WEBINAR ON

INTERNATIONAL TRADE in GOODS STATISTICS

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Outline

■ Methodology

(concepts, trade systems, coverage, data sources etc.)

■ Data compilation

■ Data production and analyze

■ Publication and dissemination

Definition

- **"Exports"** refers to selling goods by the residents of the home country to residents of other countries

- **"Imports"** refers to buying goods by the residents of the home country from residents of other countries

- International trade in goods statistics (ITGS) cover only cross border trade

!!!! ITGS cover only trading of goods
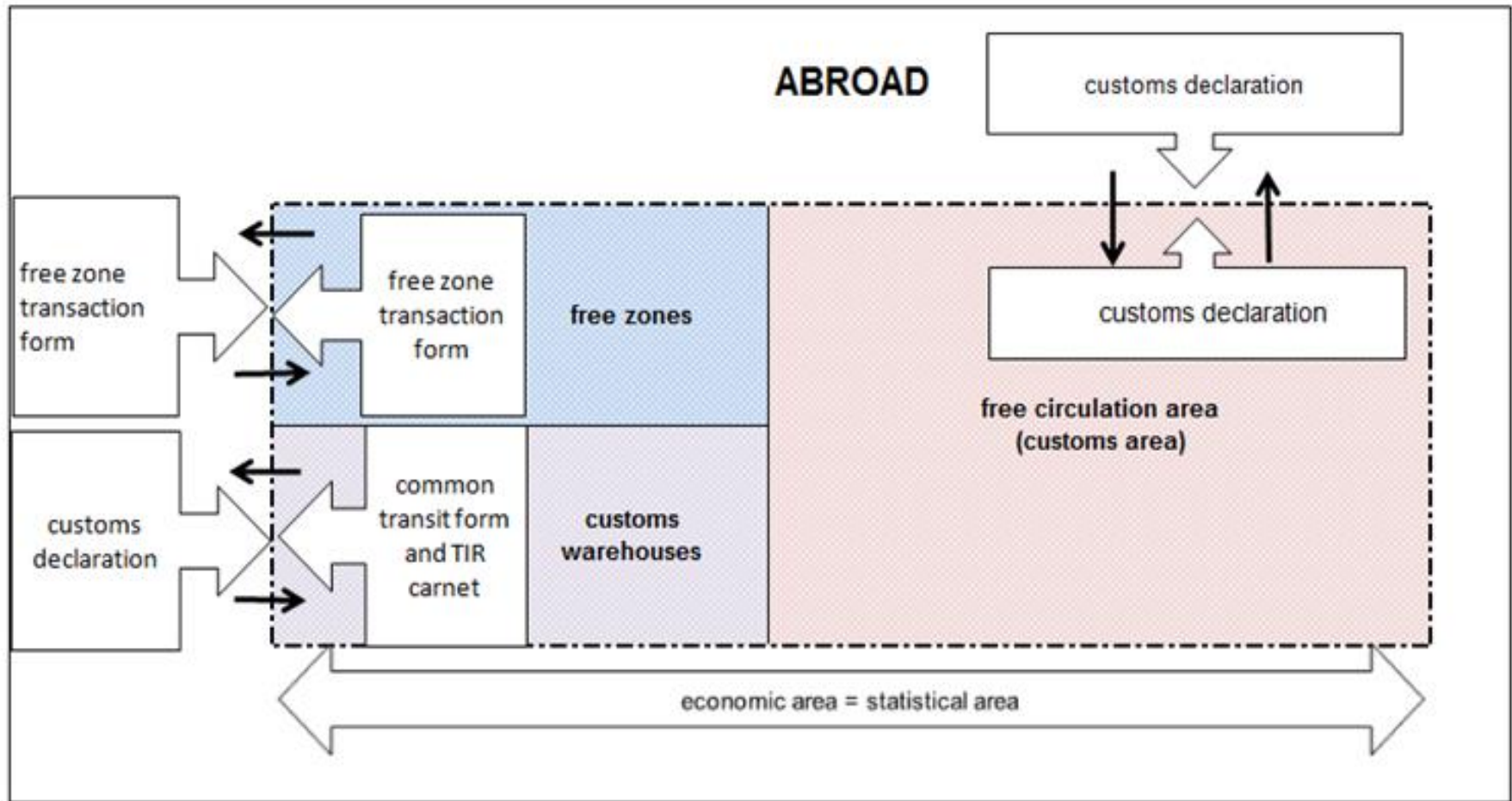
Trade system

ITGS can be calculated by two systems

1) General Trade System (GTS)

2) Special Trade System (STS)

Trade system

1) General trade system

■ Goods entering and leaving a country's economic area are covered.

■ Free zones, customs warehouses and goods entering or leaving the country's free circulation area are recorded.

■ The economic area of a country corresponds to the geographical borders and statistical area of that country.
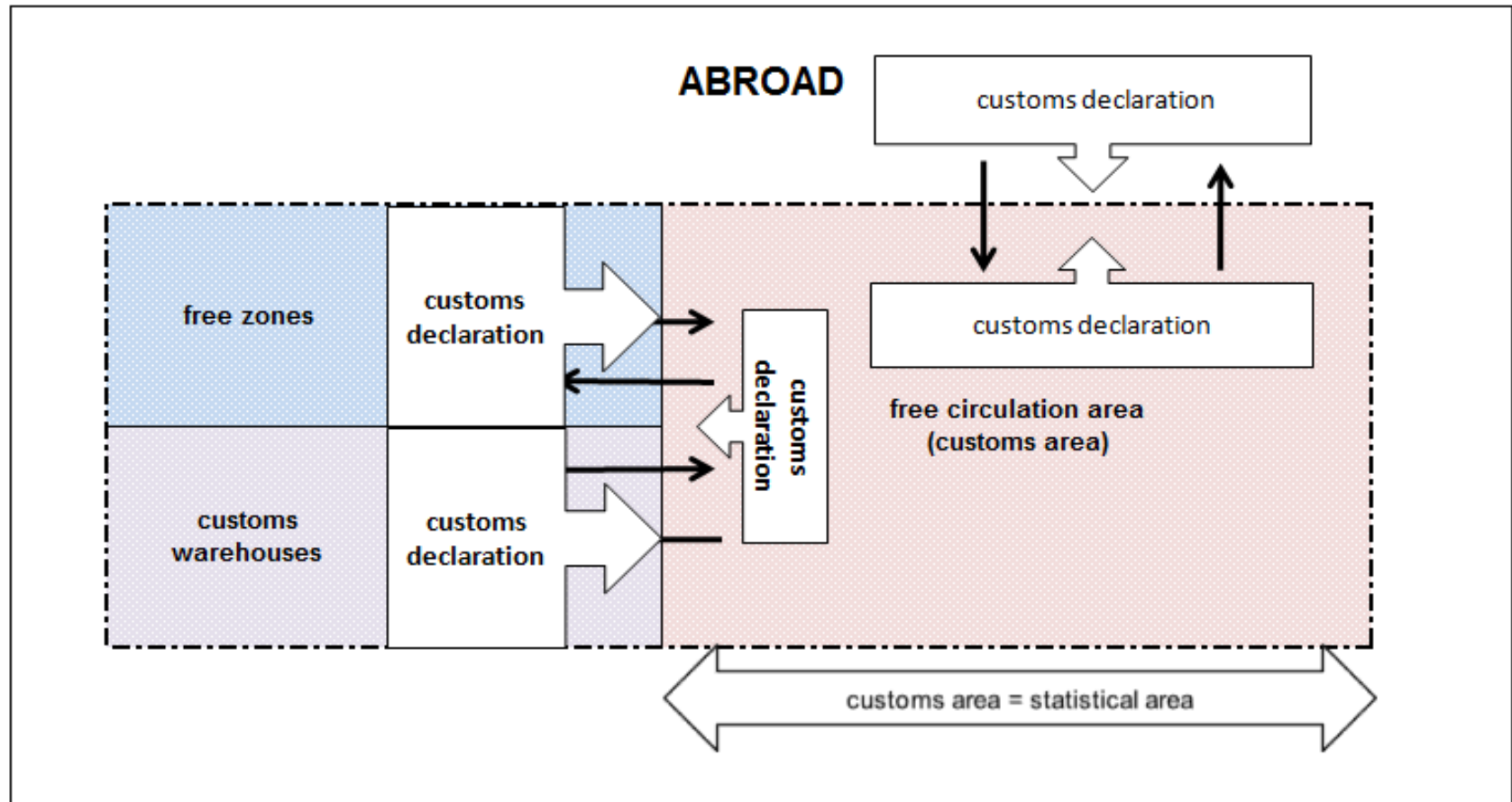
General Trade system

Trade systems

2) Special trade system

■ Customs warehouses and free zones are not included in the statistics

■ Only goods that enter and leave the country's free circulation area are included.

Special Trade system

Trade systems

- TurkStat has produced ITGS by two systems

- **ITGS by GTS** are used in news release and economic statistics (BoP, SNA)

- **ITGS by STS** are disseminated via database

Coverage

Inclusions

- Normal exports and imports
- Goods under outward processing regime
- Goods under inward processing regime
- Trade under financial leasing
- Non-monetary gold
- Border trade

Coverage

Exclusions

- Shuttle trade
- Transit trade
- Monetary gold
- Temporary trade
- Banknotes, securities, coins not in circulation and foreign currencies
- Goods for repair
- Goods sent to military troops abroad
- Trade under operational leasing

Data sources

■ Single Administrative Documents (SAD) from the Ministry of Trade

■ Free zones' data from the Ministry of Trade

■ Survey for natural gas

■ Records for financial leasing from the Financial Leasing Association (FİDER)

Data sources

Single_Administrative_Document_SAD.pdf

✓Customs are main data source for ITGS

✓Statistical information is mainly derived from customs declarations.

✓Main forms for collecting data is Single Administrative Document (SAD)

✓SAD is the documentary basis for customs declarations in the European Union and Turkey

Data sources - SAD

SAD has 54 different data elements. It is broken down into 3 different types of elements.

- ✓ First is **coding items** such as product codes, country codes, CPC, mode of transport codes, etc

- ✓ Second part is **value items**. Sush as the statisctical value, customs value, quantity, exchange rates, insurance costs, freight costs.

- ✓ Third part of the data set is **specific unique identifiers** like company numbers, customs document numbers.

Data sources -SAD

✓Customs records reflect physical movement of goods accross borders

✓Customs procedure codes are used for correct identification of flows of goods for inclusion or exclusion

Time of recording and periodicity

- Time of recording of export and import is either date of closure of declaration which goods cross border.

- It means for export that the product is ready to leave (whether or not pass the border)

- It means for import that the product passed the border.

- Published monthly

Classifications

■ **Commodity Classification:** GTIP (12-digit) based on Harmonised System
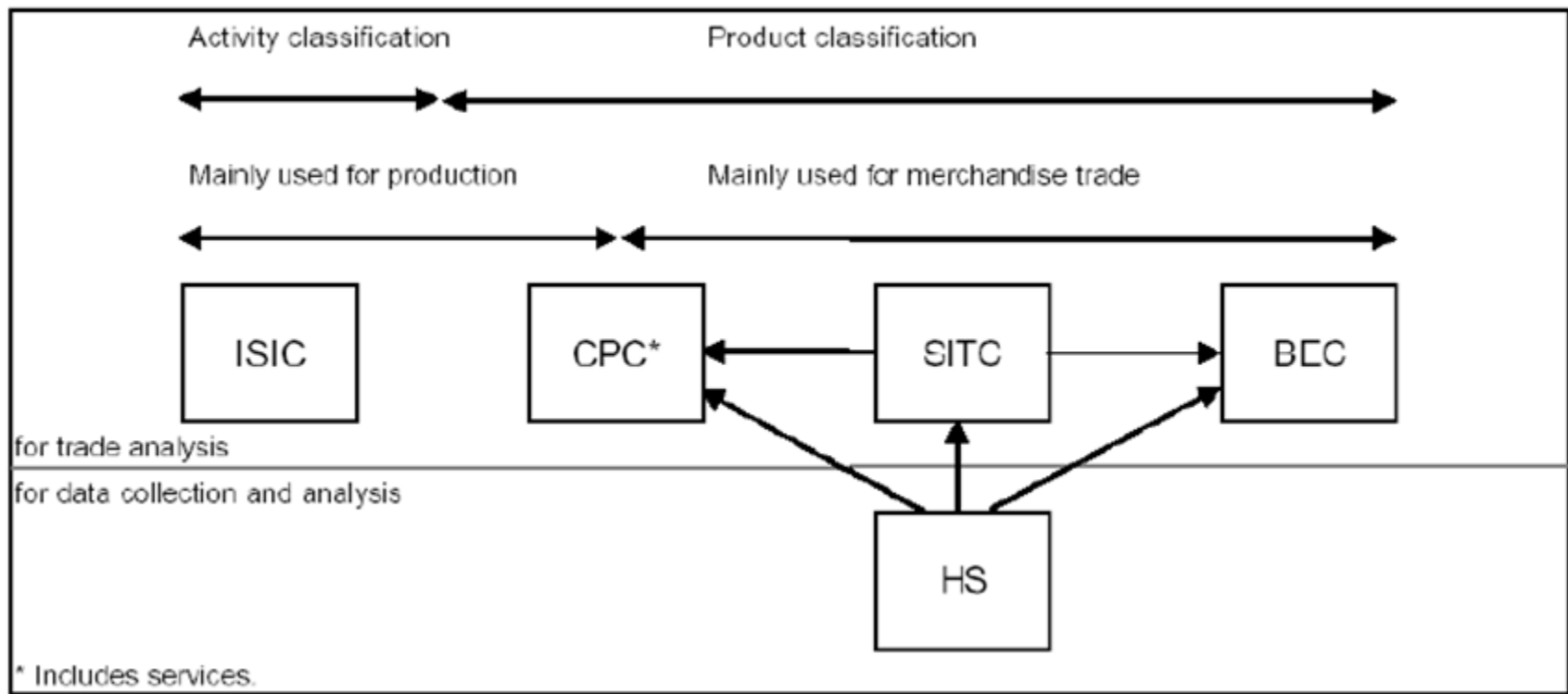

Others (SITC, BEC, CPC, CPA2008, ISIC, NACE Rev. 2, Product Groups by Technology Intensity, NST2007)

■ **Country Classification:** Geonomenclature (3-digit numerical)

Classifications

Relation between different classifications

Valuation

■ Imports : CIF (cost + insurance + freight)

■ Exports : FOB (free on board)

▸ No distinction by statistical value, customs value

▸ Published by US Dollar (Euro and Turkish Lira)

▸ All currencies are converted by using the Central Bank of the Republic of Turkey daily exchange rates

▸ FOB type imports figures have been produced since 2019 for BoP, SNA and ITSS

Quantity measurement

■ Net weight (kg) for every record

■ Additional quantity for some products (m^2, m^3, gramme, liter)

Partner country

Imports

Country of Origin

Exports

Country of Final Destination

Mode of transport

■ Transportation types and codes used by TurkStat

■ Important for transportation sector and economic statistics

Code	Mode of transport
10	Sea transport
12	Railway wagon on a seagoing vessel
16	Powered road vehicle on a seagoing vessel
17	Trailer or semi-trailer on a seagoing vessel
18	Inland waterway vessel on a seagoing vessel
20	Rail transport
23	Road vehicle on railway wagon
30	Road transport
40	Air transport
50	Postal consignment
70	Fixed transport installation
80	Inland waterway transport
90	Own propulsion
99	Confidential data

Confidentiality

Two kind of confidentiality can be used

1) Active confidentiality
2) Passive confidentiality

■ Passive confidentiality has been used since 2008

■ In principle, commodity code is protected. If this application isn't enough, net mass, partner country, customs can be protected.

■ For the data considered confidential due to the indirect identification in foreign trade statistics, these confidentiality rules are implemented when a statistical unit applies with a written application requiring consideration of its data as confidential.

Specific treatments

Ships / Aircrafts

■ Customs records

■ Records from Financial Leasing Association

■ Financial leasing

Specific treatments

Ship's/Aircraft's stores and supplies

Export: Data from customs declarations

Import: There is no data source yet

Specific treatments

monetary / non-monetary gold

■ monetary gold should be excluded from trade statistics, while non-monetary gold should be included

■ Trader may declare as monetary gold instead of non-monetary gold

■ Data processing system is checking VAT numbers of money authority (Central Bank) (asking Central Bank for monetary gold)

Specific treatments

goods for processing - goods for repair

■ Goods for processing are included in ITGS and their processing fee's are calculated and recorded separately.

■ Goods for repair are excluded from ITGS but their processing fee's are calculated and recorded separately.

■Processing fee's of both GfP and GfR are sent to the CBRT for BoP statistics.

■ Processing fee's of both GfP and GfR are used by National Accounts.

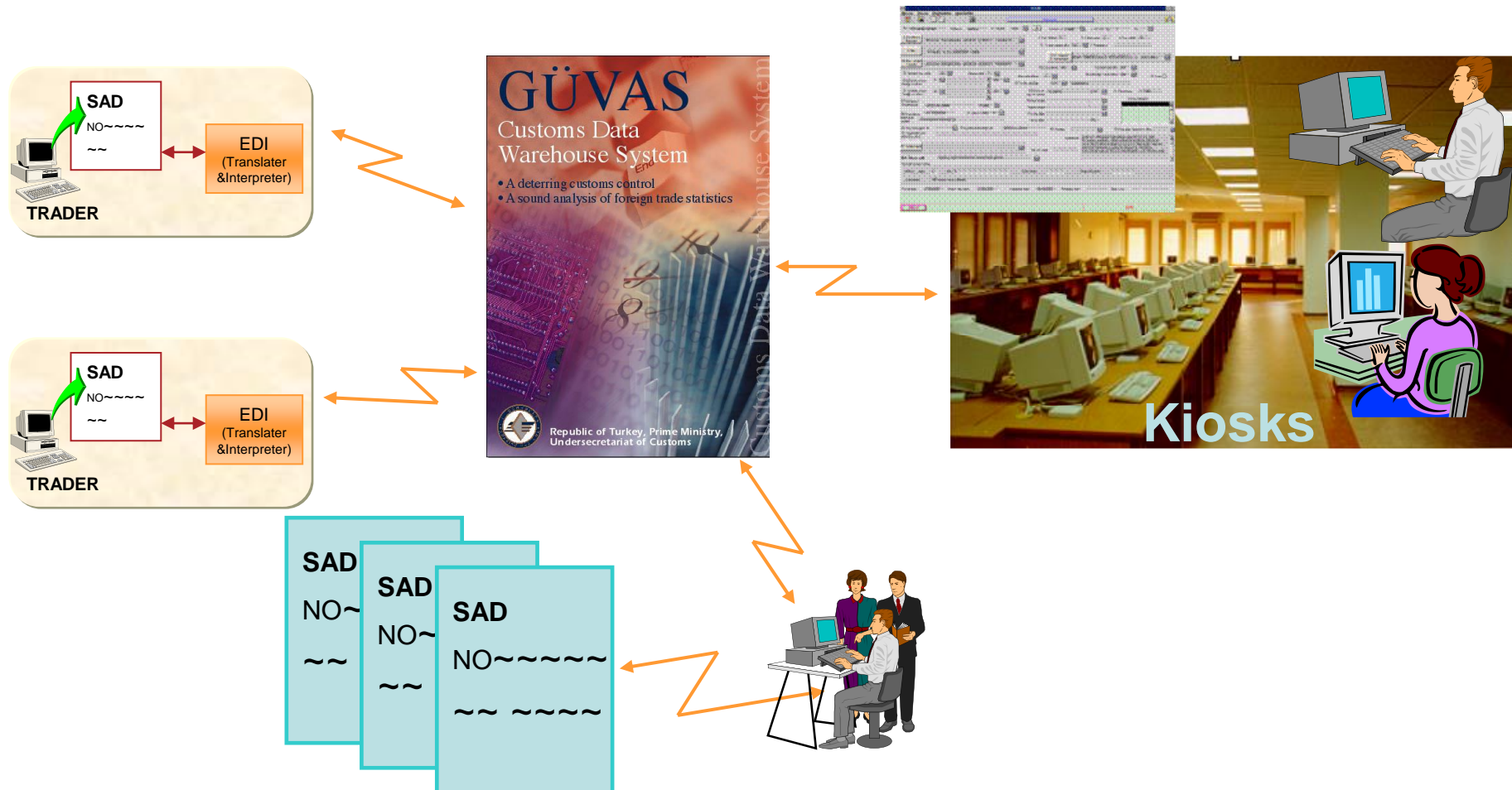■ Data of GfP and GfR are used in ITSS for analyse.

Revision policy

■ ITGS are revised frequently by requirements and needs.

■ Main reasons are;

▶ new data (customs declaration)

▶ corrections on declarations made by declarants

▶ late answers from traders

▶ corrections on ships and aircrafts, repair and maintenance, goods for processing, etc.

■ Every month, data are revised and published with following news release.

■ Annual data are finalized in July of following year (T+6) (EU's rule on finalizing trade data is T+10)

Meta data

■ It is recommended in IMTS 2010 that countries view the development of metadata as a high priority and consider their dissemination an integral part of the dissemination of international merchandise trade statistics.

■Moreover, it is recommended that this is done in compliance with the approach adopted by a given country to metadata across all areas of economic statistics.

■ Meta data is given in press releases ve statistical tables.

■ In case of important changes on data coverage and methodology, users are informed by "public announcement" before publication and meta data is also revised.

Data compilation

Data are compiled by the Ministry of Trade

Data processing

■ Data are processed by using SAS programs

■ Two main programs developed in SAS by TurkStat

SASVUP (For data processing)

SASDAGITIM (For data dissemination)

Data processing

- Transfer of data

- Auto correction of certain codes

- Transformation of Codes

- New statistical column (SPC, flags for incorrect transactions, etc)

- Validity of all Codes

- Checks for duplicate records

- Report on data received

- Report on code errors

- Report on auto corrections

GÜMRÜKTEN GELEN VERİ-(Boş Kayıtlar Silinmiş ve Mükerrer Olmayan)
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		İHRACAT / İTHALAT					
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		KAYIT SAYISI	ISTDOLARCUST	DMUKDOLAR	KAYIT SAYISI	ISTDOLARCUST	DMUKDOLAR
			Sum	Sum		Sum	Sum
INTACYIL	INTACAY						
2007	3	88	413,214	379,212	.	.	.
	4	1	12,081	12,081	.	.	.
	5	11	425,364	403,114	.	.	.
	6	23	178,864	158,051	7	2,421,217	2,421,217
	7	232	13,362,796	13,357,097	4	1,412,871	1,412,871
	8	241	17,782,661	17,742,256	10	3,028,278	3,028,278
	9	502	15,137,040	15,117,234	2,568	737,706,477	737,706,477

GTIP HATALARI
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Obs	INDEXYIL	HATA_TURU	ORJINAL_KOD	HATALI_KOD	DOGRU_KOD	SAYI
1	00	GTIP HATASI	382490959022	382490999022	.	1

YOL KODU OTOMATİK DÖNÜŞÜMLER
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Obs	INTACYIL	INTACAY	YOL_TRS	DYOL	SAYI
1	2007	3	31	30	88
2	2007	9	31	30	2
3	2007	10	31	30	235

Table for Code Errors

Data processing

credibility checks/ detailed tables

▸ **Credibility checks**

▸ **Flag for error types**

▸ **Decompose implausible / all transactions**

Unit value per KG (UV_{kg})
$Min(UV_{kg}) \leq$ Median of $(UV_{kg}) \leq Max(UV_{kg})$

Unit value per unit (UV_{Unit})
$Min(UV_{Unit}) \leq$ Median of $(UV_{Unit}) \leq Max(UV_{Unit})$

KG per unit (KG_{Unit})
$Min(KG_{Unit}) \leq$ Median of $(KG_{Unit}) \leq Max(KG_{Unit})$

Miktar Hatalarına İlişkin İstatistik
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		İhracat / İthalat			
		H		T	
		%	Sayı	%	Sayı
KOD	ACIKLAMA				
00	M1 ve M2 Normal	21.9	99773	12.0	60485
03	M1 Normal, M2 GA Kötü	0.7	3163	1.3	6503
04	M1 Normal, M2 Min'den Küçük	0.7	3243	0.4	2052
05	M1 Normal, M2 Max'dan Büyük	1.8	8318	1.1	5355
06	M1 Normal, M2 Diger Hata	0.0	12	0.0	4
07	M1 Normal, M2 GA Yok (Olcu=0)	45.2	205740	40.3	202515
22	M1 ve M2 GA Yok	8.3	37949	4.6	23280
27	M1 GA Yok, M2 GA Yok (Olcu=0)	11.8	53821	19.0	95429
30	M1 GA Kötü, M2 Normal	0.3	1244	1.1	5332
33	M1 ve M2 GA Kötü,	0.5	2133	0.7	3710
34	M1 GA Kötü, M2 Min'den Küçük	0.0	75	0.1	258

Data analyse

Types of Validation Checks

1_Completeness

You should ensure that all the data captured and published in the given month is completed. You don't have any missing information.

2_Validity of Codes

You should check accuracy of codes. You have a list of contry codes, product codes, mode of transport codes, currency codes, ets. These are referans tables.

All the codes in data must be included in the standart codes. You should compare codes in monthly data with referans code tables.

Data analyse

Types of Validation Checks

3_Range check of values

The data should be checked whether there is any record which is out of range.

Such as a kg of sugar is more than 10$ or a kg of sugar is less than 0.10$
Or
A pair of shoes can't be more than 3 kg.

This records are outlier.
We need to be able to define ranges of each of commodity codes .

Data analyse

Types of Validation Checks

4_Internal Consistency

You can say, certain code can'be sent from a certain country. For example bananas can't be sent from Island because they don't produce any bananas.

This type of checks can be done for consistency.

Data analyse

Types of Validation Checks

5_Aggregate Consistency

Finally you will have to the macro level checks. You can look at time series of information over a period of 2 years.

You can check for countries to see whether each month trade between your country and other countries is consistent or not.

Data dissemination

- Monthly data are published as Press Release within 30-31 days after reference month

- Electronic on www.turkstat.gov.tr

- Internet (database /statistical tables)

- General Trade System Database

- Special Trade System Database

- Regional Indicators

Thank you for your attention !!!

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