



INTEGRATION OF FOREIGN TRADE AND MARITIME TRANSPORT STATISTICS IN SPAIN

Luisa Escamilla, Leandro García and Eva Pérez

Fundación Valenciaport

New Orleans, 4-6 May 2009





Index:

- 1. Importance of foreign trade and transport statistics**
- 2. Spanish foreign trade and maritime transport statistics**
- 3. Analysis of possible integration of foreign trade and maritime transport statistics**
- 4. Variables included in the integrated database**



Importance of foreign trade and transport statistics

Foreign trade statistics are crucial for:

- Preparation of Balance of Payments Account and Fiscal Balance
- Analysis of trade patterns:
 - Type of products exported and imported
 - Geographical origin and destination of export and import flows
- Calculation of the indices of unitary value of export and import flows: proxy to the export and import prices of the commodities traded
- Study of the trade geographical pattern and its evolution as a key for designing trade-related diplomatic missions and trade agreements with specific countries
- Analysis of trade creation and deviation effects after certain events have taken place or agreements signed
- Impact on trade flows of reduction in tariff and non-tariff barriers

Quality statistics are fundamental for making informed decisions concerning public policy and private investment.



Importance of foreign trade and transport statistics

Transport statistics are the basis for:

- Analysing the modal split for export and import flows
- Studying the evolution of freight traffic by mode
- Analysing the utilisation rate of transport infrastructure capacity
- Assessing the need to expand or create new transport infrastructure
- Analysing the impact of transport policy on transport demand and derived external costs



Characteristics of Spanish foreign trade statistics

CONCEPT	DESCRIPTION
Name of the database	“Estadísticas de Comercio Exterior de España” (Spanish Foreign Trade Statistics)
Organisation	Department of Customs and Special Taxes, Spanish Tax Agency
Time period	1988 - 2008
Updating frequency	Monthly
Type of information	Foreign and Intra-EU trade flows
Transport modes	Maritime, Rail, Road, Air, Own propulsion, Post, Inland navigation, Fixed Transport Installation
Trade flow	Export and Import
Origin/destination level of detail	Country
Geographical level of detail within Spain	Province
Commodity information	8 digits of the Combined Nomenclature / Harmonised System (TARIC)
Last update	February 2009
Primary source of information	Single Administrative Document (SAD) and Intrastat Declaration
Links	www.aeat.es http://datacomex.mcx.es/index.htm http://aduanas.cameras.org/



Characteristics of Spanish foreign trade statistics

Two different documents provide the data compiled in the Spanish foreign trade statistical database: the Single Administrative Document (SAD) and the Intrastat Declaration.

✓ The main function of the SAD is to serve as an instrument to determine tariffs and as a tool against fraud. The SAD information is checked and filtered by Customs and is therefore of higher quality than data supplied by the Intrastat Declaration.

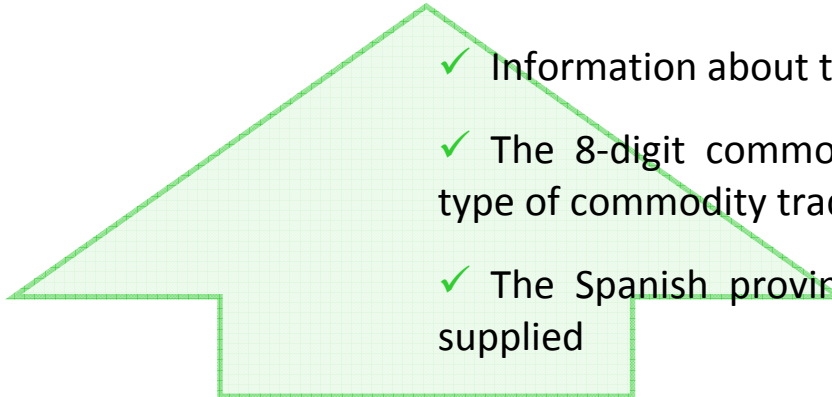
✓ A SAD document must be sent to Customs for every export or import flow. The database compiled by Spanish Customs includes every single export and import operation that takes place in a given period of time.

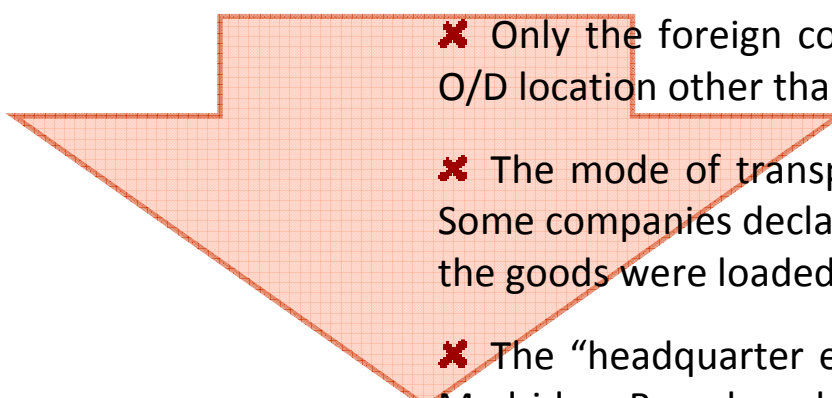
✗ The Intrastat System is a tool to collect statistical data on intra-European trade flows. Data supplied are not thoroughly checked or validated by Customs or any statistical agency.

✗ The data compiled in the intra-European trade flows database are monthly aggregates.

✗ Not every business is required to submit the Intrastat Declaration. Only businesses with dispatches or arrivals of goods from other EU member states over the assimilation threshold (250,000 Euros for dispatches or arrivals in Spain in 2008) are obliged to submit the Intrastat Declaration and only those selling more than 6 million Euros or purchasing goods for more than 6 million Euros must provide the following information: delivery terms, statistical value of goods, mode of transport, port/airport of loading/unloading and statistical regime.

Characteristics of Spanish foreign trade statistics

- 
- ✓ Information about the value of the goods is collected
 - ✓ The 8-digit commodity code provides detailed information about the type of commodity traded
 - ✓ The Spanish province of origin/destination of an export or import is supplied

- 
- ✗ Only the foreign country of origin/destination (O/D) is known, no specific O/D location other than the country is published
 - ✗ The mode of transport at the EU border is not always supplied correctly. Some companies declare that their shipments are transported by road because the goods were loaded on a truck when they left their premises.
 - ✗ The “headquarter effect”: some businesses state that the O/D province is Madrid or Barcelona because the headquarters of their company are located there, independently on whether the real O/D factory / plant / warehouse where the transport chain started is in a different province.
 - ✗ Information about the route and transport service used to transport the goods is very limited.



Characteristics of Spanish maritime transport statistics

PORT AUTHORITIES

AP A Coruña
AP Alicante
AP Almería
AP Avilés
AP Balears
AP Barcelona
AP Bilbao
AP Cartagena
AP Castellón
AP Ceuta
AP Ferrol-S. Cibrao
AP Gijón
AP Huelva
AP Bahía de Algeciras
AP Bahía de Cádiz



PORT AUTHORITIES

AP Las Palmas
AP Málaga
AP Marín y ría de Pontevedra
AP Melilla
AP Motril
AP Pasajes
AP S.C. Tenerife
AP Santander
AP Sevilla
AP Tarragona
AP Valencia
AP Vigo
AP Vilagarcía de Arousa

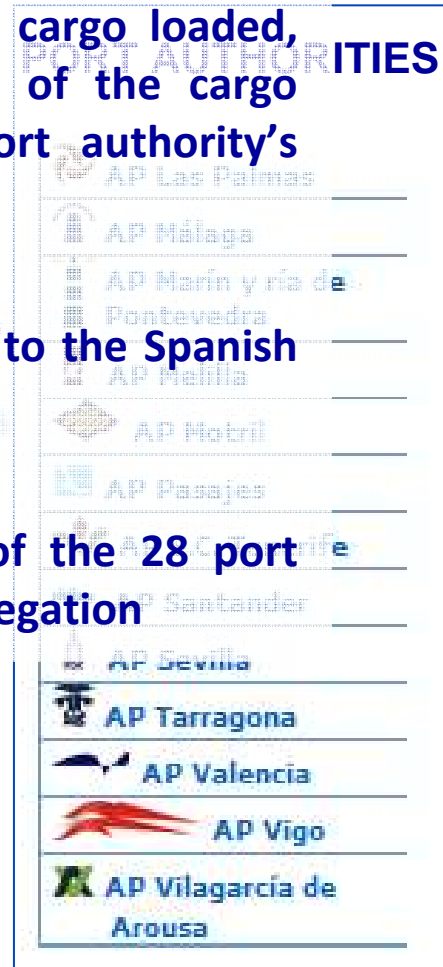
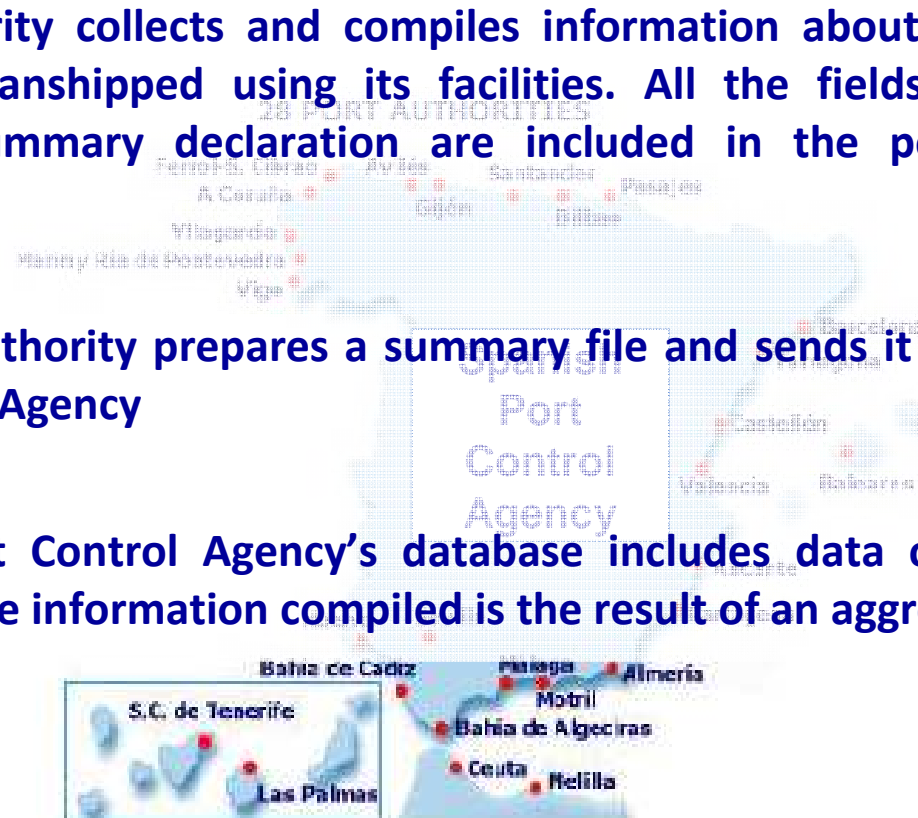
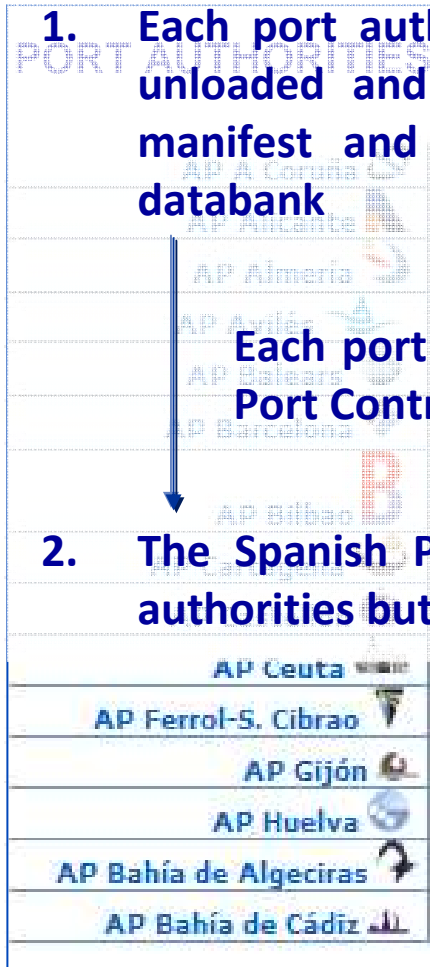
Characteristics of Spanish maritime transport statistics

There are two databases on Spanish maritime transport available:

1. Each port authority collects and compiles information about cargo loaded, unloaded and transhipped using its facilities. All the fields of the cargo manifest and summary declaration are included in the port authority's databank

Each port authority prepares a summary file and sends it to the Spanish Port Control Agency

2. The Spanish Port Control Agency's database includes data of the 28 port authorities but the information compiled is the result of an aggregation

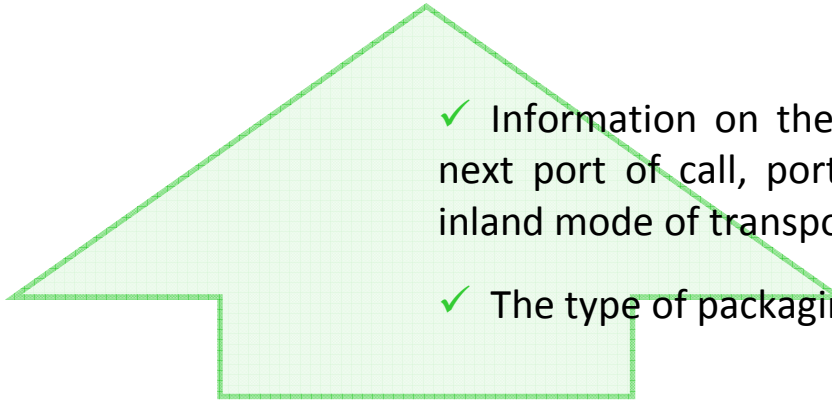


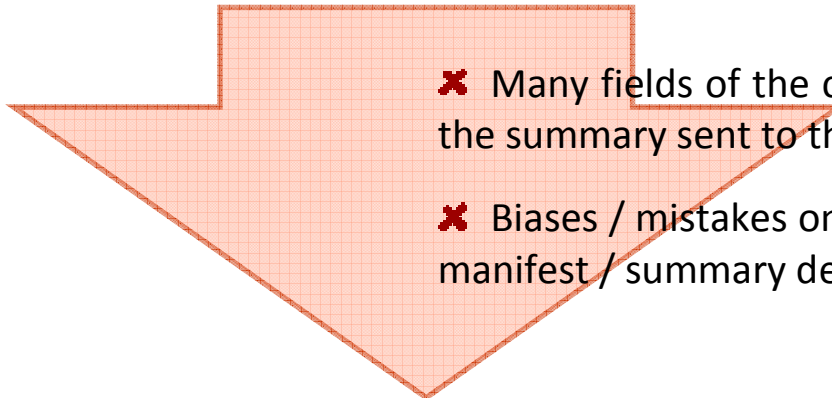


Characteristics of Spanish maritime transport statistics

CONCEPT	DESCRIPTION
Name of the database	“Estadísticas de Tráfico Portuario” (Port Traffic Statistics)
Organisation	Spanish Control Agency of the Spanish Ports of General Interest
Time period	1992-2008
Updating frequency	Monthly
Type of information	Maritime transport statistics
Transport modes	Maritime transport
Flow	Loadings, Unloadings, Loading Transhipments and Unloading Transhipments
O/D level of detail	Port
Commodity information	Commodity classification designed by the Spanish Control Agency: 40 groups of commodities (Port authority’s database: uses the Combined Nomenclature, TARIC at 4 digits disaggregation-level)
Last update	February 2009
Primary source of information	Cargo Manifest and Summary Declaration
Link	www.fomento.es www.puertos.es

Characteristics of Spanish maritime transport statistics

- 
- ✓ Information on the transport route is provided, ie. previous port of call, next port of call, port of loading, port of unloading, port of transshipment, inland mode of transport, etc...
 - ✓ The type of packaging and transport equipment used is supplied

- 
- ✗ Many fields of the cargo manifest and summary declaration are not part of the summary sent to the Spanish Port Control Agency.
 - ✗ Biases / mistakes on the information provided for certain fields of the cargo manifest / summary declaration non-validated by the port authorities.








Analysis of possible integration of foreign trade and transport statistics

MARITIME TRANSPORT

PORT CONTROL AGENCY'S DATABASE

INDIVIDUAL PORT AUTHORITY'S DATABASE

 Monthly aggregate

-  Each observation in the database refers to the information submitted by each specific cargo manifest and summary declaration
-  Each cargo manifest and summary declaration are linked to a specific SAD document for non-EU-trade
-  Integrating the information supplied by the SAD and that provided by the cargo manifest or summary declaration should be possible
-  For intra-European trade flows there is no way of linking the information supplied in the Intrastat Declaration to a cargo manifest or summary declaration



Analysis of possible integration of foreign trade and transport statistics

**FOREIGN TRADE and MARITIME TRANSPORT
statistics can be linked and included in a NEW
INTEGRATED DATABASE**

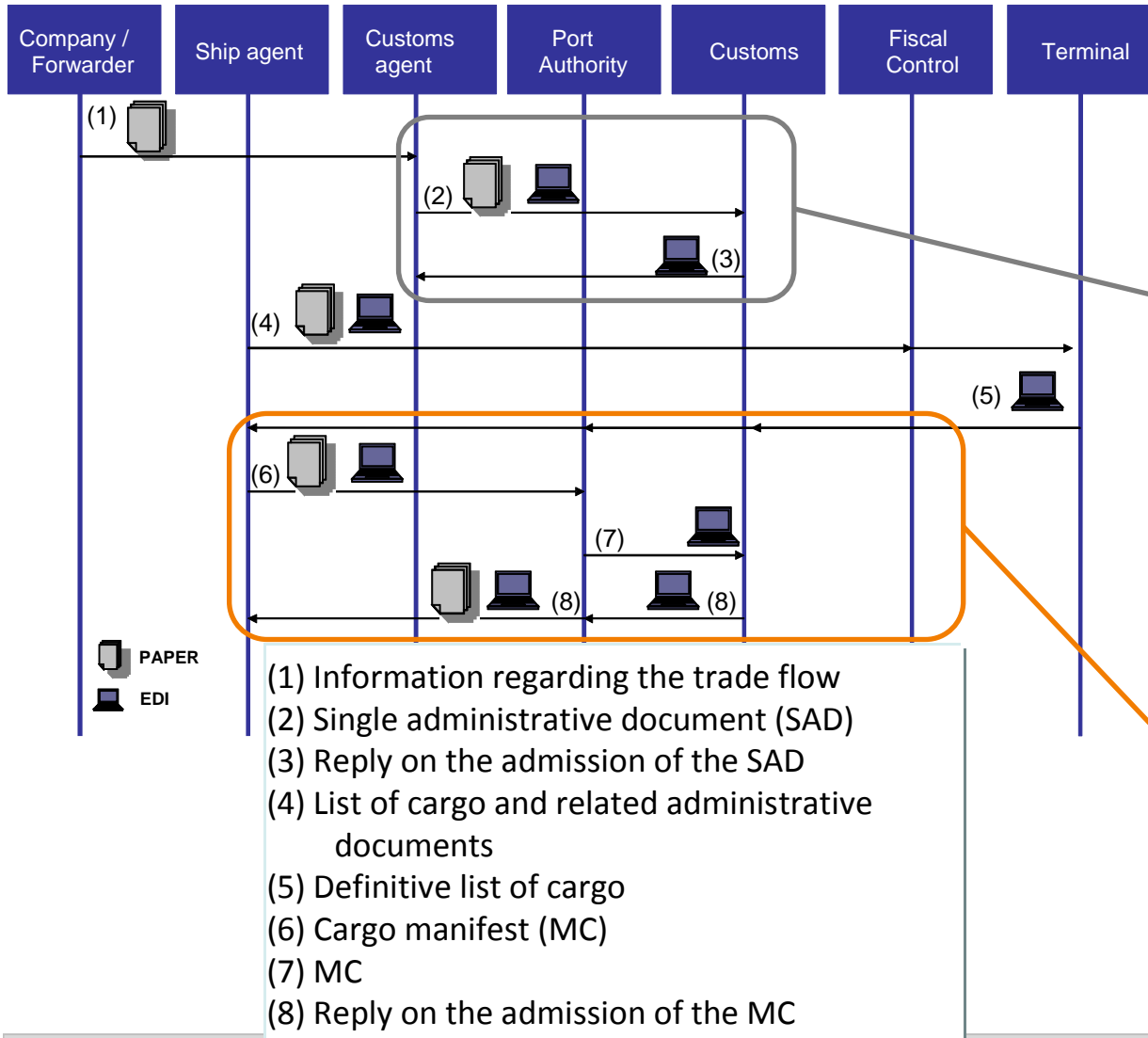
The **SAD** collects information about an export or import flow with non-EU countries

The **cargo manifest or summary declaration** collect details about the transport service and vessel used and about the goods transported

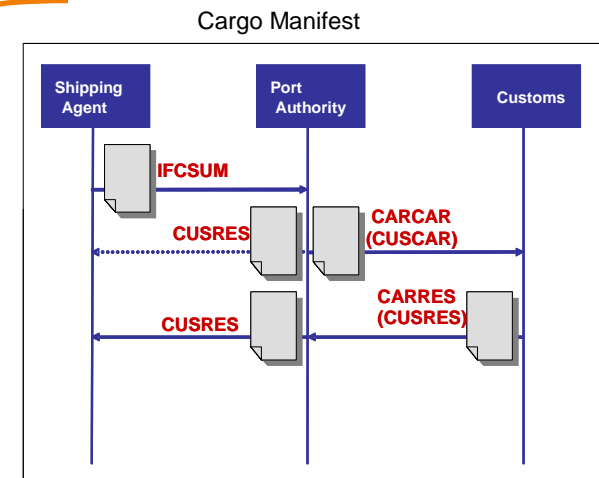
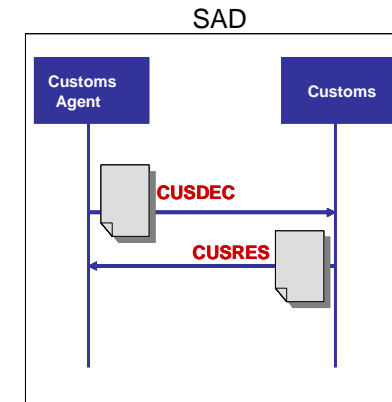


**There is a combination of fields that links the
SAD with the cargo manifest or summary
declaration**

Flow of documents for Exports



EDIFACT System of Exchanging Messages



..... Message of Non-acceptance



Flow of documents for Exports

The **cargo manifest** includes a list of the B/Ls ordered by the port of destination and indicates for each shipment the document that authorised the transport of the exported goods, in the case of an export flow to a non-EU country: the export **SAD**.

The section **“Detail of shipments” of the cargo manifest** incorporates the following information:

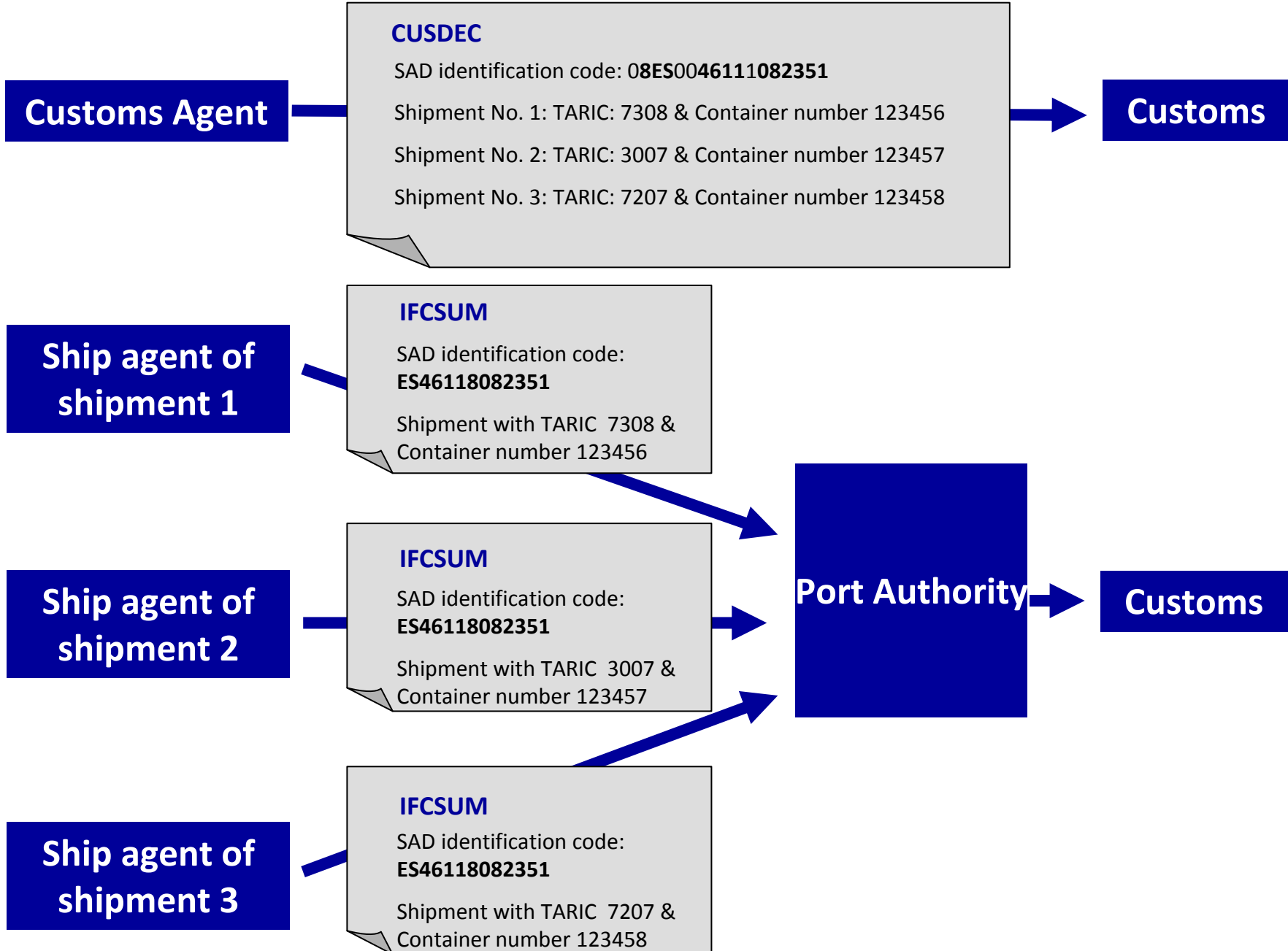
- ✓ Customs clearance situation
- ✓ Customs clearance document: it identifies the SAD document that authorises the transport of the exported goods
- ✓ Loading status: it indicates whether all the shipments compiled in one specific SAD have been loaded on the same vessel. Different shipments that are part of a single SAD may be part of different cargo manifest documents if they are loaded on different vessels. This field takes the values: total quantity of goods loaded, part of the goods loaded, rest of a previous partial loading)



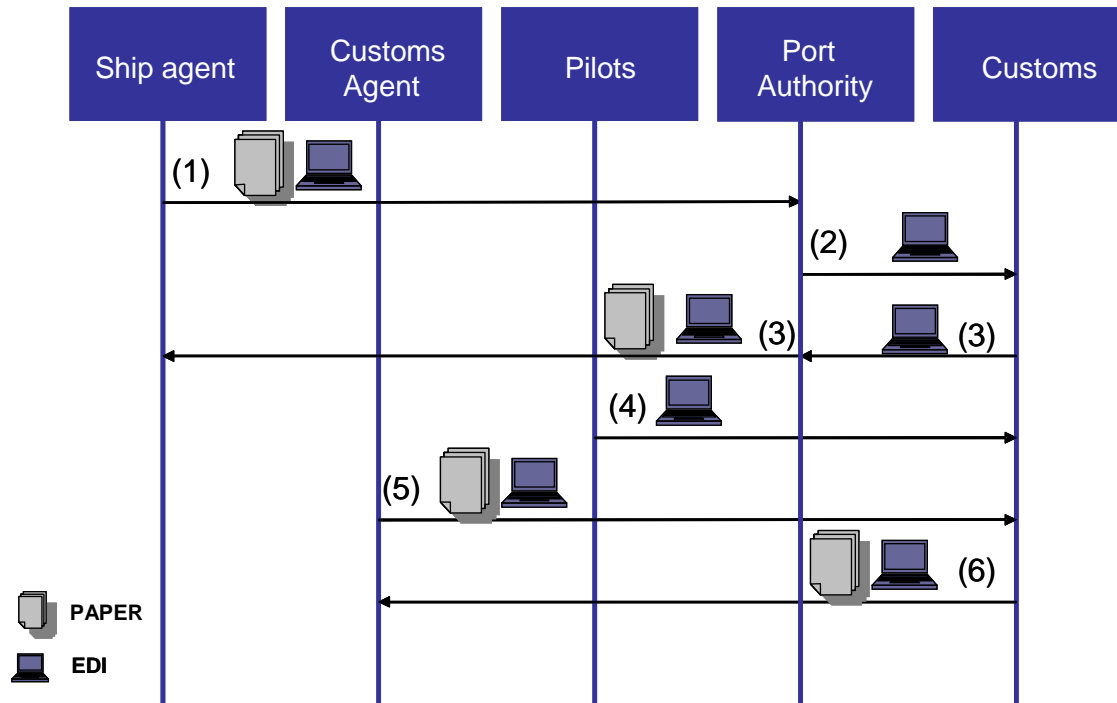
Flow of documents for Exports

CUSDEC / CUSRES (SAD)	CARGO MANIFEST	
	IFCSUM	CARCAR
<p>CUSDEC: BGM+830+802310+9'</p> <p>-This segment of the message indicates whether the goods are being exported (code 830) or imported (code 929)</p> <p>-Number of document assigned by the agent submitting this message: 802310</p>	<p>BGM+833+46118002046+47'</p> <p>-This segment indicates that this message corresponds to a cargo manifest (code 833) or to a summary declaration (code 785)</p> <p>-Number of cargo manifest: 46118002046</p> <ul style="list-style-type: none"> ▪ 4611: Code of the customs office validating and accepting the cargo manifest ▪ 8: Year ▪ 002046: Number of ship call assigned by the port authority 	<p>BGM+833+46118002046001+47'</p> <p>-This segment indicates that this message corresponds to a cargo manifest (code 833) or to a summary declaration (code 785)</p> <p>-Number of cargo manifest : 46118002046001</p> <ul style="list-style-type: none"> ▪ 4611: Code of the customs office validating and accepting the cargo manifest ▪ 8: Year ▪ 002046: Number of ship call assigned by the port authority ▪ 001: Sequential shipment number
<p>When the CUSDEC message is admitted, Customs replies with a CUSRES message, where the SAD will be given an identification code: RFF+ABT:08ES00461110823519'</p> <ul style="list-style-type: none"> ▪ 08: Year when the SAD has been accepted ▪ ES: Code of the country where the SAD document is accepted ▪ 004611: Code of the customs office validating and accepting the SAD ▪ 1082351: Sequential number of the export SAD. The first digit takes value 1 for export and 3 for import flow. ▪ 9: Control digit 	<p>DOC+830+ES46118082351:T'</p> <p>-This segment links the cargo manifest to an export SAD (code 830) or to an import SAD (code 929)</p> <p>-SAD identification code: ES08128336394</p> <ul style="list-style-type: none"> ▪ ES: Code of the country where the SAD document is accepted ▪ 4611: Code of the customs office validating and accepting the SAD ▪ 8: Year when the SAD has been accepted by Customs ▪ 082351: SAD number 	<p>DOC+830+ES46118082351:T'</p> <p>-This segment links the cargo manifest to an export SAD (code 830) or to an import SAD (code 929)</p> <p>-SAD identification code: ES08128336394</p> <ul style="list-style-type: none"> ▪ ES: Code of the country where the SAD document is accepted ▪ 4611: Code of the customs office validating and accepting the SAD ▪ 8: Year when the SAD has been accepted by Customs ▪ 082351: SAD number

Section 3

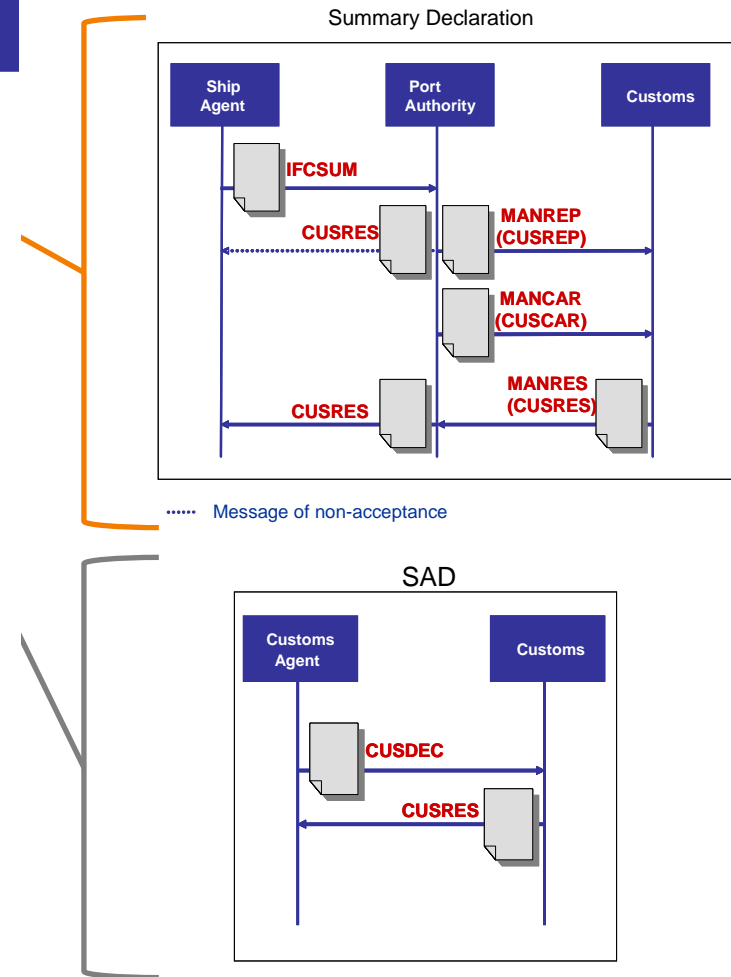


Flow of documents for Imports



- (1) Summary Declaration (SD)
- (2) SD
- (3) Reply on the admission of the SD
- (4) Activation of ship call code
- (5) SAD
- (6) Reply on the admission of the SAD

EDIFACT System of Exchanging Messages





Flow of documents for Imports

The submission of the **summary declaration** is the first step in the document flow of an import operation. Once the summary declaration has been accepted by Customs, the goods can be unloaded from the ship. The import **SAD** is then submitted to Customs, including a code that links it to the summary declaration that allowed the unloading of the shipments.

Field number 40 of the import SAD, entitled “Cargo document / Preceding document”, contains the following pair of codes:

- ✓ Identification code of the summary declaration that authorised the unloading of the goods
- ✓ Number of shipment within the summary declaration

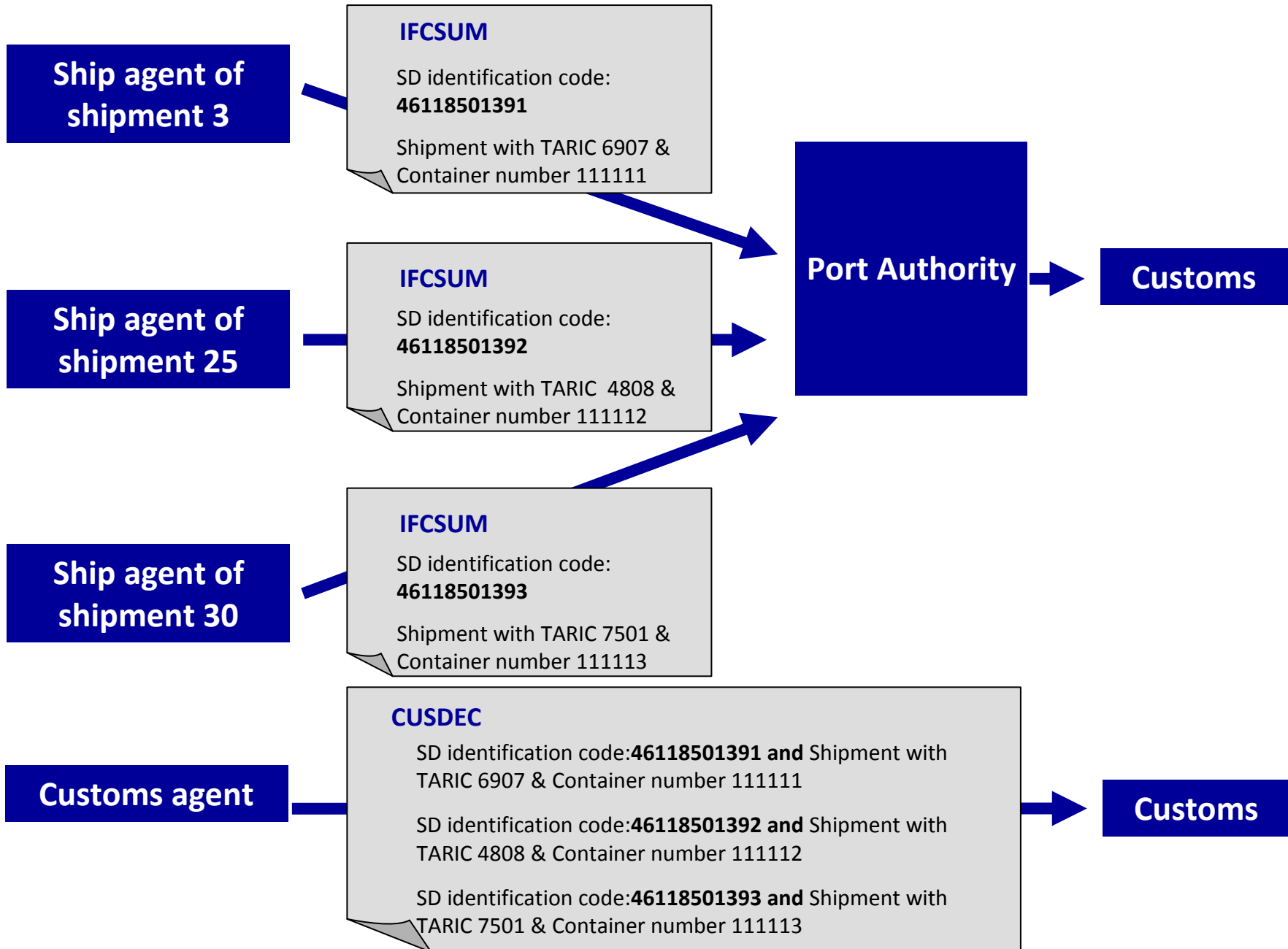
This combination of codes would allow us to integrate the information collected in the SAD and in the summary declaration.



Flow of documents for Imports

CUSDEC (SAD)	SUMMARY DECLARATION	
	IFCSUM	MANREP / MANCAR
BGM+929+802235+9' -This segment of the message indicates whether the goods are being exported (code 830) or imported (code 929) -Provisional number of document assigned by the agent submitting this message: 802235	BGM+785+46118501393+47' -This segment indicates that this message corresponds to a summary declaration (code 785) -SD identifier: 46118501393 <ul style="list-style-type: none"> ▪ 4611: Code of the customs office where the SD has been validated and admitted ▪ 8: Year when the SD was accepted ▪ 501393: Number of ship call assigned by the port authority 	BGM+785+46118501393001+47' -This segment indicates that this message corresponds to a summary declaration (code 785) -SD identifier: 46118501393001 <ul style="list-style-type: none"> ▪ 4611: Code of the customs office where the SD has been validated and admitted ▪ 8: Year when the SD was accepted ▪ 501393: Number of ship call assigned by the port authority ▪ 001: Sequential number of shipment
CST+1+3919909000:122:148+40.00:117:141+++100:116:141' -It indicates the number of shipment within the SAD: 1 -Type of commodity: 10 digits of the TARIC: 3919909000 (the first 8 digits indicate the type of commodity according to the combined nomenclature)	GID+00280+10:BX' -This segment indicates the number of shipment within the SD: 00280	GID+280+200:4::148' -This segment indicates the number of shipment within the SD: 00280
RFF+AEI:46118501393:00280:X' -Indicates the number of registry of the SD: AEI. -Identification code of the SD: 46118501393 <ul style="list-style-type: none"> ▪ 4611: Code of the customs office that admitted the SD ▪ 8: Year when the SD was accepted ▪ 501393: Number of SD ▪ Number of shipment within the SD: 00280 		

Section 3





Characteristics of the integrated database

CONCEPT	DESCRIPTION
Information provided	Trade and transport data related to every single export and import flow to a non-EU country transported by sea
Updating frequency	Monthly
Transport mode	Maritime transport
Flows	Export and import flows
O/D geographical detail	O/D specific location or province / county
O/D geographical detail within Spain	O/D specific location or province
Commodity information	8 digit of the combined nomenclature / harmonised system
Primary document sources	SAD and cargo manifest / summary declaration

Characteristics of the integrated database

- ✓ Information about the value of the goods would be available
 - ✓ The 8-digit HS commodity code would provide detailed information about the type of commodity traded
 - ✓ The ports where the shipment is loaded, possibly transhipped and unloaded would be known
 - ✓ Information about the type of packaging and equipment used for transporting the goods would be available
 - ✓ Further O/D details would be known and the “headquarter effect” existing in the foreign trade database could be corrected
 - ✓ Mistakes in the reported mode of transport in the SAD would be corrected
- ✘ Modernised Community Customs Code: Introduction of a 'centralised clearance' system → The IT systems of the 27 customs administrations must be made compatible → This study to be revised after the changes in the processes / messages derived from the implementation of a paperless, electronic customs environment is carried out.

Variables included in the integrated database

O/D DATA

- ✓ Customs office where the SAD was submitted and customs office of entry / exit to the EU
- ✓ Origin and destination location or region
- ✓ Loading and unloading port, previous and next port of call, port of transhipment

COMMODITY DATA

- ✓ HS 8-digit commodity code
- ✓ Gross weight and net mass
- ✓ Volume
- ✓ Statistical value
- ✓ Dangerous cargo information

Source: Single Administrative Document
Source: Cargo Manifest



TRANSPORT DATA

- ✓ Transport flow
- ✓ Inland mode of transport
- ✓ Loading status (total or partial)
- ✓ Use of EU regular transport line

EQUIPMENT & PACKAGING DATA









- ✓ Number and kind of packages
- ✓ Number, type and dimensions of equipment used
- ✓ Gross weight of equipment
- ✓ FCL or LCL
- ✓ Tare of equipment

TRADE RELATED DATA

- ✓ Incoterms
- ✓ Taxes or tariffs paid
- ✓ Mode of payment



Example of information for each specific observation - export flow

	ORIGIN	NULES, CASTELLÓN (SPAIN)		
	INLAND TRANSPORT	ROAD TRANSPORT		
	EU-EXIT CUSTOMS OFFICE	VALENCIA MARÍTIMA, SPAIN		TARIC 32074010 GROSS WEIGHT 40800 NET MASS 40200 STATISTICAL VALUE 19000 TYPE OF PACKAGE CS (Box) NUMBER OF PACKAGES 2000 INCOTERMS EXW NULES
	MODE OF TRANSPORT AT FRONTIER	MARITIME NON-REGULAR LINE		
	PORT OF LOADING	VALENCIA, SPAIN		NUMBER 2 TYPE CONTAINER DIMENSIONS 2210 GROSS WEIGHT OF EQ. 20400 TARE 2200 SITUATION FCL EQUIPMENT
	PREVIOUS PORT	GENOA, ITALY		
	NEXT PORT	ALGECIRAS, SPAIN		
	PORT OF UNLOADING	S. PETERSBURG		
	DESTINATION	PECHORY, RUSSIA		LOADING STATUS Total

Source: SAD
Source: Cargo Manifest



Next steps

DESIGN AND IMPLEMENTATION OF THE INTEGRATED DATABASE INCLUDING FOREIGN TRADE AND MARITIME TRANSPORT DATA

ALTERNATIVE A

The **Spanish Customs** takes charge of the project and implements the IT programme linking the information of the SAD and cargo manifest or summary declaration for every shipment exported or imported.

ALTERNATIVE B

The **Spanish Customs** gives **authorisation** to those **port authorities interested** in developing the project for shipments exported or imported through their ports and each individual port authority implements its own project.



MINISTERIO
DE FOMENTO

MINISTERIO
DE MEDIO AMBIENTE
Y MEDIO RURAL
Y MARINO



THANK YOU FOR YOUR ATTENTION!

Eva Pérez-García

Fundación Valenciaport

eperez@fundacion.valenciaport.com