



# **BLUECONNECT PROJECT – STATISTICS MODULE FOR TPCS + MONICA**

**(user requirements and analysis of current situation of  
statistical analysis tools)**

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## ABSTRACT

The following is an analysis of the user requirements for the statistical analysis module for TPCS and MONICA (Blueconnect project). There is also included in this document an examination of current statistical tools and sources of the APL (Autorità Portuale di Livorno).

## CURRENT METHOD OF STATISTICAL DATA RECOLLECTION AND PROCESSING

Since 2016 the APL isn't making ISTAT presentations anymore so this data source for the moment is not available. To generate statistical reports, the APL uses data from the Avvisatore Marittimo (AM), the TPCS and reports from all terminals in the port.

The following are the steps through which the APL currently operates:

- APL accesses the AM service site and downloads an excel file with all the month's ship arrivals. This list will be used as a "checklist" to control all the ships declared by the terminals. Every time a ship arrival is accounted for in base of the terminal's reports, the corresponding line on the file downloaded from the AM service is marked as "accounted for".
- APL receives an excel file from every terminal containing all ships operated and product type divided by loading modality indicating tons or units loaded and unloaded. These files are not standardized as they are most commonly generated by each terminal information system. APL interprets them manually and creates summarizing excel files divided by loading modality (Liquids in bulk, solids in bulk, containers, semi-trailers, etc.).
- APL uses TPCS data (when available) to double check the information provided by the terminals and to add destination and origin ports.
- Finally, the APL makes monthly and tri-monthly statistical reports detailing, product type, loading modality, country of origin and destination, tons, units, passengers, etc.; all of this divided by port (Livorno, Piombino, Isola di Elba). For greater detail see attached file.

## APL USER REQUIREMENTS FOR STATISTICAL MODULE FOR TPCS + MONICA

The user requirements described by the statistical department of the APL, basically consist in reproducing the "manual" system described in the previous part of this report but automating the data collection from TPCS and MONICA. An important obstacle for the development of this module will be that not all the information the APL receives "manually" from the terminals is contained in TPCS and MONICA, the main missing information is:

- Standardized product types

- Empty containers
- Cargo to or from EU ports (without customs)
- Cargo in semi-trailers or wheeled UTIs
- Ferry and Cruise ship passengers

In detail, APL's user requirements are the following:

1) For all **cargo** (tons / units) in a selected **time period** the detail of

**a. Movement type**

- Loading**
- Unloading**
- total**

**b. Port of origin / Port of destination** divided by:

- Geographical area**
- Country**
- Province**
- Shipping company**
- ship**

**c. Port of loading / Port of unloading**

- Geographical area**
- Country**
- Province**
- Shipping company**
- Ship**

When the **cargo** is measured in tons the module should detail:

- **Loading or unloading modality** (container, break bulk, liquid bulk, solid bulk, wheeled UTIs)
- **Product type /category**

When the **cargo** is measured in units the module should detail:

- **Unit type** (container, new car, wheeled UTI, Pax Ferry, Pax Cruise Ship, Car, Bus, Camper, Motorcycle)
  - For **Containers**
    - **TEU / Units**
    - **Full / empty**
    - **20' / 40'**
    - **Transshipment** (yes / no)
  - For **wheeled UTIs**
    - **With / without driver**
    - **Linear meters**
  - For **Pax Cruise Ship**
    - **Embarks**
    - **disembarks**
    - **transit**

2) For all **Ships** in a determined **time frame**

**a. Ship Name**

- i. **Movement type** (arrivals, departures, total)

**b. Berth**

- i. **Movement type** (arrivals, departures, total)

- ii. **Berth type** (public, private)

iii. **Berth specifics**

- 1. **Ships berthed per type**

- 2. **Berth duration**

**c. Ship type**

**d. Ship specifics**

- i. GT
  - ii. NT
  - iii. Length
  - iv. Beam
  - v. Flag
  - vi. Port of origin
  - vii. Port of destination
  - viii. Shipping Company
  - ix. TEU Capacity (in fullcontainer ship type)
- e. **Navigation Type** (coastal navigation – cabotage, deepsea)

## APL USER REQUIREMENTS:

### 1) total port movements (ton)

- a) All Product Types (TARIC - ISTAT) divided by Loading or Unloading indicating Product Code. See table 2 on attachment report.

1A					
	<b>CARGO BY TYPE</b>				
	<b>PRODUCT TYPE</b>	<b>PRODUCT CODE</b>	<b>LOADING (tons)</b>	<b>UNLOADING (tons)</b>	<b>TOTAL (tons)</b>
	product type A				
	product type B				
	product type C				
	...				
	<b>TOTAL</b>				

DATA	CAN BE FOUND IN	ALTERNATE WAY OF DATA ACQUISITION
product type	TPCS	
product code	TPCS	
loading (tons)	TPCS	
unloading (tons)	TPCS	

**NOTE 1:** product type and product code are not found on TPCS or MONICA in a standard manner, but could be found via mapping the manual data entered by the operators with the product categories (names) and product codes.

**NOTE 2:** All fields at this moment will have missing information about:

- cabotage cargo (IMPORT + EXPORT) – new evolutive of TPCS to arrive in the first trimester 2018, but not compulsory for users to fill
- communitary cargo (IMPORT + EXPORT) – new evolutive of TPCS to arrive in the first trimester 2018
- RO-RO cargo (IMPORT) – new evolutive of TPCS to arrive in the first trimester 2018
- various cargo -goods not in containers or RO-RO- (IMPORT) – new evolutive of TPCS to arrive in the first trimester 2018

b) All Cargo divided by Loading Modality indicating Product Code, Tons. Loaded, Tons. Unloaded, Units Loaded, Units Unloaded and Linear Meters Loaded and Unloaded for RO-RO. See table 3 on attachment report.

1B CARGO BY LOADING MODALITY											
LOADING MODALITY / PRODUCT TYPE	PRODUCT CODE	LOADING (tons)	UNLOADING (tons)	TOTAL (tons)	LOADING (units)	UNLOADING (units)	TOTAL (units)	LINEAR METERS LOADED (mts)	LINEAR METERS UNLOADED (mts)	TOTAL (mts)	
<b>RO-RO</b>											
product type A											
product type B											
product type C											
...											
<b>TOTAL</b>											
<b>CONTAINER</b>											
product type A											
product type B											
product type C											
...											
<b>TOTAL</b>											
<b>Break Bulk</b>											
product type A											
product type B											
product type C											
...											
<b>Liquid bulk</b>											
product type A											
product type B											
product type C											
...											
<b>Solid Bulk</b>											
product type A											
product type B											
product type C											
...											
<b>TOTAL</b>											

DATA	CAN BE FOUND IN	ALTERNATE WAY OF DATA ACQUISITION
product type	TPCS	
product code	TPCS	
loading (tons)	TPCS	
unloading (tons)	TPCS	
loading modality		fill-in forms sent to the terminals
loading (units)	TPCS	
unloading (units)	TPCS	
linear meters loaded (RO-RO)		fill-in forms sent to the terminals
linear meters unloaded (RO-RO)		fill-in forms sent to the terminals

**NOTE:** product type and product code are not found on TPCS or MONICA in a standard manner, but could be found via mapping the manual data entered by the operators with the product categories (names) and product codes.

**NOTE 2:** All fields at this moment will have missing information about:

- cabotage goods (IMPORT + EXPORT) – *new evolutive of TPCS to arrive in the first trimester 2018, but not compulsory for users to fill*
- communitary cargo (IMPORT + EXPORT) – *new evolutive of TPCS to arrive in the first trimester 2018*
- RO-RO (IMPORT) – *new evolutive of TPCS to arrive in the first trimester 2018*
- various goods -goods not in containers or RO-RO- (IMPORT) – *new evolutive of TPCS to arrive in the first trimester 2018*

c) Dangerous Goods divided by Loading or Unloading indicating Product Code, Arrived, Departed and the Total Number of Ships Transporting each dangerous goods type.

1C								
	<b>DANGEROUS GOODS</b>							
	<b>PRODUCT TYPE</b>	<b>PRODUCT CODE</b>	<b>LOADING (tons)</b>	<b>UNLOADING (tons)</b>	<b>TOTAL (tons)</b>	<b>ARRIVED SHIPS (units)</b>	<b>DEPARTED SHIPS (units)</b>	<b>TOTAL OF SHIPS (units)</b>
	product type A							
	product type B							
	product type C							
	...							
	<b>TOTAL</b>							

DATA	CAN BE FOUND IN	ALTERNATE WAY OF DATA ACQUISITION
product type	TPCS	
product code	TPCS	
loading (tons)	TPCS	
unloading (tons)	TPCS	
arrived ships	MONICA	
departed ships	MONICA	

**NOTE:** product type and product code are not found on TPCS or MONICA in a standard manner, but could be found via mapping the manual data entered by the operators with the product categories (names) and product codes.

**NOTE 2:** All fields at this moment will have missing information about:

- cabotage goods (IMPORT + EXPORT) – *new evolutive of TPCS to arrive in the first trimester 2018, but not compulsory for users to fill*
- communitary cargo (IMPORT + EXPORT) – *new evolutive of TPCS to arrive in the first trimester 2018*
- RO-RO (IMPORT) – *new evolutive of TPCS to arrive in the first trimester 2018*
- various goods -goods not in containers or RO-RO- (IMPORT) – *new evolutive of TPCS to arrive in the first trimester 2018*



## 2) Arrived vessels

- a) All Arrived and Berthed Vessels and Average Gross Tonnage of ships indicating Name, IMO, N° of Trips, Berth Total Duration, Ship Age, CO2 Footprint, Length, Beam (width), Gross Tonnage, Flag, Maritime Agency, Shipping Company and port within Port Authority's competence area. See table 11 on attachment report.

ARRIVED VESSELS	SHIP NAME	IMO	SHIP TYPE	N° OF TRIPS (units)	BERTH TOTAL DURATION (time)	BUILT YEAR	CO2 FOOTPRINT	LENGTH (mts)	BEAM (mts)	GROSS TONNAGE "GT" (tons)	FLAG	SHIPPING COMPANY (LINE)	SCALO AdSP (PORT)
vessel A													
vessel B													
vessel C													
...													
<b>TOTAL ARRIVED: QUANTITY: GROSS TONNAGE (GT): AVERAGE GT:</b>													
<b>TOTAL BERTHED: QUANTITY: GROSS TONNAGE (GT): AVERAGE GT:</b>													

DATA	CAN BE FOUND IN	ALTERNATE WAY OF DATA ACQUISITION
call sign	TPCS	
IMO	TPCS	
ship type	MONICA / VESSEL FINDER	
N° of trips	MONICA	
berth total duration	MONICA	
ship age	MONICA / VESSEL FINDER	
CO2 footprint		fill-in forms sent to the terminals
length	MONICA / VESSEL FINDER	
beam	MONICA / VESSEL FINDER	
gross tonnage	MONICA / VESSEL FINDER	
flag	TPCS	
shipping company	TPCS	
maritime agency	TPCS	
scalo AdSP (PORT)	MONICA	

- b) All Berthed Vessels divided by Type, detailing also IMO, Trip N°, GT, Berth Type, Berth Name, Berth Movement Type, Berth Duration, Terminal, Port of Origin, Port of Destination, Type of Navigation and port within Port Authority's competence area. See table 12 on attachment report.

2B														
VESSELS BY TYPE														
CALL SIGN	SHIP NAME	IMO	VISIT ID	TRIP N°	GT	BERTH TYPE	BERTH NAME	BERTH MOVEMENT TYPE	BERTH DURATION (time)	TERMINAL	TYPE OF NAVIGATION	PORT OF DEPARTURE	PORT OF DESTINATION	SCALO AdSP (PORT)
<b>TANKERS</b>														
vessel A														
vessel B														
vessel C														
...														
SUB TOTAL (ships)														
SUB TOTAL (GT)														
<b>BULK CARRIERS</b>														
vessel A														
vessel B														
vessel C														
...														
SUB TOTAL														
SUB TOTAL (GT)														
<b>GENERAL CARGO SHIPS (RO-RO)</b>														
vessel A														
vessel B														
vessel C														
...														
SUB TOTAL														
SUB TOTAL (GT)														
<b>GENERAL CARGO SHIPS (CONTAINERS)</b>														
vessel A														
vessel B														
vessel C														
...														
SUB TOTAL														
SUB TOTAL (GT)														
<b>GENERAL CARGO SHIPS (OTHER)</b>														
vessel A														
vessel B														
vessel C														
...														
SUB TOTAL														
SUB TOTAL (GT)														
<b>PASSENGER SHIPS (CRUISE)</b>														
vessel A														
vessel B														
vessel C														
...														
SUB TOTAL														
SUB TOTAL (GT)														
<b>PASSENGER SHIPS (FERRIES)</b>														
vessel A														
vessel B														
vessel C														
...														
SUB TOTAL														
SUB TOTAL (GT)														
TOTAL (SHIPS)														
TOTAL (GT)														

DATA	CAN BE FOUND IN	ALTERNATE WAY OF DATA ACQUISITION
call sign	TPCS	
IMO	TPCS	
ship type	MONICA / VESSEL FINDER	
trip N°	TPCS	
berth total duration	MONICA	
gross tonnage	MONICA / VESSEL FINDER	
berth time	MONICA	
berth name	MONICA	
berth movement type	MONICA	
terminal	MONICA	
type of navigation	MONICA	
port of origin	TPCS	
port of destination	TPCS	
scalo AdSP (PORT)	MONICA	

- c) All Berthed Full Container Vessels indicating IMO, Trip N°, Berth Total Duration, Ship Age, CO2 Footprint, NT, GT, Average NT, Average GT, Shipping Company, Maritime Agency and port within Port Authority's competence area. See table 13 on attachment report.

2C	BERTHED FULLCONTAINER SHIPS													
	CALL SIGN	SHIP NAME	IMO	VISIT ID	TRIP N°	BERTH DURATION (time)	BUILT YEAR	CO2 FOOTPRINT	GT	NT	SHIPPING COMPANY (LINE)	MARITIME AGENCY	TERMINAL	SCALO AdSP (PORT)
	vessel A													
	vessel B													
	vessel C													
	...													
	TOTAL OF SHIPS													
	AVERAGE NT													
	AVERAGE GT													

DATA	CAN BE FOUND IN	ALTERNATE WAY OF DATA ACQUISITION
call sign	TPCS	
IMO	TPCS	
trip N°	TPCS	
berth total duration	MONICA	
gross tonnage	MONICA / VESSEL FINDER	
net tonnage	MONICA / VESSEL FINDER	
shipping company	TPCS	
maritime agency	TPCS	
terminal	MONICA	
ship age	MONICA / VESSEL FINDER	
CO2 footprint		fill-in forms sent to the terminals
scalo AdSP (PORT)	MONICA	

- d) All Berthed Full Container Vessels divided by TEU Capacity indicating Call Sign, IMO, Trip N°, sub-total N° of Ship Calls by TEU Capacity, Total N° of Ship Calls, Average TEU Capacity and port within Port Authority's competence area. See table 14 on attachment report.

2D	FULLCONTAINER SHIPS BY TEU CAPACITY					NOTE: ALL THE CATEGORIES ARE THE FOLLOWING
	TEU CAPACITY / SHIP NAME	CALL SIGN	IMO	TRIP N°	VISIT ID	SCALO AdSP (PORT)
	<= 199					
		vessel A				<= 199
		vessel B				200 - 399
		vessel C				400 - 599
		...				600 - 799
	SUB TOTAL (N° OF CALLS)					800 - 999
	200 - 399					1000 - 1299
		vessel A				1300 - 1599
		vessel B				1600 - 1999
		vessel C				2000 - 2499
		...				2500 - 2999
	SUB TOTAL (N° OF CALLS)					3000 - 3499
	400 - 599					3500 - 3999
		vessel A				4000 - 4499
		vessel B				4500 - 4999
		vessel C				5000 - 5499
		...				> 5499
	SUB TOTAL (N° OF CALLS)					
	TOTAL OF CALLS					
	AVERAGE TEU CAPACITY					

DATA	CAN BE FOUND IN	ALTERNATE WAY OF DATA ACQUISITION
call sign	TPCS	
IMO	TPCS	
trip N°	TPCS	
TEU capacity		VESSEL FINDER PREMIUM USER / fill-in forms sent to the terminals
scalo AdSP (PORT)	MONICA	

### 3) TEUs

- a) Quantity of Containers Loaded and Unloaded divided by Full or Empty and indicating Type (20' / 40'). See table 5 on attachment report.

3A	CONTAINERS MOVED (WITHOUT TRANSSHIPMENT)	LOADED (units)	UNLOADED (units)	TOTAL (units)
	FULL 40' CONTAINERS			
	EMPTY 40' CONTAINERS			
	SUB TOTAL			
	FULL 20' CONTAINERS			
	EMPTY 20' CONTAINERS			
	SUB TOTAL			
	TOTAL			

DATA	CAN BE FOUND IN	ALTERNATE WAY OF DATA ACQUISITION
full 40' containers	TPCS	
empty 40' containers		fill-in forms sent to the terminals
full 20' containers	TPCS	
empty 20' containers		fill-in forms sent to the terminals

**NOTE:** All fields at this moment will have missing information about:

- cabotage goods (IMPORT + EXPORT) – new evolutive of TPCS to arrive in the first trimester 2018, but not compulsory for users to fill
- communitary cargo (IMPORT + EXPORT) – new evolutive of TPCS to arrive in the first trimester 2018
- empty containers (IMPORT + EXPORT) – new evolutive of TPCS to arrive in the first trimester 2018

- b) Quantity of Transshipment Containers divided by Full or Empty and indicating Type (20' / 40'). See table 4 on attachment report.

3B				
	<b>CONTAINERS MOVED (WITH TRANSSHIPMENT)</b>			
		<b>LOADED (units)</b>	<b>UNLOADED (units)</b>	<b>TOTAL (units)</b>
	FULL 40' CONTAINERS			
	EMPTY 40' CONTAINERS			
	<b>SUB TOTAL</b>			
	FULL 20' CONTAINERS			
	EMPTY 20' CONTAINERS			
	<b>SUB TOTAL</b>			
	<b>TOTAL</b>			

DATA	CAN BE FOUND IN	ALTERNATE WAY OF DATA ACQUISITION
full 40' containers	TPCS	
empty 40' containers		fill-in forms sent to the terminals
full 20' containers	TPCS	
empty 20' containers		fill-in forms sent to the terminals

**NOTE 2:** All fields at this moment will have missing information about:

- cabotage goods (IMPORT + EXPORT) – new evolutive of TPCS to arrive in the first trimester 2018, but not compulsory for users to fill
- communitary cargo (IMPORT + EXPORT) – new evolutive of TPCS to arrive in the first trimester 2018
- empty containers (IMPORT + EXPORT) – new evolutive of TPCS to arrive in the first trimester 2018

#### 4) Wheeled UTIs (RO-RO) (unit)

- a) Quantity of RO-RO Units Loaded and Unloaded (in units and in tons) indicating IMO, Trip N°, Shipping Company, Maritime Agency, Port of Origin, Port of Destination, Terminal and port within Port Authority's competence area. See table 7 on attachment report.

4A																				
	<b>RO-RO CARGO</b>																			
	<b>CALL SIGN</b>	<b>SHIP NAME</b>	<b>IMO</b>	<b>VISIT ID</b>	<b>TRIP N°</b>	<b>PORT OF DEPARTURE</b>	<b>PORT OF DESTINATION</b>	<b>LOADED (units)</b>	<b>UNLOADED (units)</b>	<b>TOTAL (units)</b>	<b>LOADED (tons)</b>	<b>UNLOADED (tons)</b>	<b>TOTAL (tons)</b>	<b>LINEAR METERS LOADED (mts)</b>	<b>LINEAR METERS UNLOADED (mts)</b>	<b>TOTAL (mts)</b>	<b>SHIPPING COMPANY (LINE)</b>	<b>MARITIME AGENCY</b>	<b>TERMINAL</b>	<b>SCALE AdSP (PORT)</b>
	vessel A																			
	vessel B																			
	vessel C																			
	<b>TOTAL</b>																			

DATA	CAN BE FOUND IN	ALTERNATE WAY OF DATA ACQUISITION
call sign	TPCS	
IMO	TPCS	
trip N°	TPCS	
ship type (RO-RO)	MONICA / VESSEL FINDER	
port of origin	TPCS	
port of destination	TPCS	
loaded (units)	TPCS	
unloaded (units)	TPCS	
loaded (tons)	TPCS	
unloaded (tons)	TPCS	
loaded (linear meters)		fill-in forms sent to the terminals
unloaded (linear meters)		fill-in forms sent to the terminals
terminal	MONICA	
shipping company	TPCS	
maritime agency	TPCS	
scalo AdSP (PORT)	MONICA	

**NOTE:** All fields at this moment will have missing information about:

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- communitary cargo (IMPORT + EXPORT) – *new evolutive of TPCS to arrive in the first trimester 2018*
- RO-RO (IMPORT) – *new evolutive of TPCS to arrive in the first trimester 2018*

## 5) Passengers (unit)

- a) Quantity of Passengers Embarked and Disembarked divided by Country of Origin. See table 8 on attachment report.

5A				
	PASSENGERS (FERRY)			
	COUNTRY	EMBARKED (units)	DISEMBARKED (units)	TOTAL (units)
	country A			
	country B			
	country C			
	...			
	SUB TOTAL			
	TOTAL			

DATA	CAN BE FOUND IN	ALTERNATE WAY OF DATA ACQUISITION
country		fill-in forms sent to the terminals
embarked		fill-in forms sent to the terminals
disembarked		fill-in forms sent to the terminals

## 6) Cruise ship passengers (unit)

- a) Quantity of Passengers Embarked, Disembarked and in Transit, divided by Ships indicating Ship Call Sign, IMO, Trip N°, Port of Origin, Port of Destination, Shipping Company, Maritime Agency and port

within Port Authority's competence area. See table 9 on attachment report. (These data sets are not found in TPCS and MONICA)

6A

PASSENGERS (CRUISE SHIP)													
CALL SIGN	IMO	SHIP NAME	TRIP N°	VISIT ID	PORT OF DEPARTURE	PORT OF DESTINATION	SHIPPING COMPANY (LINE)	MARITIME AGENCY	EMBARKED (units)	DISEMBARKED (units)	TRANSIT(units)	TOTAL (units)	SCALO AdSP (PORT)
Ship A													
Ship B													
Ship C													
...													
<b>TOTAL</b>													

DATA	CAN BE FOUND IN	ALTERNATE WAY OF DATA ACQUISITION
call sign		fill-in forms sent to the terminals
IMO		fill-in forms sent to the terminals
trip N°		fill-in forms sent to the terminals
port of origin		fill-in forms sent to the terminals
port of destination		fill-in forms sent to the terminals
shipping company		fill-in forms sent to the terminals
maritime agency		fill-in forms sent to the terminals
embarked		fill-in forms sent to the terminals
disembarked		fill-in forms sent to the terminals
transit		fill-in forms sent to the terminals
scalo AdSP (PORT)		fill-in forms sent to the terminals

## 7) New cars (unit)

- a) Quantity of New Cars Loaded, Unloaded or in Transshipment, divided by Ship indicating IMO, Trip N°, Shipping Company, Maritime Agent, Port of Origin, Port of Destination and port within Port Authority's competence area. See table 2 -last row- on attachment report.

7A

NEW CARS													
CALL SIGN	SHIP NAME	IMO	TRIP N°	VISIT ID	PORT OF DEPARTURE	PORT OF DESTINATION	SHIPPING COMPANY (LINE)	MARITIME AGENCY	LOADED (units)	UNLOADED (units)	TRANSSHIPMENT (units)	TOTAL (units)	SCALO AdSP (PORT)
Ship A													
Ship B													
Ship C													
...													
<b>TOTAL</b>													

DATA	CAN BE FOUND IN	ALTERNATE WAY OF DATA ACQUISITION
call sign	TPCS	
IMO	TPCS	
trip N°	TPCS	
port of origin	TPCS	
port of destination	TPCS	
shipping company	TPCS	
maritime agency	TPCS	
loaded		fill-in forms sent to the terminals
unloaded		fill-in forms sent to the terminals
transshipment		fill-in forms sent to the terminals
scalo AdSP (PORT)	MONICA	

## 8) Forestal products (ton)

- a) All Cargo corresponding to this category divided by Loading and Unloading and divided by Country of Origin / Destination, all of this in the categories In Container / Not In Container. See table 10 on attachment report.

8A							
	FORESTAL PRODUCTS						
		IN CONTAINERS			NOT IN CONTAINERS		
	COUNTRY	LOADED (tons)	UNLOADED (tons)	TOTAL (tons)	LOADED (tons)	UNLOADED (tons)	TOTAL (tons)
	country A						
	country B						
	country C						
	...						
	SUB TOTAL						
	TOTAL						

DATA	CAN BE FOUND IN	ALTERNATE WAY OF DATA ACQUISITION
country	TPCS	
loaded (in cont.)	TPCS	
unloaded (in cont.)	TPCS	
loaded (not in cont.)	TPCS	
unloaded (not in cont.)	TPCS	
product type	TPCS	

**NOTE:** product type and product code are not found on TPCS or MONICA in a standard manner, but could be found via mapping the manual data entered by the operators with the product categories (names) and product codes.

**NOTE :** All fields at this moment will have missing information about:

- cabotage goods (IMPORT + EXPORT) – new evolutive of TPCS to arrive in the first trimester 2018, but not compulsory for users to fill
- communitary cargo (IMPORT + EXPORT) – new evolutive of TPCS to arrive in the first trimester 2018
- RO-RO (IMPORT) – new evolutive of TPCS to arrive in the first trimester 2018
- various goods -goods not in containers or RO-RO- (IMPORT) – new evolutive of TPCS to arrive in the first trimester 2018

## User interface and missing data compilation

### Multi-Port management

Aside from the time frame, all user requirements (views), should offer the user the possibility of choosing between the different ports within the Port Authority's competence area in a way to generate the desired statistical tables. The options should be the following:

- Livorno



- Piombino
- Isola d'Elba
- ALL

### Missing information compilation

As explained before there is information that currently won't be found neither in TPCS nor in MONICA's databases. This data will have to be filled mainly by Blueconnect users either by entering the information manually or via the upload of a file containing it.

The workflow should be as follows:

- 1) Blueconnect gets from MONICA's DB all ships calling in the port
- 2) Blueconnect associates the cargo manifests from TPCS's DB to it corresponding ships
- 3) Ships without a cargo manifest associated are highlighted and some kind of alert is sent to the user that should enter the data
- 4) Users enter the missing data either manually (directly on Blueconnect module) or via a file

## CUSTOMS OFFICE USER REQUIREMENTS

The following two reports should be visualized and used by all the users that are part of the organization "customs office".

### Fullcontainer ships authorized for pre-clearing

Number of fullcontainer ships eligible for pre-clearing, number of fullcontainer ships authorized for pre-clearing, internal port. The user should be able to select a time frame only in months, for example: 2017 → Jan., Feb., Mar., etc.

FULLCONTAINER SHIPS AUTHORIZED FOR PRE-CLEARING		
MONTH: MAY 2017		
INTERNAL PORT (SCALO AdSP)	N° OF SHIPS ELIGIBLE FOR PRE-CLEARING	N° OF SHIPS AUTHORIZED FOR PRE-CLEARING
LIVORNO		
PIOMBINO		
PORTOFERRAIO		
<b>TOTAL</b>		



## RO-RO ships authorized for pre-clearing

Number of RO-RO ships eligible for pre-clearing, number of RO-RO ships authorized for pre-clearing, internal port. The user should be able to select a time frame only in months, for example: 2017 → Jan., Feb., Mar., etc.

RO-RO SHIPS AUTHORIZED FOR PRE-CLEARING		
MONTH: MAY 2017		
INTERNAL PORT (SCALO AdSP)	N° OF SHIPS ELIGIBLE FOR PRE-CLEARING	N° OF SHIPS AUTHORIZED FOR PRE-CLEARING
LIVORNO		
PIOMBINO		
PORTOFERRAIO		
<b>TOTAL</b>		

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azienda soggetta a controllo e coordinamento da parte di DBA GROUP S.p.A.

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