ANTAQ

The Brazilian National Waterway Transportation Agency

https://www.gov.br/Antaq

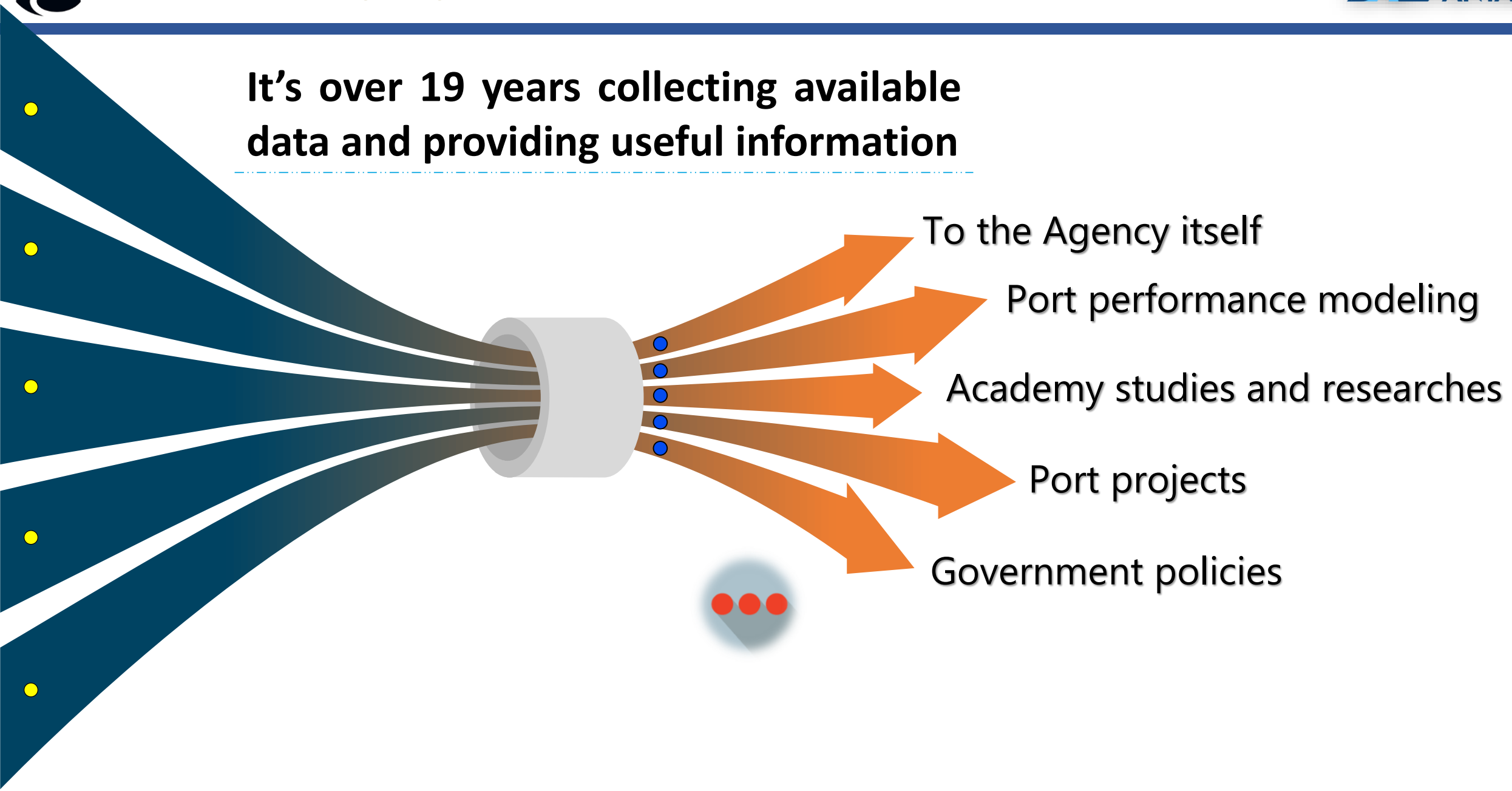
The Agency´s Port Statistics Dashboard

9th ITF Transport Statistics Meeting

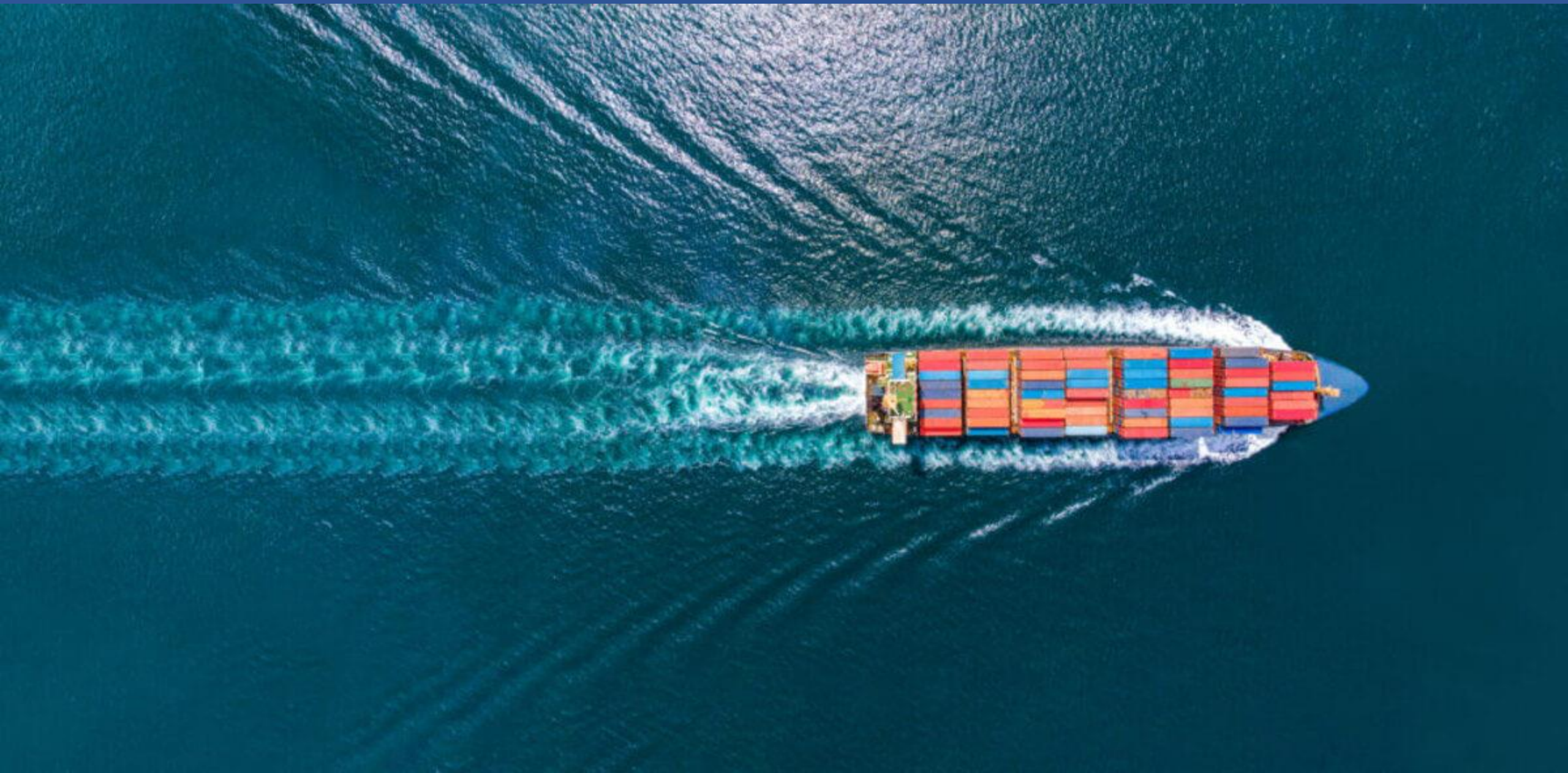
3-4 April 2023, Paris, France

Dashboard purposes: An overview

It's over 19 years collecting available data and providing useful information



1 The Agency and Port Grants



The Brazilian National Waterway Transportation Agency

An independent federal government Agency – Acronym ANTAQ

6 Regional Managements
7 Regional Units
13 Outposts

Regulation

Supervision

Collegiate Board of Directors and Superintendencies

Concessions

Statistics, Studies and environment

Public and private roles in port management

(Ports Law No. 12,815 of 2013 and its Decree 8,033 of 2013)

Types of grants

Public Ports

Public

Federal, State or City delegation

Private

Bidding auction process

Leased Terminals

-
-

Private Use Terminals

- Investments in infrastructure and superstructure
- Outside of a public port area

Granted by a bidden process
Private contracts

123 General numbers of ports in Brazil – reference 2022

169 Private Use Terminals
146 Leased Terminals

29 public ports
2 concessions

1,209

Billion tons

CAGR* 2010 to 2022 YoY

3.1%

*Compound Annual Growth Rate – Year base of 2010

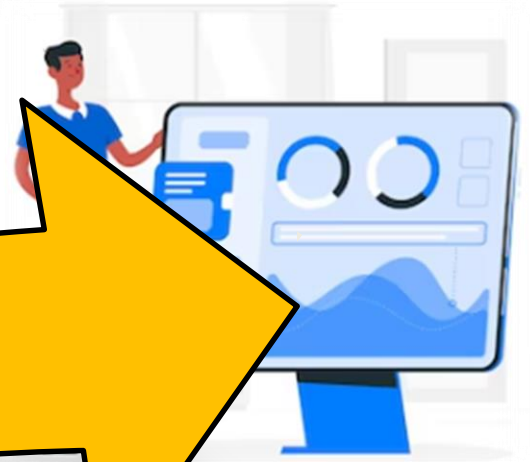
Decrease of

0.4%

Compared to 2021

2 Concepts about the dashboard

A three-step process: building a dashboard



STEP 1

STEP 2

STEP 3

Regulated Bodies

Agency

Collecting data

- Port Performance System
- Primary database
- Online forms or XML files

Extract, Transform and Load

- Read from the primary database
- Join with other internal databases
- Create a new database

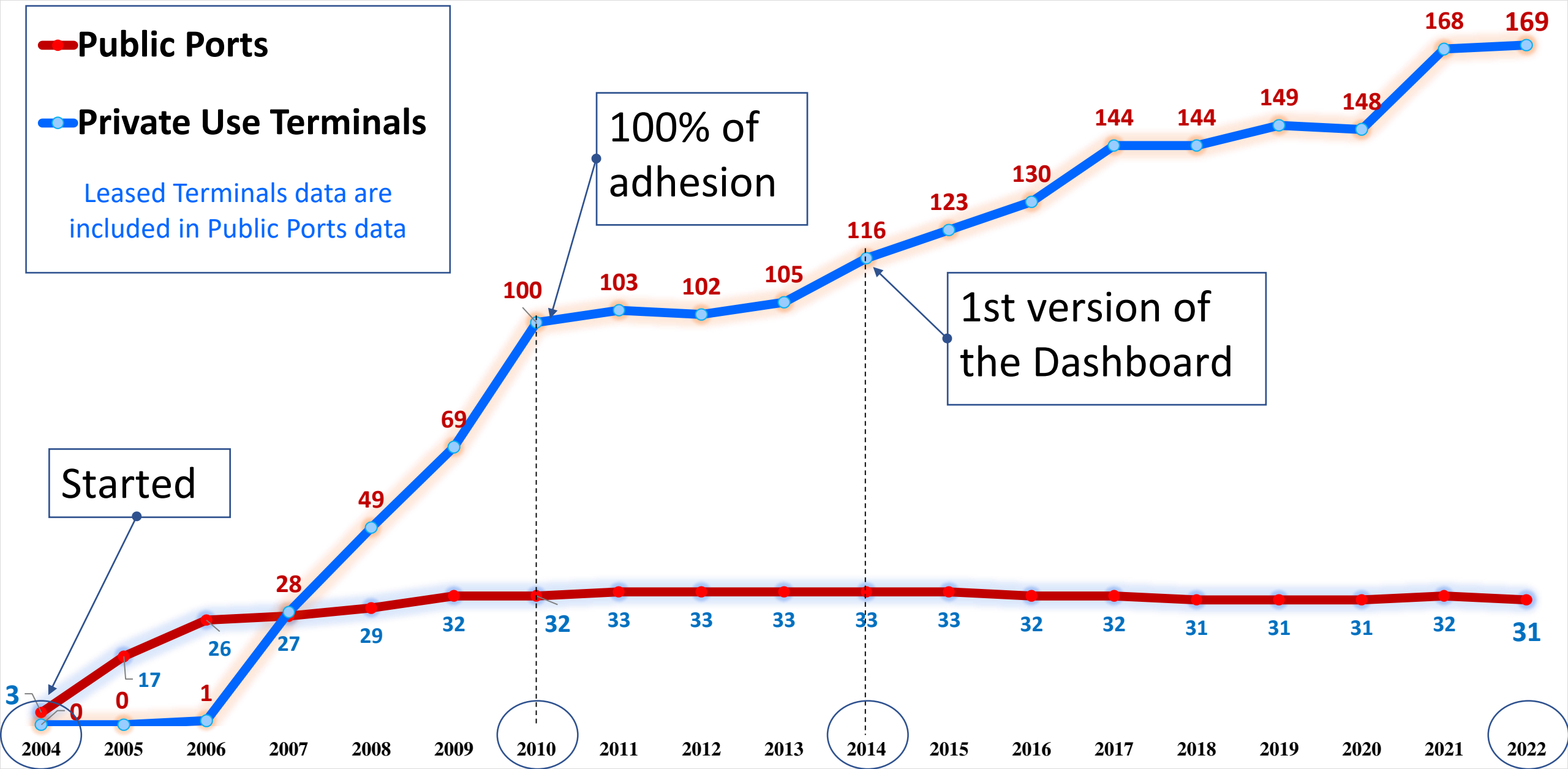
Publishing the dashboard

Maintenance of:

- Code, evolutions, versions
- Computing environment

The Port Performance System timeline

Number of Ports sending data



Primary database: Logical view of data

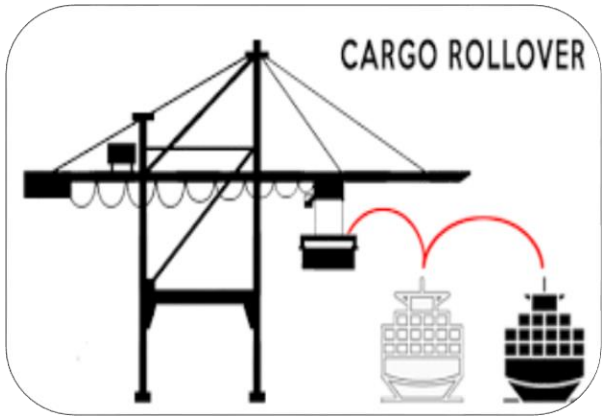
DATA UNIT: Ship unberthing

Monthly sending frequency

General	Cargo	Downtime
Tariff	Type of Navigation	Downtime Code
Operating Time	Origin and Destination	Start
Passenger	Gross Weight	End
	Containerized cargo	
	Container ID	
	Cargo ID	
	Net Weight	
		how long a berth stayed out of operation

The ANTAQ 's Port Performance System – Additional data

Ship calls omissions



Cargo rollover

Concession indicators

Dangerous goods and waste collection

Snow effect: The regulatory environment

Why ANTAQ has such a comprehensive and up-to-date database?

"The 4 musts"

supported by laws and Regulatory Acts

1

Annual meetings

Problems and solutions

2

Agreed updates by everyone

3

The right team

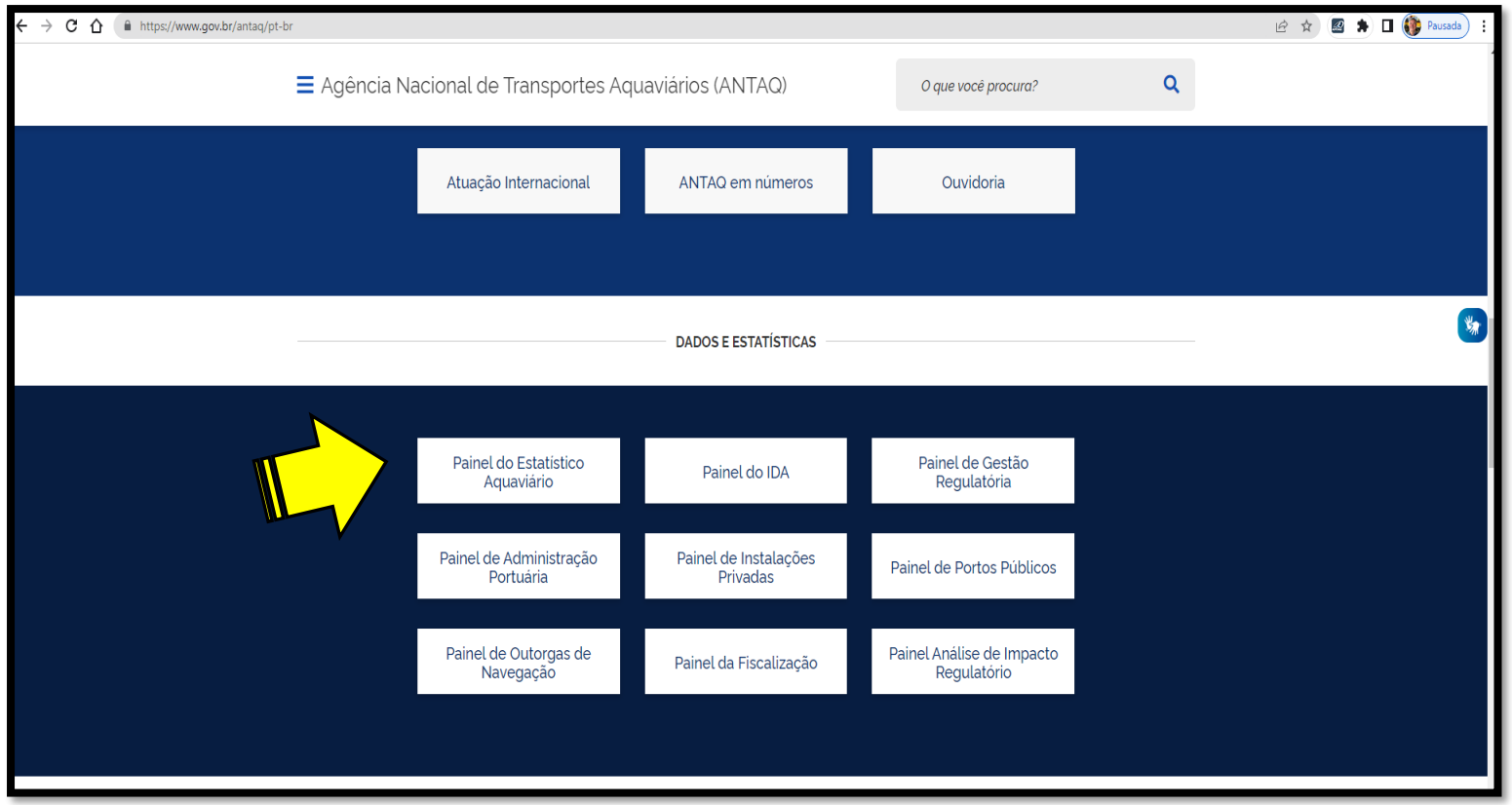
4

3 The dashboard – Accessing and searching data

Accessing the ANTAQ's Port Statistics Dashboard

Scan QR Code

Link http://ea.antaq.gov.br



https://www.gov.br/antaq

- **Found at the Agency's homepage**
- **Typing its Internet Address in a browser**

Introducing Dimensions, metrics and filters

Dimensions

Categories of information you want to know about

A diamond

Metrics

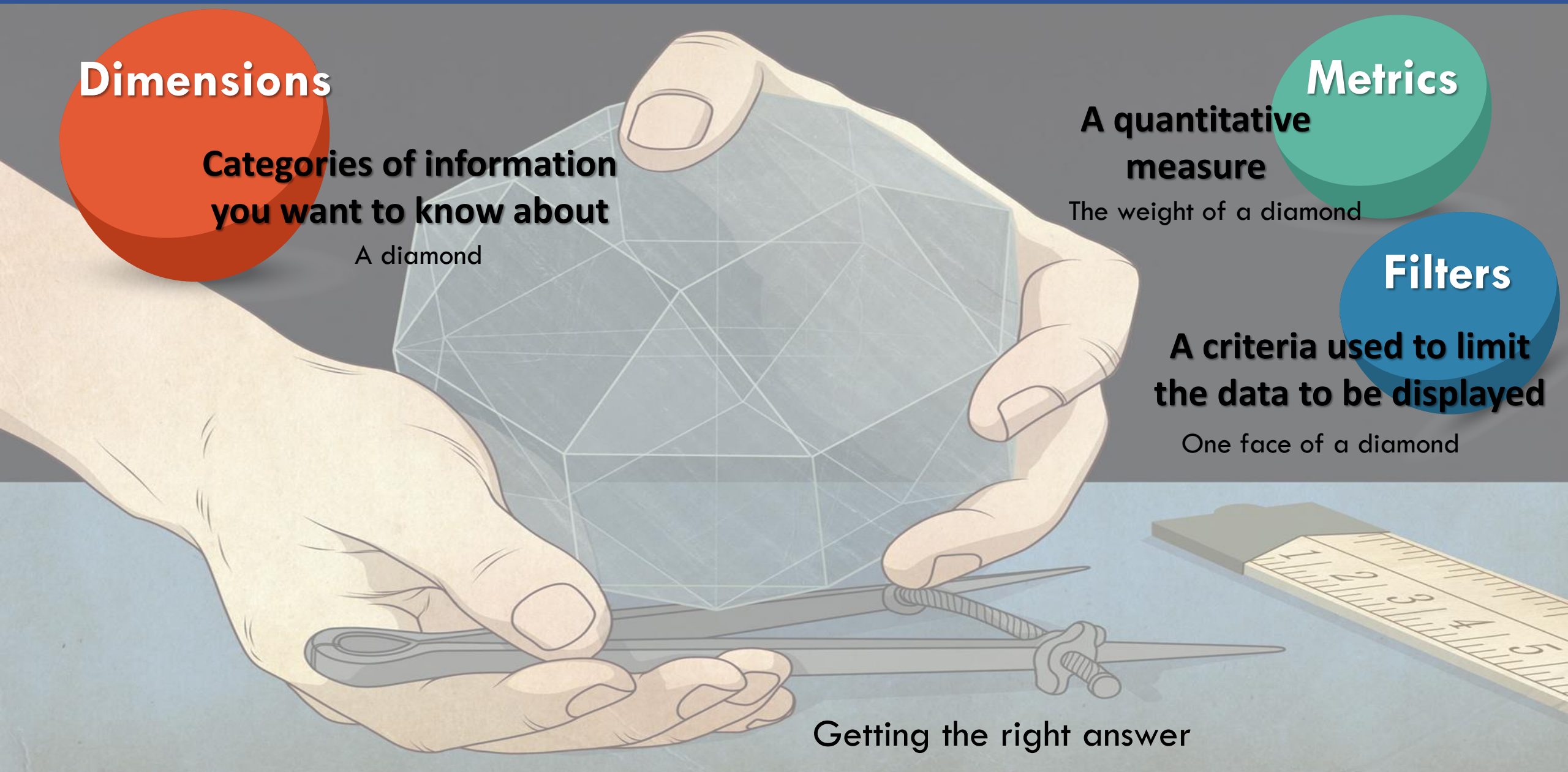
A quantitative measure

The weight of a diamond

Filters

A criteria used to limit the data to be displayed

One face of a diamond



Getting the right answer

The dashboard main page

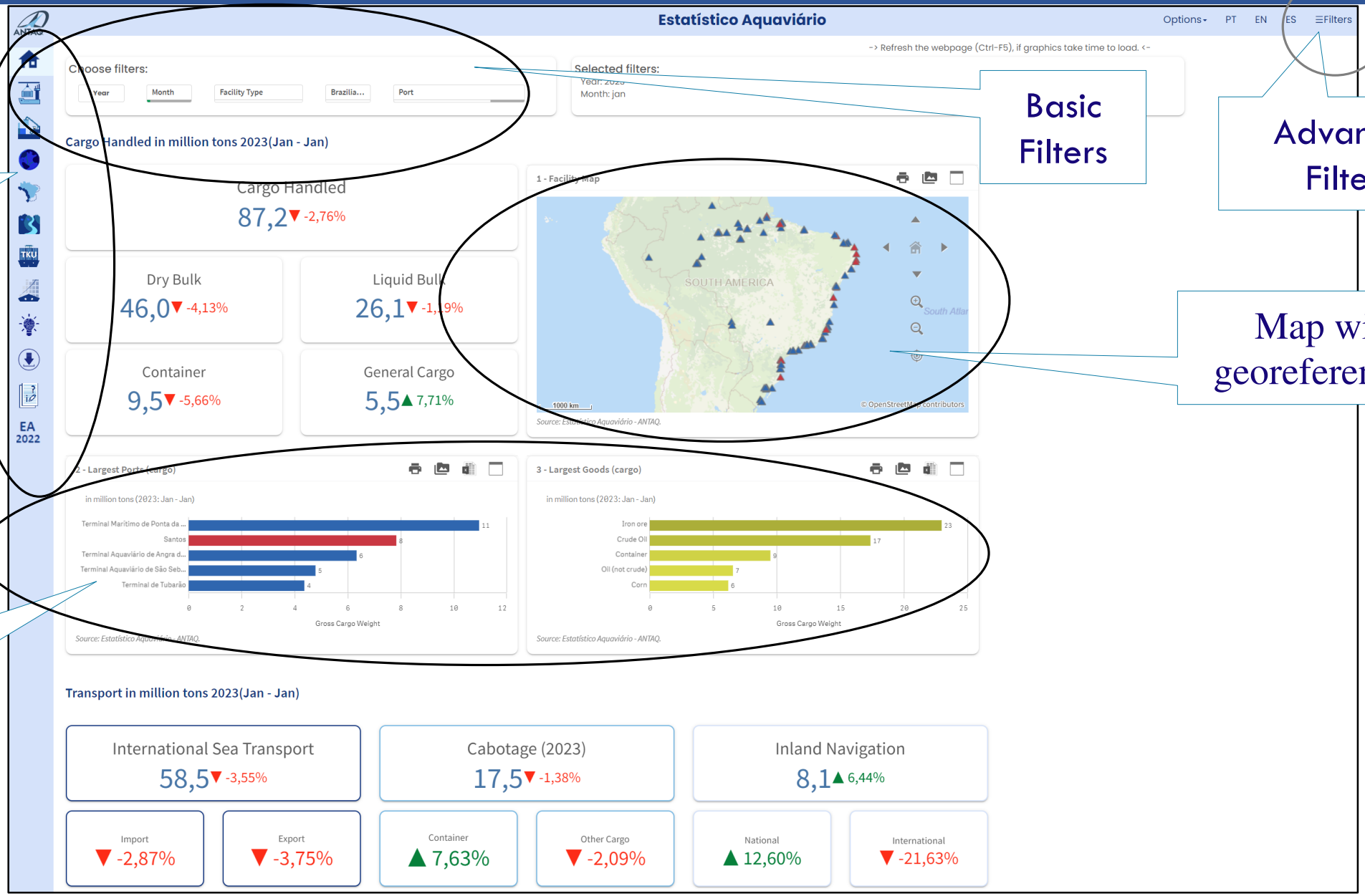
11 buttons changing pages

Basic Filters

Advanced Filters

Map with georeferencing

Dimensions and metrics



Using the dashboard: An example

Browse for:

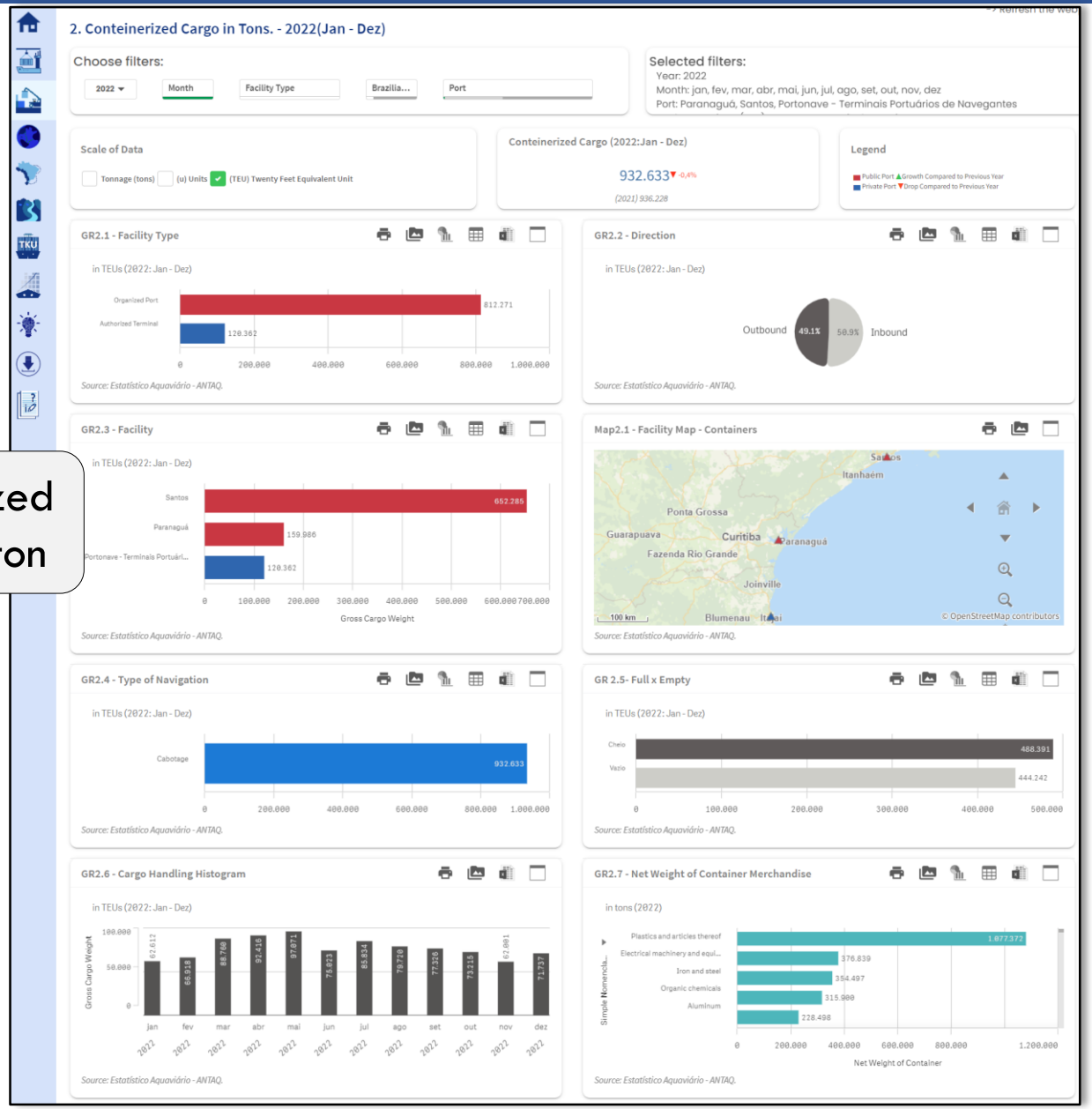
- Total Containerized cargo handled in 2022;
- in cabotage navigation ;
- for public ports of Santos and Paranagua; and
- the Private Use Terminal of Portonave.

Using the dashboard: The checklist

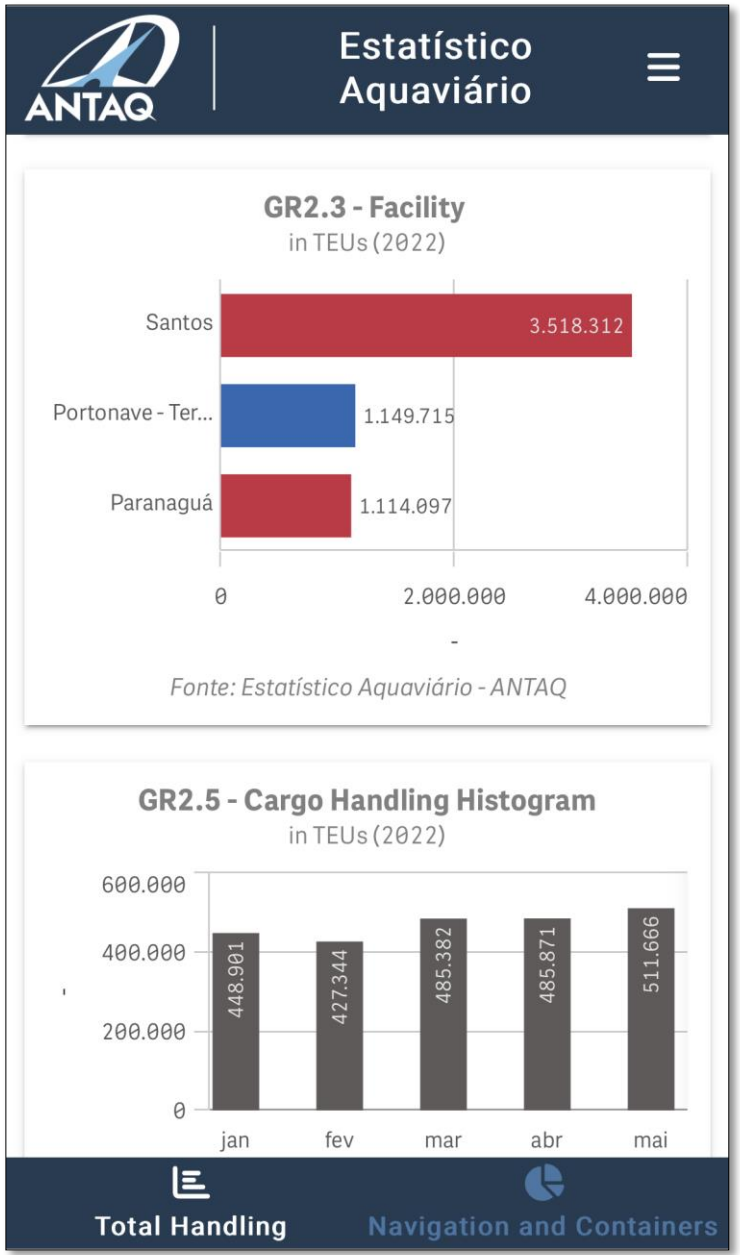
- Choose the right page
- Select the right filters
- Look at the right dimensions
- Print or save the information

Using the dashboard: Step 1 – The right page

Containerized Cargo Button

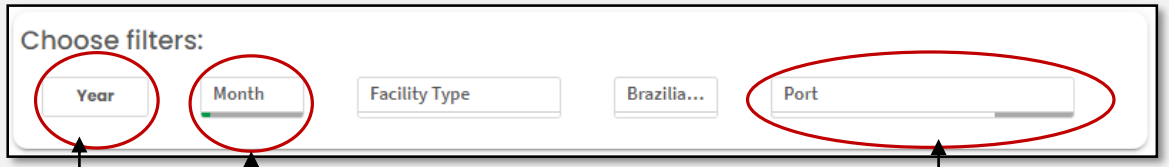


Containerized Cargo Page



Using the dashboard: Step 2 – Select the right filters

Basic Filter Area

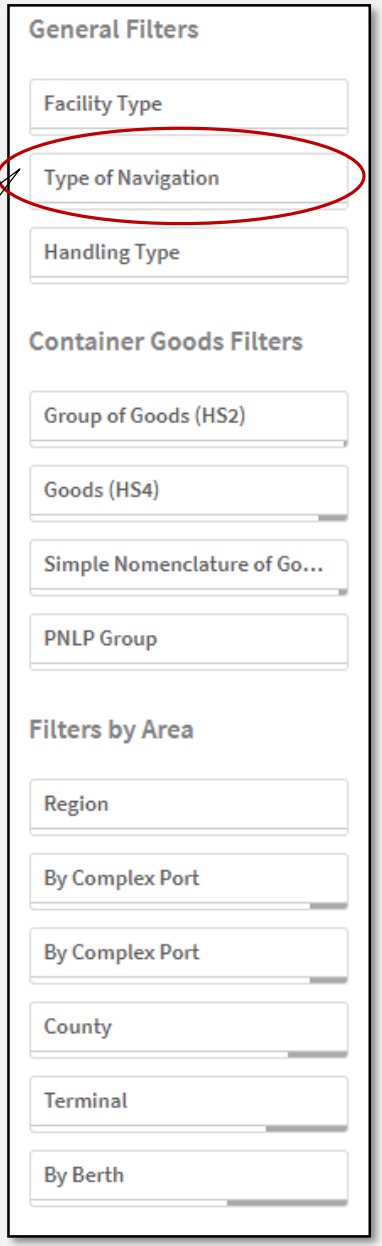


Year = 2022
Months = Jan to Dec

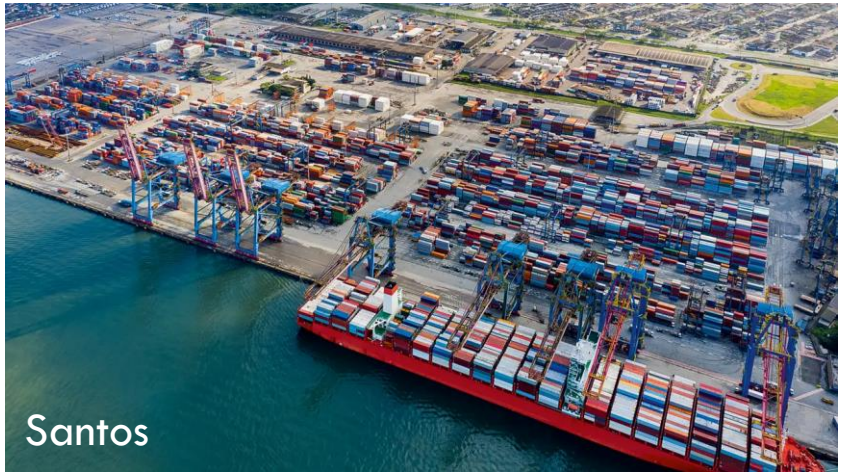
Ports names =
Santos
Paranaguá
Portonave

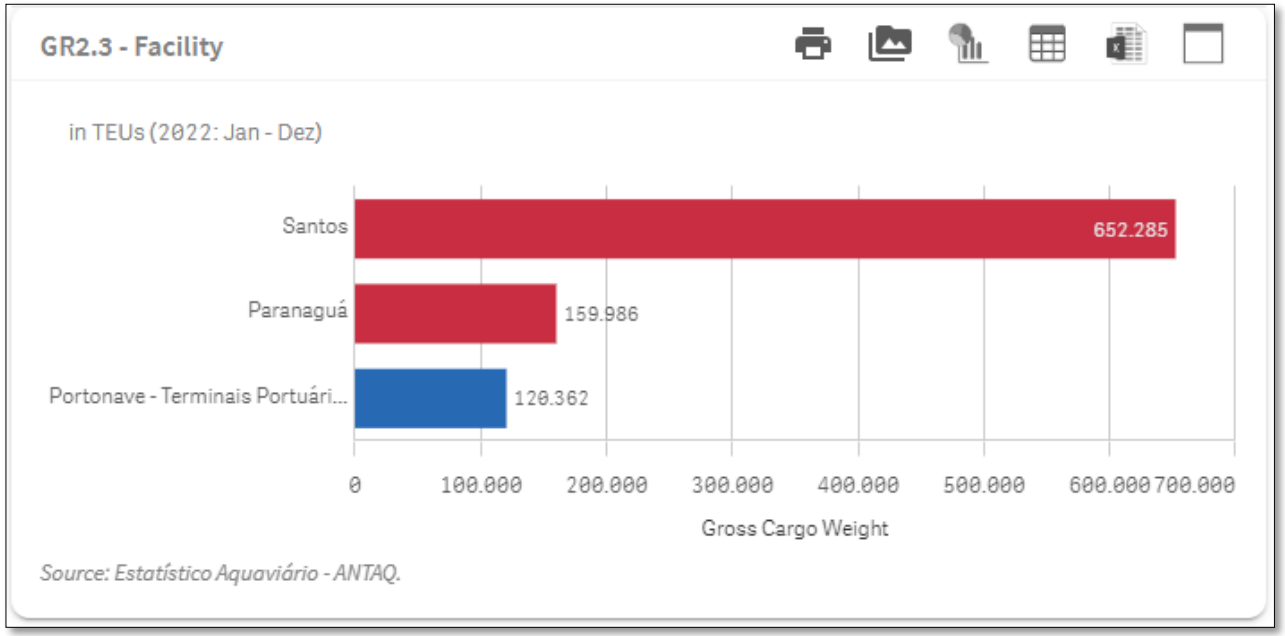
Advanced Filter Area

Type of navigation
= Cabotage



Using the dashboard: Steps 3, 4 – Viewing and saving information





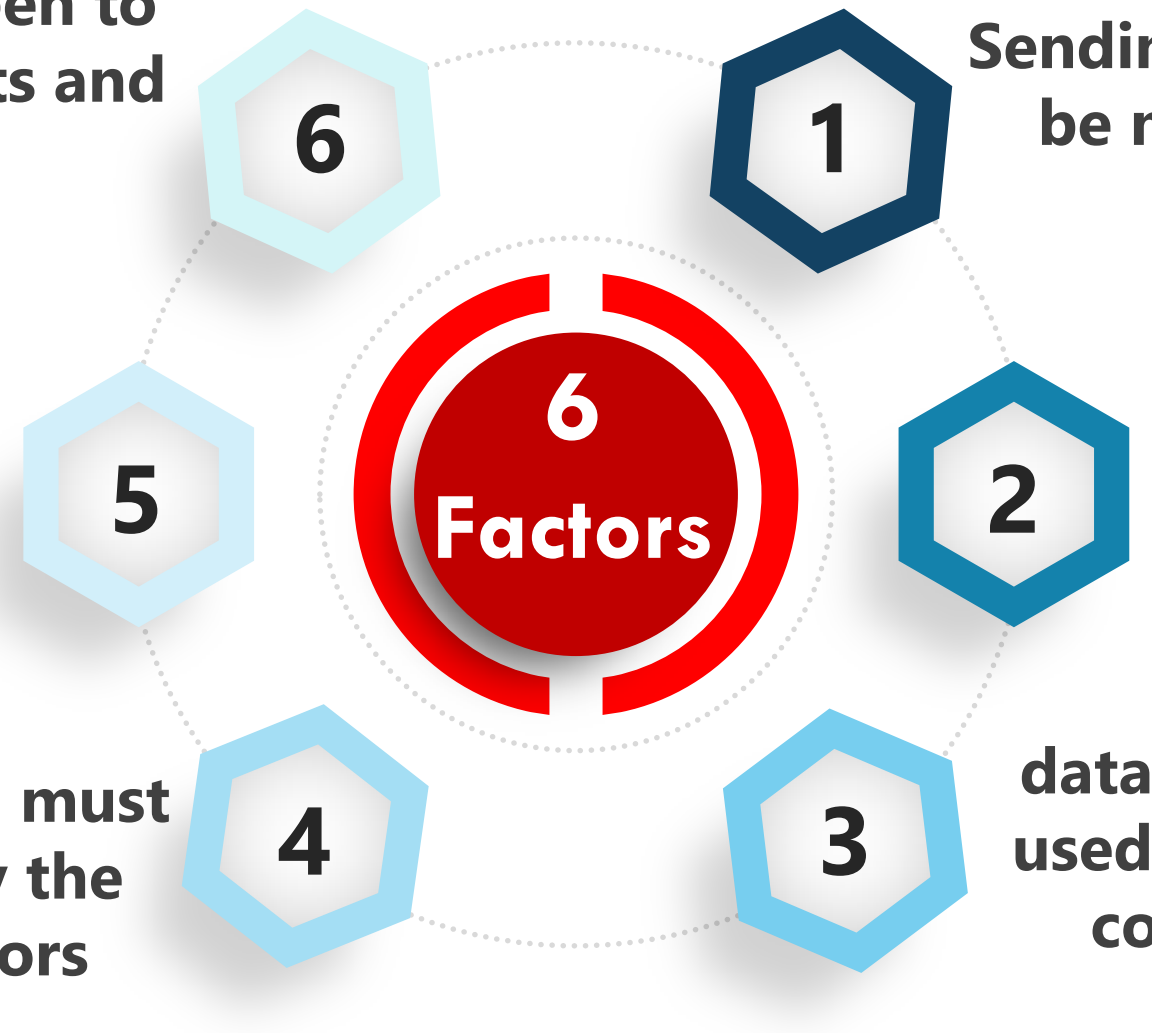
Results (Thousand TEU):

Santos-SP = 652,285

Paranaguá-PR = 159,986

Portonave-SC = 120,362

Conclusion: 6 important factors in dashboard development



1. Sending data must be mandatory
2. There must be Software, hardware, Database and People
3. data must actually be used by everyone as a confident source
4. The whole system must be supported by the board of directors
5. There must be the involvement of the regulated sector
6. We must always be open to Suggestions, comments and criticism

Thank you

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Santos Port Authority