most important Brazilian ports demand investments in order to make possible the safe passage of large ships, specially Post Panamax Plus class (300x43x14.5) and New Panamax class(366x49x15.2).
- The dredging works demanded will be contracted on Result-based method by Secretariat for Ports (SEP/PR)

## GUIDELINES FOR THE NDP II

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- Result-based dredging aim to ensure the effectively of the investments
- Result-based dredging contracts may contemplate more than one port or harbor and other services like Aids to Navigation and Buoyage and Environmental monitoring in order to keep depth and navigation security conditions.
- NDP II shall consolidate Brazil as an attractive dredging market and also increase competition among companies



# **THE SECOND NATIONAL DREDGING PROGRAM**

## NDP I – RESULTS AND FIND OUTS

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### ▪ Results:

- About **73 million of m<sup>3</sup>** of dredged material (6.08 million of trucks);
- **Average increase of 26% in depth** of ports waterway access.

### ▪ Find outs

- The effectiveness of the program were hindered by the mismatch between the conclusion of federal dredging and local port administration investments on maintenance and on navigation security and buoyage;
- The contractual goals, based on flat surface depth, are difficult to achieve (or verify) and some payments are canceled;
- Companies failure on correctly acknowledge risks and analyze preliminary information given by SEP results on contractual claims (most not granted by SEP) and service interruption before final goals accomplishment.

## NDP II – IMPROVEMENTS

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### ▪ Auctioning:

- International public procurement auctions for dredging contracts
- Blind reserve price
- Hybrid bid system – 1st step: closed auction with 3 winners and 2<sup>nd</sup> step: open auction with 1 winner

### ▪ Effectiveness

- Package of services (deepening and maintenance dredging including access channel, turning basin, anchorage areas and mooring berths and security and environmental services)
- Long term contracts – up to 10 years
- Set of ports (more than one Port to be dredged under a unique contract)
- Contractual goals based on bands and not on flat surface depth

## NDP II – IMPROVEMENTS

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### ▪ **Contract**

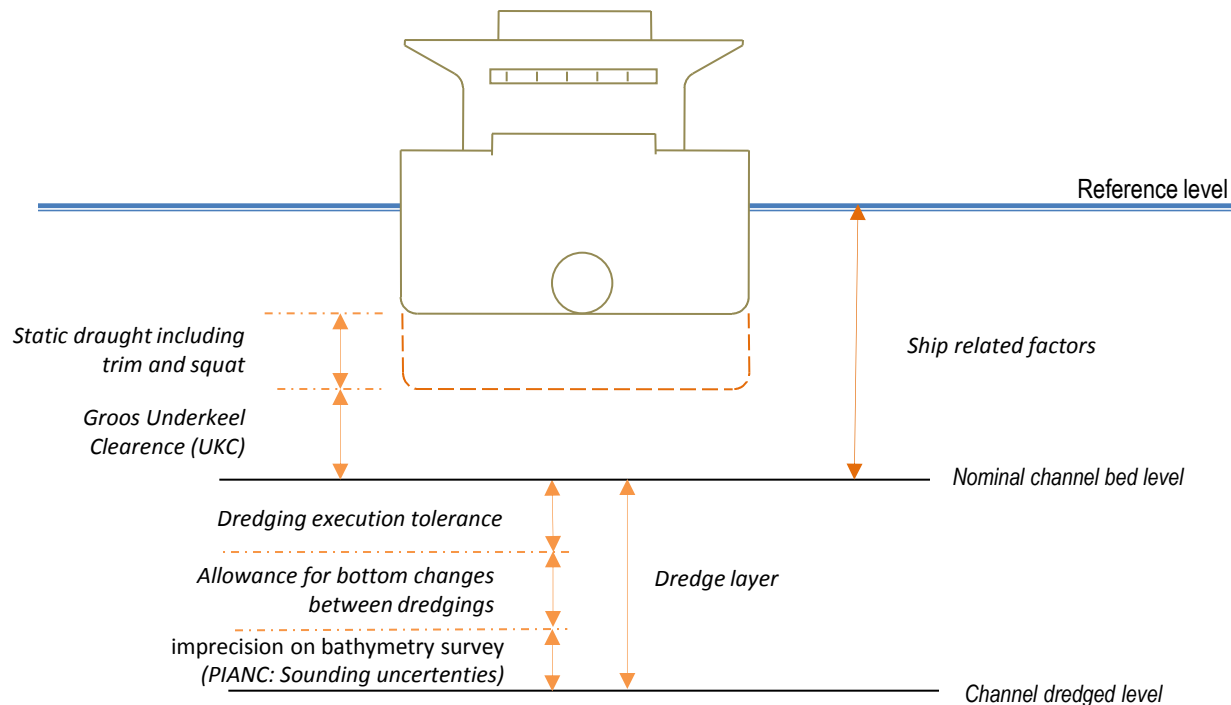
- More detailed and clear clauses – specially risk allocation, dredging goals and payments conditions;
- Clauses with explicit procedures in case of very probable events with uncertain costs, like discovery of unknown rocks and of sunk objects
- Variable payment – efficiency

### • **Transparency and Competition**

- New contracting clauses, auctioning rules and dredging goals defined through public hearing – Port of Santos term of reference
- Formal effort to restore dredging firms confidence on the Brazilian NDP and to bring more bidders to the public auctions

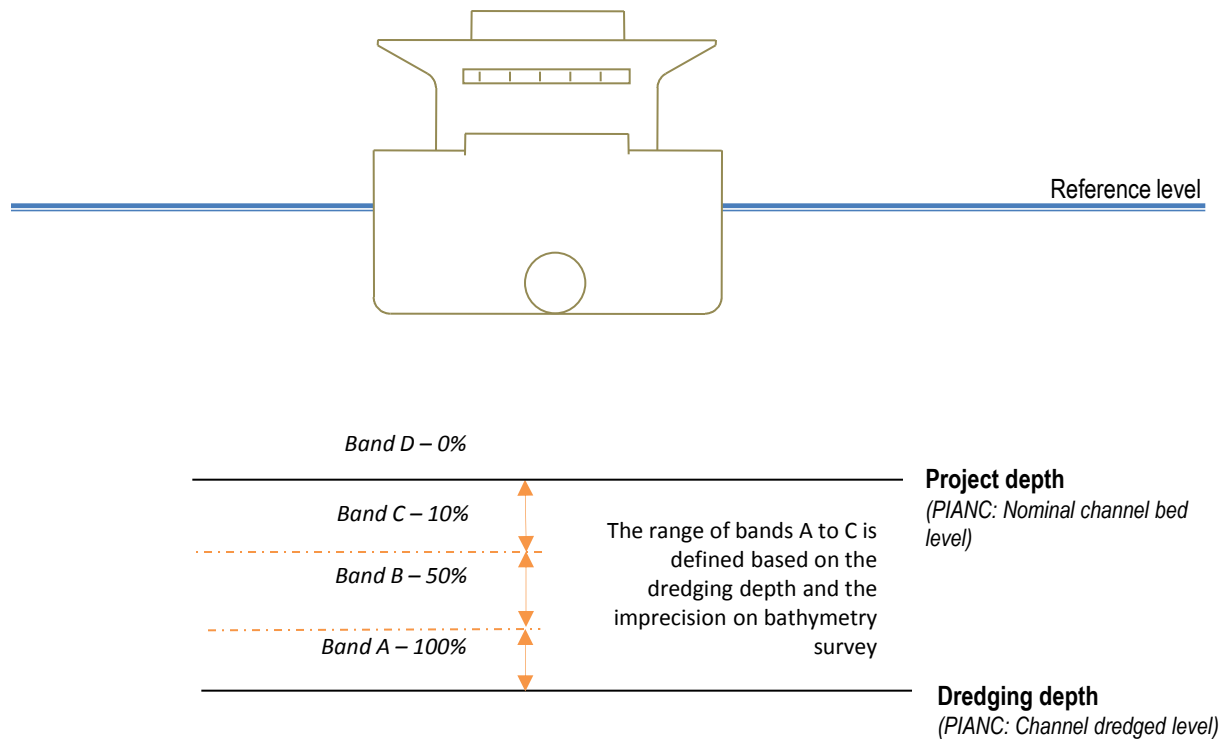


➤ Dredging depth definition have to be set securely in order to avoid draught changes during the contract.



\* Drawing without scale

➤ Work measurement and payment based upon depth band and variable reward.



\* Drawing without scale

## Dredging contracts main risks

SEP (Sponsor)	Contractor
Force majeure and act of God	Equipments and dredging methodology choosing
Real costs variation below the contractual inflation index	Real costs variation above the contractual inflation index
Legal and regulatory and taxes change, except income tax legislation	Harm and losses caused to a third party (negligence)
Delays due to archaeological, indigenous, maroons and environmental requirements, when the contractor has not given cause	Over dredging (beyond the Dredging depth)
Rocks and sunk objects that <b>CANNOT</b> be removed without special equipments	Rocks and sunk objects that <b>CAN</b> be removed without special equipments
Delay bigger than 48 hours on the schedule to liberate dredging on mooring berths	Delay of 48 hours or less on the schedule to liberate dredging on mooring berths

## Budget Details

	NDP I	NDP II
Deepening Dredging	<b>R\$ 1.6 billion</b>	<b>R\$ 900 million</b>
Maintenance Dredging	<b>R\$ 120 million</b>	<b>R\$ 3.8 billion</b>

\* Resources provided by Ports Authority's tariff income

## Tender forecast for 2014

NDP 2 execution forecast					
Port	Dredging type	Volume (million of m <sup>3</sup> )	Highest project depth (m)	Term	Tender
Santos	Adequacy	8.93	15.0	3 years	Tender set in February 21st 2014
	Maintenance	13.20	15.0		
Mucuripe	Adequacy	1.10	14.0	6 months	Tender set in March 13rd 2014
Rio de Janeiro	Deepening and Adequacy	2.73	15.0	1 year	April 2014
Rio Grande	Adequacy and Maintenance	33.00	18.0	3 years	May 2014
Paranaguá	Deepening and Maintenance	11.03	16.0	3 years	June 2014
Cabedelo e Maceió	Deepening	5.40	12.5 e 12.5	1 year and a half	July 2014
Niterói and S. Gonçalo	Deepening and Adequacy	5.50	11.0	1 year and a half	August 2014
Itaguaí, Vitória, Salvador and Maceió	Maintenance	6.00	21.0; 14.0; 14.0 e 12.5	4 years	October 2014
Recife, Suape, Cabedelo, Natal and Mucuripe	Maintenance	9.00	11.5; 20.0; 12.5; 12.5; e 14.0	4 years	November 2014
Itajaí, São Francisco do Sul e Imbituba	Adequacy e Maintenance	8.10	14.0; 14.0 e 17.0	4 years	December 2014
Suape	Deepening	1.00	20.0	1 year	December 2014

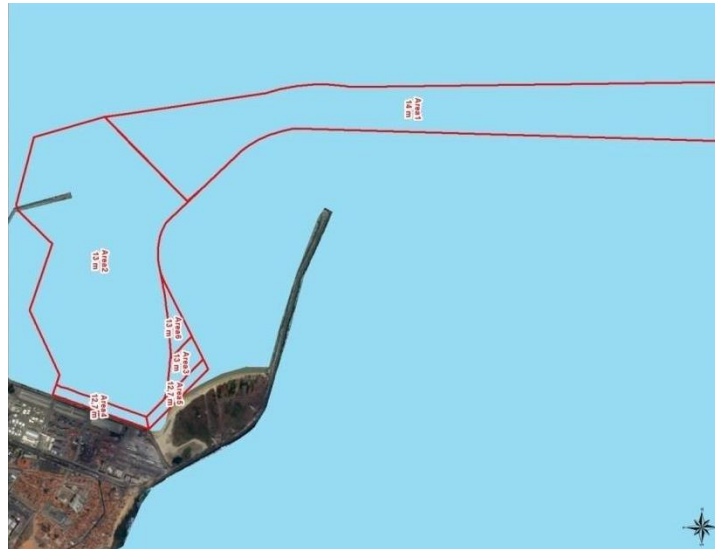
## Port of Santos



**DESCRIPTION:** Maintenance dredging for 3 year, sedimentation of about 6,600,000 m<sup>3</sup> per year and buoyage.

- Depth goal: 15.0m
- Expected volume of dredging:
  - Deepening and adequacy: 8.93 million of m<sup>3</sup>
  - Maintenance: 6.6 million of m<sup>3</sup> per year
- Date of tender warning : February 2014
- Date of bid submission: April 2014

## Port of Mucuripe



**DESCRIPTION:** Adequacy dredging of passenger terminal approach channel and turning basin.

- Depth goal: 14.0m
- Expected volume of dredging:
  - Adequacy: 1.10 million of m<sup>3</sup>
- Date of tender warning: March 2014
- Date of bid submission: April 2014

## Port of Rio de Janeiro



**DESCRIPTION:** Capital dredging and adequacy of access channel to Caju Quaywall.

- Depth goal: 15.0 m
- Expected volume of dredging:
  - Deepening and Adequacy: 2.73 million of m<sup>3</sup>
- Date of tender warning: April 2014
- Date of bid submission: **June 2014**



# Port of Rio Grande



**DESCRIPTION:** Maintenance dredging for 3 years, sedimentation estimated in 8,000,000 m<sup>3</sup> per year and Buoyage.

- Depth goal: 18.0 m
- Expected volume of dredging:
  - Adequacy and Maintenance: 33.0 million of m<sup>3</sup>
- Date of tender warning: May 2014
- Date of bid submission: July 2014

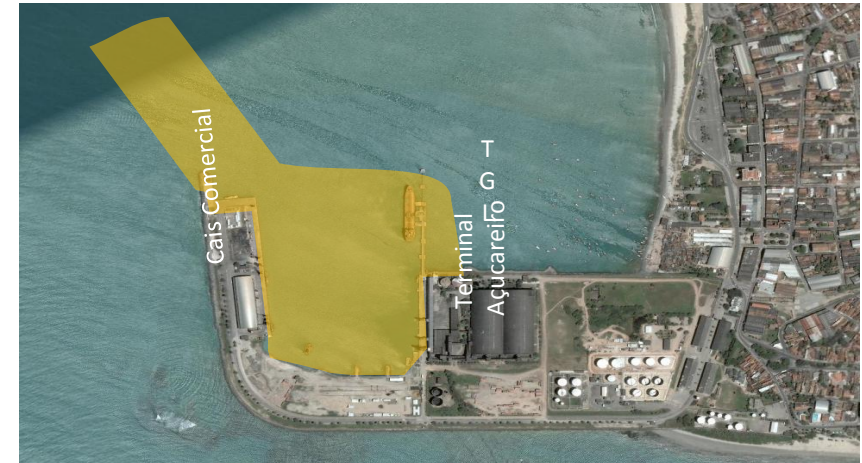
## Port of Paranaguá



**DESCRIPTION:** Capital dredging in access channel and harbour basin – Alpha, Bravo1 and Bravo 2 areas, Maintenance for 3 years, with sedimentation estimated in 2,600,000 m<sup>3</sup> per year and buoyage.

- Depth goal: 16.0 m
- Expected volume of dredging:
  - Deepening and Maintenance: 11.03 million of m<sup>3</sup>
- Date of tender warning: June 2014
- Date of bid submission: August 2014

# Ports of Cabedelo and Maceió



**DESCRIPTION:** Capital dredging of access channel and harbour basin.

- Depth goal: 12.5 m
- Expected volume of dredging:
  - Deepening: 5.40 million of m<sup>3</sup>
- Date of tender warning: July de 2014
- Date of bid submission: September 2014

## Ports of Niterói and São Gonçalo



**DESCRIPTION :** Capital dredging and Adequacy of access channel and harbour basin.

- Depth goal: 11.0 m
- Expected volume of dredging:
  - Deepening and Adequacy: 5.50 million of m<sup>3</sup>
- Date of tender warning: August 2014
- Date of bid submission: October 2014

## Ports of Itaguaí, Vitória, Salvador and Maceió



**DESCRIPTION :** Maintenance dredging for 4 years of access channel and turning basin.

- Depth goal: 21.0 m, 14.0 m, 14.0 m e 12.5 m.
- Expected volume of dredging:
  - Maintenance: 6.00 million of m<sup>3</sup>
- Date of tender warning: October 2014
- Date of bid submission: December 2014

## Ports of Recife, Suape, Cabedelo, Natal and Mucuripe



**DESCRIPTION :** Maintenance dredging for 4 years in access channel and turning basin.

➤ Depth goal: 11.5 m, 20.0 m, 12.5 m, 12.5 m and 14.0 m.

➤ Expected volume of dredging:

▪ Maintenance: 9.00 million of m<sup>3</sup>

➤ Date of tender warning: November 2014

➤ Date of bid submission: January 2015

## Ports of Itajaí, São Francisco do Sul and Imbituba



**DESCRIPTION :** Adequacy and Maintenance dredging for 4 years in access channel and turning basin.

- Depth goal: 14.0 m, 14.0 m e 17.0 m.
- Expected volume of dredging:
  - Adequacy and Maintenance: 8.10 million of m<sup>3</sup>
- Date of tender warning: December 2014
- Date of bid submission: February 2015

# Port of Suape



**DESCRIPTION :** Capital dredging of waterway access channel to Port of SUAPE, from -15.0m to -20.0m.

- Depth goal: 20 m.
- Expected volume of dredging:
  - Deepen: 1.0 million of m<sup>3</sup>
- Date of tender warning: December 2014
- Date for bid submission: February 2015