

Manual on goods sent abroad for processing

2014 edition

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Contents

Preface	5
Purpose of the manual	5
Summary conclusions	7
Section 1 — Introduction	10
Section 2 — ESA 2010 guidance	12
Goods for processing and processing services	12
Goods under merchanting	13
Quasi transit trade	17
Non-resident transit trade	17
Goods for repair	20
Re-exports	20
Section 3 — Conceptual issues	21
Guidance	21
Numerical example	22
Section 4 — Analysis	24
Reconciling national accounts and merchandise trade statistics	24
Impact on SUT balancing	24
Section 5 — Compilation guide	27
International Merchandise Trade Statistics (IMTS)	27
Customs procedures	27
Nature of Transaction codes	28
Surveys	32
Business surveys	32
Balance of Payments surveys	33
Other sources	34
Recommended sources for each activity	35
Section 6 — Task force recommendations	40
References	46
Annex A — Model survey questions to collect Goods for Processing information	47
Inward processing	47
Outward processing	47
Example of a questionnaire on manufacturing services	48
Annex B — Nature of Transaction case studies	50
Case I — Processing with subsequent sale to another Member State	50
Case II — Processing with subsequent sale in Member State of processing	51
Case III — Processing with subsequent sale within the initial Member State of export	53
Case IV — Processing under contract with several suppliers	55

Case V — Goods with negligible value sent for processing	57
Case VI — Multi-country processing.....	59
Case VII — Return of unprocessed goods	62
Case VIII — Processing vs. waste disposal.....	62
Annex C — IMTS Supplement to the Compiler Manual — use of customs procedures.....	64
Annex D — Reconciliation between IMTS source data and trade in goods on a BoP and NA basis	66
Annex E — Extra examples of quasi transit trade.....	67
Glossary	68

Preface

The treatment of goods sent abroad for processing is one of the changes introduced in the updated European System of Accounts (ESA 2010) that has the most significant impact on national accounts and balance of payments compilation. The *Manual on goods sent abroad for processing* sets out the implementation issues facing national accounts and balance of payments compilers, providing Member States with the guidance necessary to compile data in a reliable and comparable way.

Under ESA 95, a change of ownership was imputed for goods sent abroad for processing, even when the financial flows indicated that there was no transfer in ownership of the goods. Under ESA 2010, goods sent abroad for processing will be recorded on a strict change of ownership basis, meaning that where goods sent abroad do not change ownership, they are excluded from the trade in goods data. Instead, the cost of the **processing service** is recorded as trade in services (*manufacturing services on physical inputs owned by others*).

ESA 2010, SNA 2008 and BPM6 present a consistent conceptual approach for recording goods sent abroad for processing in national accounts and balance of payments, but the collection and compilation of statistics in line with the new concepts is not straightforward. At the invitation of Directors of Macro Economic Statistics (DMES), Eurostat set up a task force in 2011 to consider the implementation of the new standards, so that reliable and comparable statistics can be produced. This manual follows the recommendations and conclusions of the task force.

Purpose of the manual

The *Manual on goods sent abroad for processing* sets out the conceptual change introduced in ESA 2010 and discusses the implementation issues facing national accounts compilers. It describes the sources and methods that can be used to compile data in line with the new standards, and gives Member States the guidance needed to compile data in a reliable and comparable way.

Section 1 presents an example to explain the conceptual change for goods sent abroad for processing introduced by the new international standards. The example sets out how goods sent abroad for processing transactions are presented in ESA 2010. ESA 2010 also provides guidance on other aspects of multinational activity that are closely related to goods sent abroad for processing:

- manufacturing services on physical inputs owned by others (called processing services in this manual);
- merchanting;
- quasi transit trade;
- re-exports; and
- goods sent abroad for repair.

Section 2 presents the international guidance for each of these activities.

Section 3 provides practical conceptual guidance on how to distinguish goods sent abroad for processing, goods under merchanting and general merchandise trade. An example of the impact on supply and use tables (SUT) is included.

Section 4 looks at the impact on supply use table analysis and discusses how the new data should be presented to users. This includes the reconciliation of national accounts data with International Merchandise Trade Statistics (IMTS) data.

Section 5 describes the sources and methods that can be used to compile goods sent abroad for processing and processing services, including the use of Nature of Transaction (NoT) codes within International Trade in Goods Statistics (ITGS) (or IMTS outside the EU) and surveys.

Section 6 reviews the recommendations of the Eurostat Task Force on Goods sent abroad for Processing and the steps needed to implement the recommendations.

Separate Annexes are included covering model survey questions to collect Goods for Processing information, case studies developed by the Task Force setting out the use of IMTS Nature of Transaction codes and an extract from the IMTS Supplement to the Compiler Manual showing use of Nature of Transaction codes.

A Glossary is included to ensure consistent terminology is used across the compiling and user community.

Summary conclusions

- (a) Globalisation has led to a sharp rise in cross-border production, with an associated increase in the value of goods sent abroad for processing. Under ESA 95, a change of ownership was imputed for goods sent abroad for processing. However, ESA 2010 reflects the view that imputing a change of ownership did not reflect the economic reality and that no change in ownership should be made for goods sent abroad for processing, where none has taken place. The increasing importance of such global production and the new international standards will often require EU Member States to develop new approaches to capture these measures in the national accounts and balance of payments statistics on a consistent basis.
- (b) The focus of this manual is on goods sent abroad for processing, but also covers other trade-related globalisation activities. Sections include:
- Goods sent abroad for processing and returned to the original owner after processing;
 - Goods sent abroad for processing, but subsequently sold abroad (either within the country of the processor, or a third country) without returning to the country of the owner (or principal);
 - Goods under merchanting. Goods that change ownership, but are never physically present in the compiling economy;
 - Manufacturing services on physical inputs owned by others;
 - Quasi transit trade.
- (c) The different activities require different approaches. It is not yet possible to agree a common source for each activity across all Member States as the potential sources are not all available or equally reliable in each country. However it is possible to make some general recommendations on sources and methods to allow robust estimates of goods for processing and manufacturing services on physical inputs owned by others to be compiled. These are set out in Section 5. It is recommended that work to harmonise sources and methods continues.
- (d) It is recommended that Member States produce a reconciliation table setting out how the IMTS source data is adjusted to convert merchandise trade statistics to trade in goods on a national accounts/balance of payments basis. An example of such a reconciliation table is set out below:

Table 1: Reconciliation between International Merchandise Trade Statistics and trade in goods on a national accounts basis

Merchandise Trade statistics from IMTS source	Exports	Imports
– Goods sent abroad for processing	Deduct	n/a
– Goods returned from abroad after processing	n/a	Deduct
– Goods sent abroad after processing in compiling economy	Deduct	n/a
– Goods received from abroad for processing	n/a	Deduct
+ Goods sold abroad after processing in other economies	Add	n/a
+ Goods acquired in other economies for processing abroad	n/a	Add
+ Net exports of goods under merchanting	Add	n/a
= Trade in goods on a national accounts basis		

Where n/a = not applicable

- (e) Where Member States have retained and quality assure 2-digit Nature of Transaction (NoT) codes, then IMTS trade data remains an important source of information on goods sent abroad for processing and goods returned after processing. For countries that do not collect or quality assure 2-digit NoT codes as part of IMTS, additional data collection will be required.
- (f) Goods that are subsequently sold abroad after processing can be identified by NoT codes, but will be valued at the price they were originally sent abroad and not include the value of the processing. It is recommended that the NoT codes are analysed to determine whether the activity is important in the compiling economy and if necessary additional questions are added to existing surveys to collect the value of goods sold abroad after processing.
- (g) In countries where inward or outward processing is important and NoT codes are not of sufficient quality it is recommended that countries add questions to existing enterprise surveys (such as Structural Business Statistics surveys), or Balance of Payments surveys. A list of the questions for possible inclusion is given in Annex A. This list should be adapted to Member States requirements, in order to balance the need for more data against the demand to reduce (or at least not increase) burdens on business.
- (h) Where information is available from both enterprise/BoP and IMTS sources, the results should be compared and reconciled, so that best estimates can be made according to the relative merits of the sources.
- (i) Separate reconciliation should be undertaken for both inward processing (where resident processor does not take ownership of the goods) and outward processing (where the resident company retains ownership of the goods). If possible, the reconciliation should be made on an individual company by company basis. If that is not possible, aggregate data should be reconciled on a monthly or quarterly basis. Differences will occur and should be verified with the individual traders where possible. An example of the sort of validation that can be undertaken is shown below.

Table 2.1: Inward Processing — reconciliation of IMTS Nature of Transaction code data with survey sources

	IMTS – NoT	Survey source	Difference
Goods received from abroad for processing			
Goods returned to non-resident owner after processing			
Value of processing (export of manufacturing services)			

Table 2.2: Outward Processing — reconciliation of IMTS Nature of Transaction code data with survey sources.

	IMTS – NoT	Survey source	Difference
Goods sent abroad for processing			
Goods returned from abroad after processing			
Value of processing (import of manufacturing services)			

- (j) The reconciliation exercise should determine the relationship between the different sources and whether the existing high frequency IMTS data should be adjusted to reflect the enterprise survey results. IMTS data can meet the need to produce quarterly national accounts and balance of payments statistics, if suitable adjustment factors can be derived from the (generally) less frequent enterprise survey reconciliation.

- (k) The value of manufacturing services on physical inputs owned by others should not be estimated as the difference between goods sent abroad and returned after processing from IMTS NoT codes. Even where reliable data exists on the values of goods sent abroad for processing and returned after processing, the value of the processing service cannot simply be assumed to be the difference between the values (BPM6 para 10.70). Instead, the value of exports and imports of manufacturing services should be collected as part of existing BoP or trade in services data collection. The results should be compared with the value of goods sent abroad *less* returned after processing, to check that differences can be explained by holding gains/losses and the inclusion of overheads (such as marketing and financing included in the finished good price). If possible, this validation should be undertaken at the enterprise level.
- (l) A product breakdown of goods sent abroad for processing and returned after processing, for both outward and inward processing is required for SUT balancing. This is required to adjust the imports and exports figures from IMTS and it is recommended that the product breakdown be based on IMTS data where possible.
- (m) The industry breakdown of outward processing (imports) for SUT purposes can be classified according to the general industrial classification of economic activities within the European Union (NACE Rev.2), the European version of the international standard industrial of all economic activities (ISIC 2008) of the goods being processed e.g. clothing products, petroleum products, computer products.
- (n) It is recommended that prices charged for each processing activity are assumed to move in line with the Producer Price Index (PPI) for that manufacturing activity.
- (o) Data sharing. Member States are encouraged to continue to remove obstacles to sharing micro-level data. This is particularly relevant for multinational enterprises (MNEs) engaged in goods for processing activity.

Section 1 — Introduction

- 1.1 The production processes for many goods such as oil, garments, electrical goods and motor vehicles, are increasingly spread across more than one country in order to reduce costs (labour and capital), take advantage of investment incentives offered by host countries, and reduce companies' global tax burden. The increasing importance of globalised production led to a review of trade in goods sent abroad for processing in the international standards.
- 1.2 Previously, ESA 95 imputed a change of ownership when goods were sent abroad for processing. Even when there was clearly no change of ownership and the only payment was for the cost of processing, ESA 95 required transactions for the value of goods sent abroad and then returned after processing to be imputed for presentation in the national accounts. This was relatively straightforward, as data was captured by the International Merchandise Trade Statistics (IMTS) systems – Intrastat and Extrastat – which are based on the physical movement of goods across borders, irrespective of whether there is a real change of ownership.
- 1.3 The growth in cross-border processing led to concerns about the rise in exports and imports of goods, the dependence on transfer pricing (usually between affiliates) to determine values, and the inconsistency with the corresponding financial transactions. The treatment was therefore reviewed in the update of international standards.
- 1.4 The review concluded that with the increasingly international nature of production, imputing a change of ownership for goods sent abroad for processing did not reflect the economic reality. **Under ESA 2010 and BPM6, imputations for changes in ownership should no longer be made when goods are sent abroad for processing.** There is now consistency between the National Accounts and Balance of Payments standards, as BPM5 always required a change of ownership to be imputed, while ESA 95 (and SNA 93) only required a change of ownership to be imputed where processing led to a substantial change in the nature of the good.
- 1.5 The simplest example of goods sent abroad for processing is as follows:

‘A computer manufacturer (the principal) based in country A sends component parts to a processor in country B for assembly. The processor assembles the components and returns the finished product (computers) back to the computer manufacturer in country A. The computer manufacturer retains ownership of the components and finished goods throughout the process and pays the processor a fee for the assembly work.’
- 1.6 As the principal retains ownership of the goods throughout the process, there is no change of ownership and no trade in goods transaction under ESA 2010. Instead, the computer manufacturer buys a service from the processor, and this is recorded as an import of processing service in the international trade figures of country A, and an export for country B. A new *trade in service* category – *manufacturing services on physical inputs owned by others* – is included in BPM6 (and MSITS2010) and ESA 2010 in order to record and to present this activity.
- 1.7 Often the processor and the principal will be related companies within a multinational enterprise. However, this is not always the case and the ESA 2010 treatment is not dependent on the relationship between the processor and the principal, but rather on whether the goods change ownership.
- 1.8 Determining whether goods have changed ownership will not always be straightforward, especially when goods move between a parent and an affiliate abroad. Goods may be sent abroad for on-sale in the country of the affiliate, or they may be sent abroad for processing. Under BPM6 para 3.46, the best test of ownership is:

...to identify which location assumes the risks and rewards of ownership most strongly (e.g., from factors such as whether the goods are included in the accounts, and which location is responsible for subsequent sale of the goods).

- 1.9 If the affiliate abroad assumes the risks and rewards of ownership of the goods, then treat the cross-border movement of goods as trade in goods. If, however, the parent retains the risks and rewards of ownership, treat as goods sent abroad for processing, and exclude them from exports and imports of goods.
- 1.10 There are many variants of the basic model. For example, the principal (country A) may sell the finished products directly to country B without bringing them back to country A. In this case, the principal of country A still pays a processing fee to the processor of country B, but an export of goods to country B is recorded as the finished goods now change ownership. Similarly, if the principal sells the finished goods directly from country B to a customer in a third country C, then again a payment of a processing fee is recorded in country A as an import of a service, and an export of goods from country A to country C should also be recorded.
- 1.11 While the concept underpinning the new standards is clear and there is consistency with the recording of financial transactions, implementing the standard is not straightforward. The main source of information for cross-border goods transactions is International Merchandise Trade Statistics (IMTS). IMTS records the cross-border movement of goods, irrespective of whether there is a change of ownership. Therefore goods sent abroad for processing with no change of ownership will continue to be recorded in IMTS. For the national accounts, the IMTS data must be adjusted to remove the cross-border flows of goods sent abroad for processing and returned after processing with no change of ownership. In addition, any goods that are subsequently sold (or purchased) abroad, without returning to the country of the owner, need to be added to the IMTS data. This issue is discussed in detail in Section 5.

Section 2 — ESA 2010 guidance

Goods for processing and processing services

- 2.1 Using the change of ownership principle to help determine whether a process is producing a good or a service, is emphasised in ESA 2010 (9.48e):

Imports and exports occur when there is a change of ownership between residents and non-residents. Physical movement of goods across national borders does not by itself imply an import or export of these goods. **Goods sent abroad for processing (without a change of ownership between residents and non-residents) are not recorded as exports and imports.**

- 2.2. ESA 2010 (18.33):

Between ESA 95 and ESA 2010, there has been a fundamental change in the treatment of goods sent abroad for processing without change of ownership. In ESA 95, such goods were shown as exports on being sent abroad, and then recorded as imports on return from abroad, at a higher value as a result of the processing. This was known as the gross recording method, and effectively imputes a change of ownership so that international trade figures represent an estimate of the value of the goods being traded. The 2008 SNA, BPM6 and the ESA 2010 do not impute a change of ownership, but rather show only one entry — an import of the processing service. This would be an export of the service for the country in which the processing takes place. This recording is more consistent with the institutional records and associated financial transactions. It does however cause an inconsistency with the international merchandise trade statistics (IMTS). This will continue to show the gross value of the exports for processing and returning imported processed goods.

- 2.3 This paragraph highlights the inconsistency with IMTS — the main source of information on exports and imports of goods data in the national accounts — which continues to measure cross-border flows of goods, irrespective of whether they change ownership. The compiler of trade in goods statistics for both BoP and NA must now separately identify cross-border flows of goods for processing, where there is no change of ownership. The options for collecting this data are set out in Section 5.
- 2.4. In order to reconcile national accounts and balance of payments trade in goods data, with the IMTS data, it is recommended that the value of the goods sent abroad for processing and returning from abroad after processing are recorded as supplementary items. This also allows a reconciliation table to be produced showing the transition from merchandise trade statistics to exports and imports of goods on a BoP and National Accounts basis. This is discussed further in Section 4.
- 2.5. ESA 2010 suggests the net processing service (equivalent to *manufacturing services on physical goods owned by others*) can be presented as the difference between the goods sent abroad for processing, less the goods returned after processing. This is too simplistic an approach, and other options for estimating manufacturing service exports and imports are discussed further in Section 5.
- 2.6. While goods sent abroad for processing with no change of ownership are now excluded from general merchandise, freight transport and insurance costs may still be incurred. To convert imports from CIF to FOB needed for national accounts and BoP, the value of freight and insurance to the border of the importing country should be deducted. Where these freight and insurance services are provided by a non-resident an import of transportation services should be recorded.

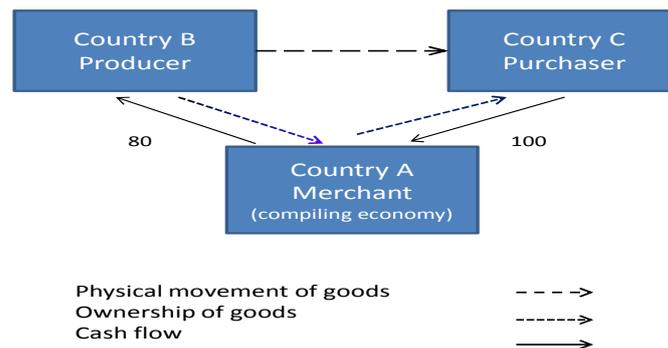
Goods under merchanting

- 2.7 In contrast to goods sent abroad for processing which cross a country's border, but are not included in trade in goods, there are exports of goods that occur without the goods crossing the country's border. One example is merchanting which is defined by ESA 2010 (3.164) as:
- ...the purchase of a good by a resident from a non-resident and the subsequent resale of the good to another non-resident, without the good entering the merchant's economy.
- 2.8 ESA 2010 (9.48 e) contrasts merchanting with goods sent abroad for processing:
- ...In contrast, buying and reselling goods with non-residents without the goods entering the merchant's economy are recorded as imports and exports in the accounts of the producer and final purchaser, and a net export of goods under merchanting is shown in the accounts of the merchant economy.
- 2.9 This is a change from the BPM5 and ESA 95 treatment, which excluded merchanting from trade in goods, but instead included the difference between the sale and purchase of goods as a 'merchanting' service category within *other business services*. BPM5 recognised this treatment as an exception to the change of ownership principle. Under BPM6 (10.44) goods under merchanting are recorded as follows:
- (a) The acquisition of goods by merchants is shown under goods as a negative export of the economy of the merchant;
 - (b) The sale of goods is shown under goods sold under merchanting as a positive export of the economy of the merchant;
 - (c) The difference between sales over purchases of goods for merchanting is shown as the item 'net exports of goods under merchanting';
 - (d) Merchanting entries are valued at the transaction price agreed by the parties, not FOB.
- 2.10 The new treatment of merchanting is consistent with the change of ownership principle. Merchanting requires goods to change ownership and so transactions are recorded in the trade in goods account. If there is no change of ownership, there is no merchanting transaction, although there may be manufacturing services on physical inputs owned by others, if the goods are processed for a fee.
- 2.11 The standard model of goods under merchanting is that goods are purchased by a company in country A from a producer in country B. The goods are sold on to a customer in country C, but without the goods ever entering country A.

2.12 This example is set out in Figure 1 below (from the United Nations publication *The Impact of Globalization on National Accounts*).

Figure 1: Merchenting of goods (resident merchant)

Merchant in country A purchases goods from country B and sells to country C
(From the Handbook on Globalisation)



2.13 The ESA 95/BPM5 and ESA 2010/BPM6 treatment of the merchenting example above is shown in Table 3. The merchant in country A buys goods worth 80 from a producer in country B and sells them for 100 to a customer in country C, without the goods ever entering country A. Under ESA 95, country A records the export of a merchenting service of 20 as the difference between the buying and selling price. Country B records an export of goods of 80 and country C records an import of goods of 100, equivalent to the transaction prices of the purchase and sale.

Table 3: Treatment of merchenting activity in ESA 95/BPM5 and ESA 2010/BPM6.

	ESA 95 / BPM5 treatment		ESA 2010 / BPM6 treatment	
	Export	Import	Export	Import
Country A			Country A	
Goods			Goods under merchenting	100
Services: merchenting	20		Goods under merchenting	-80
			Net exports of goods under merchenting	20
Country B			Country B	
Goods	80		Goods	80
Country C			Country C	
Goods		100	Goods	100
Global balance (sum of above)			Global balance (sum of above)	
Goods	80	100	Goods	100
Services: merchenting	20		(of which goods under merchenting)	(20)

2.14 So under ESA 95 a global imbalance occurs within the categories of goods and services, as the country where the merchant is resident (country A) includes exports of merchenting **services**, while country B and country C record the value of the **goods** entering or leaving the country. There is a balance at the level of goods and services combined.

2.15 Under ESA 2010, this imbalance is removed by treating merchanting transactions as trade in goods. The acquisition of goods by the merchant in country A is shown under goods as a negative export, while the sales are recorded as a positive export. The difference between sales and purchases of goods under merchanting are recorded as net exports of goods under merchanting in country A. Country B and C continue to record the value of the goods entering and leaving the country. Now the global balance in goods shows 100 recorded for both global exports and global imports of goods.

2.16 Merchanting is only recorded in the accounts of the country in which the merchant is resident. In the counterpart countries, export sales to merchants and import purchases from merchants are included indistinguishably within general merchandise.

2.17 ESA 2010 Reference: chapter 18, paragraph 18.38:

Merchanting is defined as the purchase of goods by a resident (of the compiling economy) from a non-resident combined with the subsequent resale of the same goods to another non-resident without the goods being present in the compiling economy. Merchanting occurs for transactions involving goods where physical possession of the goods by the owner is unnecessary for the process to occur.

2.18 ESA 2010 (18.39) goes on to explain:

Merchanting arrangements are used for wholesaling and retailing. They may also be used in commodity dealing and for the management and financing of global manufacturing processes. For example, an enterprise may contract the assembly of a good among one or more contractors, such that the goods are acquired by this enterprise and resold without passing through the territory of the owner. If the physical form of the goods is changed during the period the goods are owned, as a result of manufacturing services performed by other entities, then the goods transactions are recorded under general merchandise rather than merchanting. In other cases where the form of the goods does not change, the goods are included under merchanting, with the selling price reflecting minor processing costs as well as wholesale margins.

2.19 ESA 2010 recognises that merchanting is often undertaken as part of global manufacturing and therefore it should be considered alongside goods for processing. ESA 2010 makes a distinction between goods that are either transformed or not transformed, where there is change of ownership but do not enter the compiling economy. Goods that are transformed should be included in general merchandise, while goods that are not transformed, should be recorded as goods under merchanting.

2.20 No further guidance is given on the distinction between merchanting (no transformation) and general merchandise (transformation). A general rule is needed, so it is recommended that goods that have been processed in any way are assumed to have been transformed and therefore treated as general merchandise, rather than merchanting. Goods that have been simply repacked or labelled are not considered to have been transformed in any way. Therefore goods that are simply repackaged or cleaned do not change physical form and should be recorded as goods under merchanting. Goods that have been assembled, refined or undergo any manufacturing process should be recorded as general merchandise, even though the goods do not enter the compiling economy. This treatment is in line with BPM6 guidance (box 10.1) ⁽¹⁾.

2.21 If a merchant resells goods to a resident of the same economy as the merchant, this is not merchanting, but rather imports of general merchandise. In this case, the goods enter country A of

⁽¹⁾ It is important to note, that this rule is only used to distinguish between merchanting and merchandise trade where goods change ownership and do not enter the compiling economy. Goods sent abroad for processing where there is no change of ownership, are excluded from trade in goods. Instead, any processing activity from simple repacking to more significant manufacturing services is treated as manufacturing services on physical inputs owned by others.

the merchant, so no longer fit the definition of international merchanting. Similarly, in the European Union accounts, merchanting only includes purchases and sales of goods with non-EU residents (ESA 2010 19.17):

In European accounts, merchanting includes only the purchase of goods by a resident of the European Union / the euro area from a non-resident with the subsequent resale of the same goods to a non-resident without the goods being present in the European Union / the euro area. It is recorded first as a negative export of goods and then as a positive export of goods, with any timing differences between the purchase and sale being recorded as changes in inventories (See paragraphs 18.41 and 18.60). When a merchant which is resident of the European Union / euro area buys goods from a non-resident and then sell them to a resident of another Member State, the purchase is recorded as negative exports in the national accounts of the Member State of the merchant but as imports in European accounts.

- 2.22 Merchanting of services is a concept introduced in BPM6. It includes subcontracting or outsourcing of service work to another contractor (BPM6 10.160):

Business and other services, such as transport, construction, and computing, may be subcontracted. This arrangement may also be called ‘outsourcing.’ For example, a specialist service arranger may be paid to provide back-office functions for a customer, which the service arranger subcontracts to another contractor. Thus, subcontracting is similar in some ways to merchanting of goods, because the services are purchased and resold. However, for services, the degree of transformation involved may be harder to assess than for goods, such as in the case of bundling and managing the services of different contractors. ‘Service merchanting’ of this kind is an important activity in some economies. The value of services exported and imported in the economy of the service arranger is recorded on a gross basis. (This treatment is applicable because the arranger buys and sells the services; if the arranger acted as an agent on a commission basis, then only the commission would be recorded as the service provided by the arranger.) These services are classified to the appropriate specific service classification, such as transport, construction, computing, or other business services. (See also paragraph 10.75 for transport.) However, if the activity is significant for an economy, net data could be provided on a supplementary basis.

- 2.23 BPM6 allows for net merchanting of services to be recorded on a supplementary basis, in addition to classifying them to the appropriate specific service classification (see BPM6 10.160) for those economies where service arrangers are important.
- 2.24 In addition to the standard merchanting example, where goods do not enter the reporting economy, there are also transactions between residents with a non-resident intermediary merchant, where goods remain in the reporting country. In this case, although there are no cross-border movements of goods, there is a change of ownership between residents and non-residents. These transactions should therefore be recorded as general merchandise. As data will not be available through the IMTS system, alternative sources will be required (such as from VAT declarations).

Quasi transit trade

2.25 ESA 2010 18.28:

Transit trade is where goods cross a country on their way to their final destination, and for the country crossed, are generally excluded from foreign trade statistics, Balance of Payments statistics and the national accounts.

2.26 In quasi transit trade, goods are imported into a country by a non-resident, and then re-exported to a third country, often in the same economic union, usually at a higher price. The country where the goods arrive for the customs clearance should exclude the goods from national imports and exports as the goods continue to be owned by the non-resident entity. The country which buys the goods should record the import.

2.27 ESA 2010 18.28 sets out the standard EU quasi transit trade example:

Quasi transit trade are goods imported into a country, cleared through Customs for free circulation within the EU, and then dispatched to a third country in the EU. The entity used for Customs clearance is usually not an institutional unit as defined in Chapter 2, and so does not acquire ownership of the goods. In this case, the import is shown in the national accounts as a direct import to the final destination, as in the case of simple transit trade. The appropriate value is that recorded as the goods enter the final destination country.

2.28 As the country where the goods enter the EU does not take ownership of the goods, the value of the goods as they enter and leave the country should be excluded from the national accounts. European regulations however, require the transmission of BoP and IMTS data for EU and Euro-area aggregates at the point where goods are **cleared for entry into the EU** (or Euro-area). Data in line with this ‘community principle’ will therefore include quasi transit trade.

2.29 There can be large differences between the value of goods when they enter the EU and when they reach their final destination. The treatment of quasi transit trade is designed to avoid double counting of trade that is included in EU aggregates. In EU aggregates (rather than national aggregates), the difference between the declared value of the goods when they enter the EU and the subsequent sales price is recorded as ‘branding’ — recorded as an import of services by the transit country from the owner of the goods. At least part of this difference in value may be due to transfer pricing by the owner of the goods, rather than any service activity.

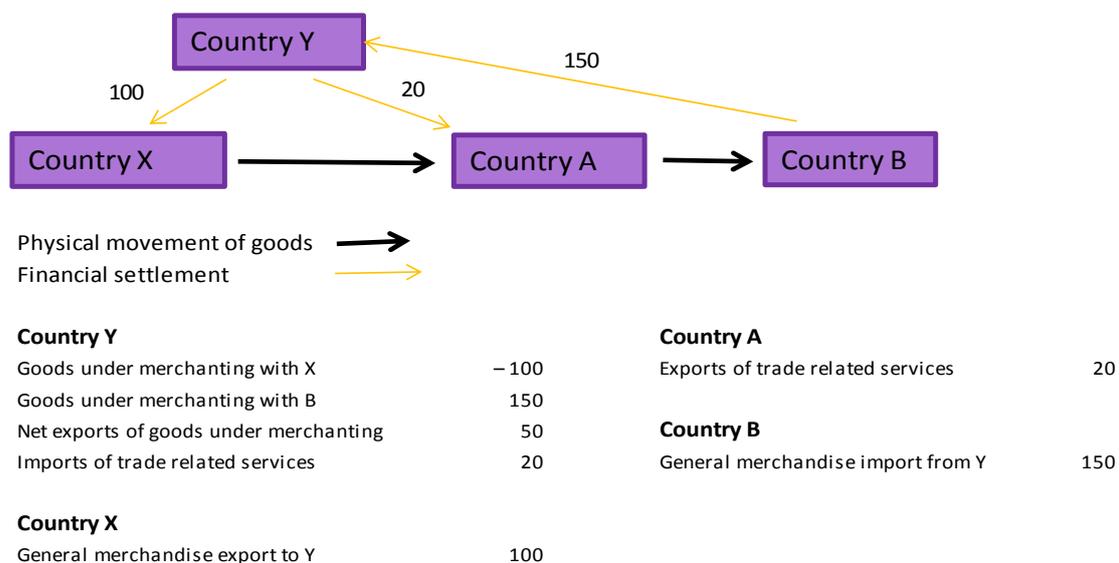
2.30 While quasi transit trade usually refers to goods that are imported into a country before onward despatch to a third country, the same phenomena can occur for exports also. For example, wine exported from France to Russia may be cleared for Customs in Lithuania. In this case, the export is shown in the national accounts of France as a direct export to Russia. Lithuania does not take ownership of the goods, so the value of the goods as they enter and leave the country should be removed from IMTS for national accounts purposes.

Non-resident transit trade

2.31 Non-resident transit trade is used to describe activity similar to quasi transit trade that is increasingly common in the EU. Non-resident transit trade is used to describe the situation where goods arrive from one Member State and are despatched to another Member State, by an owner that is not resident in either Member State. In this case, while there is physical movement of goods, there is no transfer in ownership of the goods, so the Member State where the goods transit will not record imports or exports of goods. If the owner is based outside the EU, then the EU aggregates will be affected however.

- 2.32 Non-resident transit trade requires the compiler to identify cases where its own country does not acquire ownership of goods (both transit and quasi transit trade), so that they can be excluded from trade in goods exports and imports. In many EU Member States, non-resident traders are obliged to register for VAT in any country where they realise a taxable transaction, including the intra-EU supply or acquisition of goods. These non-resident VAT registrations therefore become Intrastat respondents in the country where they are trading, even though they may have no physical presence. The local VAT number may identify their non-resident nature.
- 2.33 A non-resident company might choose to enter goods in a particular EU country for a number of reasons – locational, VAT deferral schemes, or to take advantage of warehousing or value added logistics (e.g. quality inspection, repackaging etc.). The goods are subsequently dispatched to the final customer in another EU country, who pays the full price for the goods directly to the non-resident merchant. The non-resident merchant will separately pay the processor in the transit country for any processing services received. IMTS will be the prime source of data for quasi transit trade.
- 2.34 Figures 2.1 and 2.2 show the recording of quasi transit trade in both national and EU accounts.
- 2.35 In the first example, the merchant in country Y buys goods from country X for the wholesale price of 100 and sells these goods to country B for the transactions price of 150 (including purchased services and profit margin of the merchant in country Y). A local fiscal representative in transit member state A, in addition to taking care of the customs arrangements, sub-contracts to a specialised enterprise the undertaking of quality inspections before the goods are shipped. He gets reimbursed for his services by the merchant in Y with 20. These services are reflected in the higher goods value when dispatched to member state B; however, they also need to be recorded as separate transactions in the balance of payments of A, because residents of member state A provided services to country Y for which they were explicitly compensated.

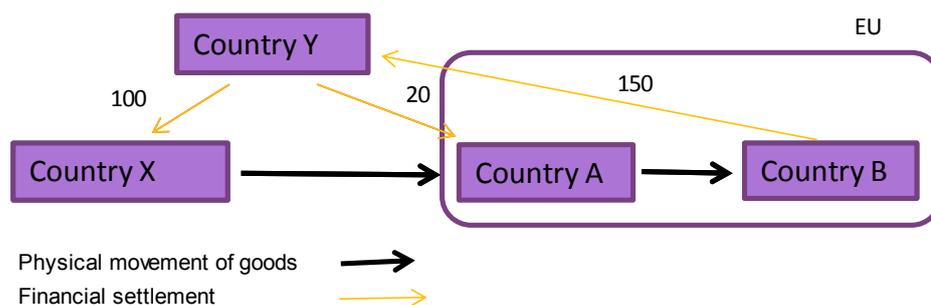
Figure 2.1: Recording of quasi transit trade in national accounts and national BoP ⁽²⁾



⁽²⁾ From Chapter 9 of the *Guide to measuring global production*: Measurement issues associated with quasi transit trade and similar phenomena.

- 2.36 As shown in Figure 2.1, goods under merchanting are recorded in the accounts of the merchanting country Y (owner of the goods), with the difference in price representing the merchants' margin. The transit member state A records only services exports to country Y, while Country X and B record exports and imports of goods, respectively, to and from country Y. This treatment is dependent on data being available in IMTS. IMTS 2010 recommends that partner country for exports should be the country of last known destination or country of consignment, while for imports it should be country of origin or consignment. The EU requirement is for country of final destination for exports and country of origin for imports. In Figure 2.1, country X is likely to declare general merchandise exports with partner A (country of consignment) or country B (country of final destination), but not with partner Y. Country B will declare a general merchandise import from country A (country of consignment) or possibly country X (country of origin), but not country Y.
- 2.37 Example 2 repeats largely example 1; however, country X and Y are both outside the EU, and country A and B are inside the EU. The merchant in country Y buys goods from country X for the price of 100. The goods are first cleared for customs in EU member state A by a local fiscal representative. In addition, he sub-contracts to a specialised enterprise the undertakings of quality inspections before the goods are being shipped and dispatched to end-consumer B. He is reimbursed for his services by the merchant in Y with 20.

Figure 2.2: Recording of quasi transit trade in EU aggregates



Country Y			European Union	
Goods under merchanting with X	- 100		General merchandise import from Y	100
Goods under merchanting with B/EU	150		Import of 'branding services' from Y	50
Net exports of goods under merchanting	50		Exports of manufacturing services	20
Imports of manufacturing services	20			
Country X				
General merchandise export to Y	100			

- 2.38 In EU countries where non-resident VAT registrations play a role, imports and exports by such non-resident VAT registrations should be separately identified from their specific tax identifier and excluded from the IMTS dataset for national accounts purposes. Non-resident VAT registrations are generally allocated a specific tax identifier that identifies their non-resident status. 'Imports and exports' from these non-resident VAT registrations can then be identified in the IMTS dataset and removed for national accounts and BoP purposes.
- 2.39 It is recommended that national accounts compilers work with their Customs authorities to identify non-resident traders and ensure they meet national accounts, not just tax definitions of non-resident.

Two more examples of quasi transit trade are provided in Annex E.

Goods for repair

- 2.40 Goods temporarily sent abroad for repair, with no change of ownership are excluded from general merchandise in the same way goods for processing (with no change of ownership) are excluded. In addition, the value of the maintenance and repair service is included within services in ESA 2010 and BPM6 — *maintenance and repair services n.i.e.*
- 2.41 BPM6 para 10.22. Items to be excluded from general merchandise because there is no international transaction.
- (e) Goods temporarily exported or imported without a change of ownership. Examples include goods for repair, as part of an operating lease, and for storage, and animals or artifacts for participation in exhibitions or competitions.
- 2.42 BPM6 para 10.72:
- Maintenance and repair services n.i.e. cover maintenance and repair work by residents on goods that are owned by non-residents (and vice versa).

Re-exports

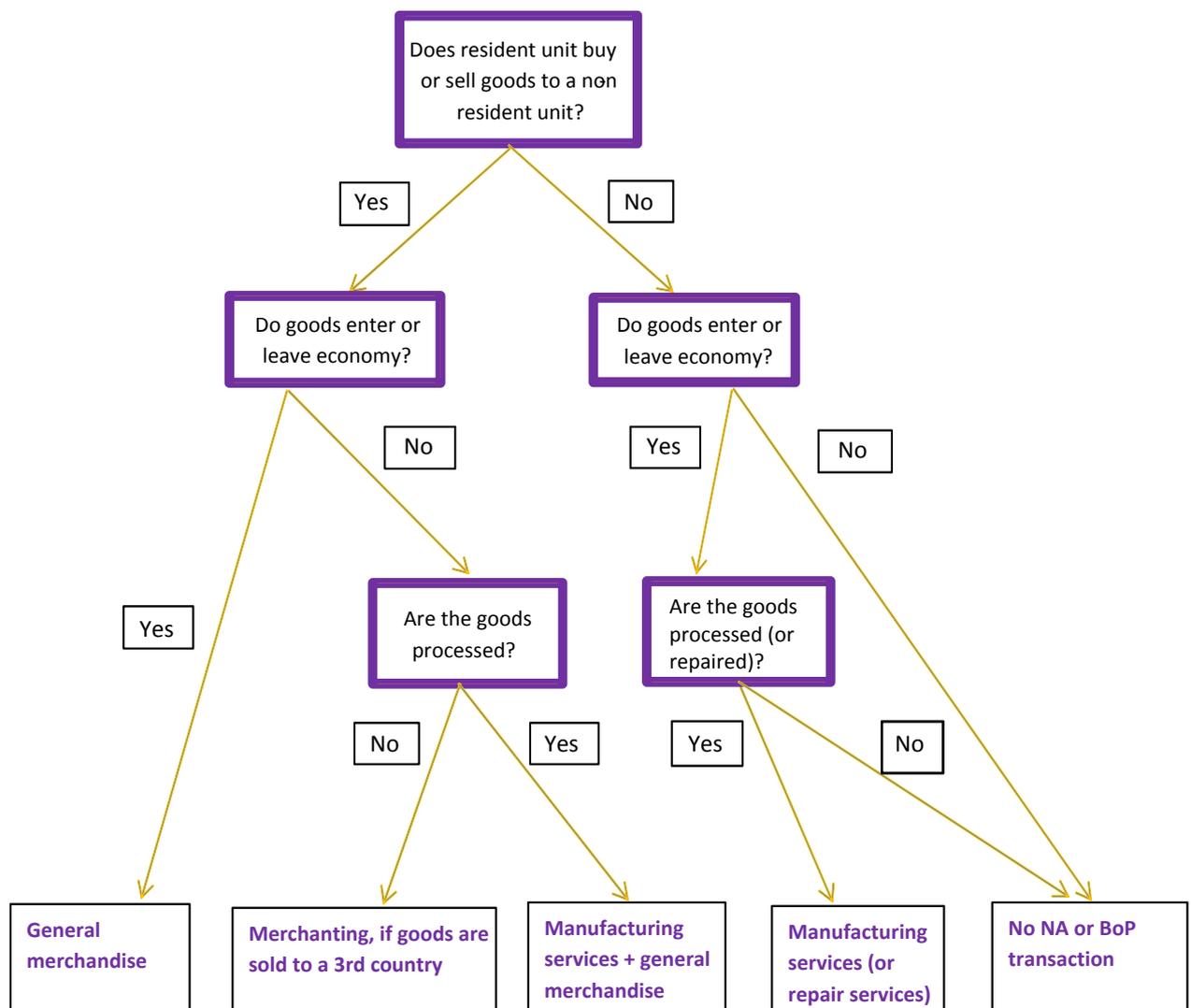
- 2.43 Re-exports are foreign goods which are imported into the reporting economy by a resident, so there is a change of ownership (in contrast to quasi transit trade), but then re-exported without substantial transformation. As there is a change of ownership, re-exports are included in both national accounts and balance of payments.
- 2.44 ESA 2010 Para 18.28
- Re-exports are foreign goods (goods produced in other economies and previously imported with a change of economic ownership) that are exported with no substantial transformation from the state in which they were previously imported. Because re-exported goods are not produced in the economy concerned, they have less connection to the economy than other exports. Economies that are major trans-shipment points and locations of wholesalers often have large values of re-exports.
- 2.45 ESA 2010 recommends that re-exports are separately identified from other trade as they have little impact on the domestic economy. Goods that have been imported and are waiting to be re-exported should be recorded in inventories of the resident economic owner.

Section 3 — Conceptual issues

Guidance

3.1 The flowchart in Figure 3 is a decision tree to help the compiler classify transactions as goods sent abroad for processing, merchanting and general merchandise trade. The first question is whether there is a change of ownership. If there is no change of ownership and the goods are sent abroad and returned after processing, then the movements should be classed as goods sent abroad for processing and excluded from exports and imports of goods. If there is a change of ownership, but the goods do not enter the compiling economy, then the goods should be included as merchanting (or general merchandise if the goods are transformed before being sold).

Figure 3: Decision tree



Note: Resident units do not include 'non-resident VAT registrations'

Numerical example

- 3.2 The change in the treatment of goods for processing has a major impact on national accounts compilation, including Supply Use Table (SUT) compilation and analysis. This section will set out the change by looking at a worked example.
- 3.3 Consider the case where a computer manufacturer outsources assembly to a non-resident affiliate. The computer manufacturer in country A sends computer parts to be assembled by its foreign affiliate in country B, to take advantage of lower wage rates. The finished computers are then returned to the computer manufacturer in country A, where they are sold to domestic consumers. In order to cross the border, transfer prices will be necessary in order that tax authorities can assess import and export duty on the goods, where applicable.
- 3.4 In ESA 95 a change in ownership of the computer parts is imputed, but under ESA 2010, there is no change of ownership. The situation is considered from the point of view of the computer manufacturer in country A and the foreign affiliate in country B.
- 3.5 Under ESA 95, country A records an export of 50 and subsequent import of 90 is recorded. The difference represents the processing fee, although this is not recorded under ESA 95.

Figure 4: ESA 95 treatment of goods for processing

ESA 95 treatment of goods sent abroad for processing (for owners' economy — country A)

	Output (P.1)	Imports of goods (P.71)	Imports of serv. (P.72)	Total supply	Intermediate consumption (P.2)	Household expenditure (P.3)	Exports of goods (P.61)	Exports of serv. (P.62)	Use
Computers, components + services	50	90		140		90	50		140

ESA 95 treatment of goods sent abroad for processing (for processors' economy — country B)

	Output (P.1)	Imports of goods (P.71)	Imports of serv. (P.72)	Total supply	Intermediate consumption (P.2)	Household expenditure (P.3)	Exports of goods (P.61)	Exports of serv. (P.62)	Use
Computers, components + services	90 (50+40)	50		140	50		90		140

- 3.6 In the above table, the imports and exports of goods should match the entries in the IMTS dataset.
- 3.7 In ESA 2010 goods for processing are recorded on a net basis, with only the trade in services transaction recorded. The cross-border movement in goods recorded in the IMTS is not included in the SUT. In our example, for the computer processing industry, the difference between the value of goods as they arrive and depart represents the processing fee. Under ESA 2010 this is recorded as an import of manufacturing services on physical inputs owned by others.

Figure 5: ESA 2010 treatment of goods for processing

ESA 2010 treatment of goods sent abroad for processing (for owners' economy — country A)

	Output (P.1)	Imports of goods (P.71)	Imports of serv. (P.72)	Total supply	Intermediate consumption (P.2)	Household expenditure (P.3)	Exports of goods (P.61)	Exports of serv. (P.62)	Use
Computers, components + services	50		40	90		90			90

ESA 2010 treatment of goods sent abroad for processing (for processors' economy — country B)

	Output (P.1)	Imports of goods (P.71)	Imports of serv. (P.72)	Total supply	Intermediate. consumption (P.2)	Household expenditure (P.3)	Exports of goods (P.61)	Exports of serv. (P.62)	Use
Computers, components + services	40			40				40	40

It is recommended that manufacturing services on physical inputs owned by others is collected separately, rather than simply derived as the difference between the value of goods sent abroad and subsequently returned. The value of the manufacturing service is not necessarily the same as the difference between the value of goods before and the value of goods after processing due to holding gains/losses and the inclusion of overheads in the finished goods price.

- 3.8 ESA 2010 recommends that where the gross flows of goods for processing are available, they are presented as supplementary items.

Section 4 — Analysis

Reconciling national accounts and merchandise trade statistics

- 4.1 The conceptual differences between IMTS and ESA 2010 and BPM6 should be illustrated with a bridge table showing the reconciliation of IMTS sources data and trade in goods data used in BoP and national accounts. This also meets the requirement to publish goods sent abroad for processing as supplementary items. It is recommended that Member States produce a reconciliation table setting out in detail how the IMTS source data is adjusted to convert merchandise trade statistics to trade in goods on a national accounts/balance of payments basis. An example of such a reconciliation table is set out below:

Table 4: IMTS/trade in goods reconciliation table

Reconciliation between International Merchandise Trade Statistics and Trade in Goods on a national accounts basis

Merchandise Trade statistics from IMTS source	Exports	Imports
– Goods sent abroad for processing	Deduct	n/a
– Goods returned from abroad after processing	n/a	Deduct
– Goods sent abroad after processing in compiling economy	Deduct	n/a
– Goods received from abroad for processing	n/a	Deduct
+ Goods sold abroad after processing in other economies	Add	n/a
+ Goods acquired in other economies for processing abroad	n/a	Add
+ Net exports of goods under merchanting	Add	n/a
= Trade in goods on a national accounts basis		

Where n/a = not applicable

- 4.2 BPM6 provides an example of a bridge table (Table 10.2) covering all the coverage and valuation differences between trade in goods on a IMTS and a BoP basis. This is shown in Annex D.

Impact on SUT balancing

- 4.3 The traditional purpose of an SUT was to show which products were used to make other products. In the case of products being transferred between units so that they can be processed, a change of ownership had to be imputed when the products were delivered from the first unit to the second.

- 4.4 SNA 2008 (14.37) gives the following example of the SNA 93 treatment:

...if one establishment of an enterprise was responsible for making steel and another for making steel products, the steel from the first establishment was shown as being delivered (or 'sold') to the second. This meant the final customer for the steel products bought them entirely from the second establishment and the production account showed the value of the steel included in both intermediate inputs and output. A similar approach was taken for goods sent abroad for processing but then returned to the original economy.

- 4.5 However, under SNA 2008 and ESA 2010, a change of ownership is no longer imputed where goods are sent abroad for processing, when the principal retains ownership of the goods. As there is no sale and purchase of goods, the imports and exports of goods will be in line with the underlying financial transactions.

- 4.6 The impact on SUT balancing is described in Chapter 5 of the *Impact of Globalization on the National Accounts (UN)* and SNA 2008 (para 14.39 – 14.43).
- 14.40 The pattern of inputs for an establishment processing goods on behalf of another unit is quite different from the pattern of inputs when the establishment is manufacturing similar goods on their own account. A simple illustration may be given by referring to crude petroleum. The unit refining on own account has intermediate consumption of crude oil and output of refined petroleum products; the unit processing on behalf of another unit has all the other similar inputs and uses the same sort of fixed capital but shows neither the crude petroleum nor the refined products in its production account. For similar amounts of crude oil processed, the value added and other inputs will be comparable and when the process is carried out for a non-resident, imports will exclude the crude oil and exports will exclude the refined products but include the processing fee. As a result, the current external balance will be unaffected by this treatment. The result of recording only the processing fee rather than the full value of the goods processed does, however, affect the ratios of imports and exports to GDP and gives a more realistic picture of the extent to which domestic financial resources are required to fund imports or benefit from exports.
- 14.42 Measuring goods for processing by the processing fee instead of by the full value of the processed goods changes the nature of input-output coefficients. They no longer represent the technological structures of an industrial process but an economic process. Changes in coefficients may result not from changes in technology but from changes in the proportion of oil (in this case) processed on own account and processed on behalf of another unit.....the consequences for supply and use tables and input-output tables are extremely significant and change many of the traditional perceptions about what information is conveyed in these tables.
- 4.7 In the example above, the link between the crude oil inputs required to produce a barrel of refined petroleum output will vary depending on whether the refinery is processing on own account or not. Where the refinery is buying in crude oil inputs the ratios will remain unchanged, but where it is refining on behalf of another, the material inputs will be zero with the resulting impact on the input-output ratios.
- 4.8 The increased volatility of input to output ratios will affect the ability of short-term indicators of value added to be proxied by turnover measures. Traditional indices such as the Index of Production, which assume a stable relationship between inputs and output, must be monitored carefully for step changes in production measurement, when the company moves from a gross measurement basis to a net one because of a move to toll processing accounting. This is an issue which affects domestic as well as international trade, and this manual does not attempt to provide solutions to this fundamental issue, although it does stem, from the increasing role of large multinational enterprises in production.
- 4.9 What are the benefits and drawbacks to the two pictures?

Figure 6: Benefits and drawbacks of the ESA 95 and ESA 2010 approaches

Benefits

The gross treatment (ESA 95)	The net treatment (ESA 2010)
It shows the value of movement of goods between sites	It is more likely to match the entries in the financial accounts
It shows an input structure for both industries which reflect the physical inputs	No need to impute a change of ownership.
	The payment for the computer assembly service can be better estimated by reference to rates charged for the service per unit, and examination of the value added generated in the computer assembly industry by the activity.
	Better attributes value added due to the owner for designing, marketing etc., rather than to the party that undertakes the processing.

Drawbacks

The gross treatment (ESA 95)	The net treatment (ESA 2010)
It does not match the entries in the financial accounts	The movement of goods is not shown
Need to impute a change of ownership ⁽³⁾ .	The input structures do not show the goods input in the computer assembly industry
It is likely to depend on estimation of transfer prices. If the computer assembly company is an affiliate of the computer manufacturer, then neither the purchases of the computer parts by the computer assembly industry, nor the purchase of the finished computers back by the computer manufacturer may represent market values.	

⁽³⁾ It is inappropriate to impute a change of ownership as the processor assumes none of the risk associated with the eventual sale of the products. The risk remains with the legal owner. The processor is not at risk from (and does not benefit from) any unexpected changes in prices of either the components or the final product. The only risk the processor accepts is limited to meeting the contractual commitment in the most cost-effective manner.

Section 5 – Compilation guide

5.1 This section reviews the two main sources of information used to compile cross-border movements of goods for processing and associated manufacturing services:

- International merchandise trade statistics (IMTS) nature of transaction codes;
- Surveys of traders or processors.

International Merchandise Trade Statistics (IMTS)

5.2 IMTS are the starting point for the compilation of trade in goods statistics in national accounts and balance of payments in all Member States. Customs declarations (Extrastat) and Intrastat returns are the basic source of data for trade in goods statistics. Extrastat and Intrastat are broadly in line with IMTS 2010, with some special features, like the use of the country of consignment in Intrastat and the use of the special trade system in Extrastat (that excludes goods that enter EU Customs warehouses of ‘free zones’ from imports).

5.3 IMTS 2010 (para 1.20) recommends:

...that in all cases goods for processing, as well as goods resulting from the processing (compensating products in customs terminology) are to be included in the merchandise exports and imports of the countries at their full (gross) value.

5.4 Goods for processing (where there is no change of ownership) therefore need to be separately identified so that they can be removed from the IMTS source data, for use in national accounts and BoP.

Customs procedures

5.5 Specific customs procedures are used to identify certain types of extra-EU trade, including goods for inward processing, goods for outward processing and processing under customs control. These types of trade are further classified by ‘nature of transaction codes’ (NoT) within customs procedures. NoT codes are primarily used to reconcile IMTS figures with BoP and NA, therefore the information collected can be a source of information to identify goods for processing where there is no change of ownership needed for balance of payments and national accounts.

- Inward processing — Inward processing is defined as the customs procedure under which goods can be brought into a customs territory conditionally relieved from payment of import duties and taxes, provided such goods are intended to be used in one or more processing operations, to be repaired, to undergo operations to ensure their compliance with technical requirements etc. Within set limits, the inward processing procedure shall be discharged by placing goods or processed goods under another procedure (e.g. release for free circulation, export etc.).
- Outward processing — Outward processing is defined as the customs procedure under which goods that are in free circulation in an economy may be temporarily exported for manufacturing, processing or repair and then re-imported with total or partial exemption from import duties and taxes.
- Processing under customs control — Processing under customs control includes those imported goods which will be processed or further manufactured under customs control, before they are released for free circulation at the rate of import duty appropriate to them.

- Drawback — Drawback is defined as the amount of import duties and taxes repaid on export of the goods. This procedure is useful where goods were temporarily imported for processing with duties paid on entry. Under this procedure, the importer reclaims duties paid because the processed goods were exported again.
- 5.6 The IMTS: Supplement to the Compiler Manual provides some useful examples of the use of customs procedures to identify Goods for Processing. These are replicated in Annex C. However if only customs procedures are used to identify the processing this may lead to underestimation (normal import is declared for duty free goods while there is processing activity) or overestimation of processing (inward processing is declared even though there is change of ownership). Further information is needed about the change of ownership than is currently provided by customs procedure code.

Nature of Transaction codes

- 5.7 A two-digit coding system for Nature of Transactions is used to differentiate between types of trade. The collection of the one-digit code in column A (see figure 7 below) is mandatory in all Member States within the framework of Intrastat. Member States may also use the two-digit coding which is a combination of the code numbers in column A and their subdivisions in column B. Collection of Nature of Transaction code is not mandatory within the framework of Extrastat and so data is only available where the national Customs authority collect this information on the customs declaration.

Figure 7: Nature of Transactions codes

A — 1 digit	B — 2 digit
1. Transactions involving actual or intended transfer of ownership from residents to non-residents against financial or other compensation (except the transactions listed under 2, 7, 8)	1. <i>Outright purchase/sale</i> 2. <i>Supply for sale on approval or after trial, for consignment or with the intermediation of a commission agent</i> 3. <i>Barter trade (compensation in kind)</i> 4. <i>Financial leasing (hire-purchase)</i> 9. <i>Other</i>
2. Return and replacement of goods free of charge after registration of the original transaction	1. <i>Return of goods</i> 2. <i>Replacement for returned goods</i> 3. <i>Replacement (e.g. under warranty) for goods not being returned</i> 9. <i>Other</i>
3. Transactions involving transfer of ownership without financial or in kind compensation (e.g. aid shipments)	
4. Operations with a view to processing under contract (no transfer of ownership to the processor)	1. <i>Goods expected to return to the initial country of export</i> 2. <i>Goods not expected to return to the initial country of export</i>
5. Operations following processing under contract (no transfer of ownership to the processor)	1. <i>Goods returning to the initial country of export</i> 2. <i>Goods not returning to the initial country of export</i>
6. Particular transactions recorded for national purposes	
7. Operations under joint defense projects or other joint intergovernmental production programs	
8. Transactions involving the supply of building materials and technical equipment under a general construction or civil engineering contract for which no separate invoicing of the goods is required and an invoice for the total contract is issued	
9. Other transactions which cannot be classified under other codes	1. <i>Hire, loan, and operational leasing longer than 24 months</i> 9. <i>Other</i>

Notes: Financial leasing covers operations where the lease instalments are calculated in such a way as to cover all or virtually all of the value of the goods. The risks and rewards of ownership are transferred to the lessee. At the end of the contract the lessee becomes the legal owner of the goods.

Processing covers operations (transformation, construction, assembling, enhancement, renovation...) with the objective of producing a new or really improved item. This does not necessarily involve a change in the product classification. Processing activities on a processor's own account are not covered by this item and should be registered under item 1 of column A.

2-digit codes from the point of view of the owner of the goods (the sending country) are required to identify whether:

- goods sent abroad for processing are subsequently expected to return to the country of ownership (NoT code 41), and therefore should be removed from the IMTS exports data;
- goods sent abroad for processing but then expected to be sold abroad or in the processing economy (NoT code 42). As there is a change of ownership, the IMTS data is consistent with the national accounts definitions and should be used; and
- goods returned after processing to the country of ownership (NoT code 51) should be removed from the IMTS imports data.

Similarly, from the point of view of the processing country, a 2-digit breakdown is required to identify whether:

- goods received from abroad for processing expected to return to the country of ownership (NoT code 41), should be removed from the IMTS imports data;
- goods received from abroad for processing expected to be sold abroad or in the processing economy (NoT code 42). If the goods are sold on in the country of the processing, an import of goods should be recorded. Otherwise the goods should be removed from the IMTS imports data;
- goods received from abroad for processing which return to the country of ownership after processing (NoT code 51) should be excluded from the IMTS exports data; and
- goods received from abroad for processing that do not return to the country of ownership but they are sold onto a third country (NoT code 52). As there is no change of ownership in the processing country, the goods should be removed from the IMTS exports data

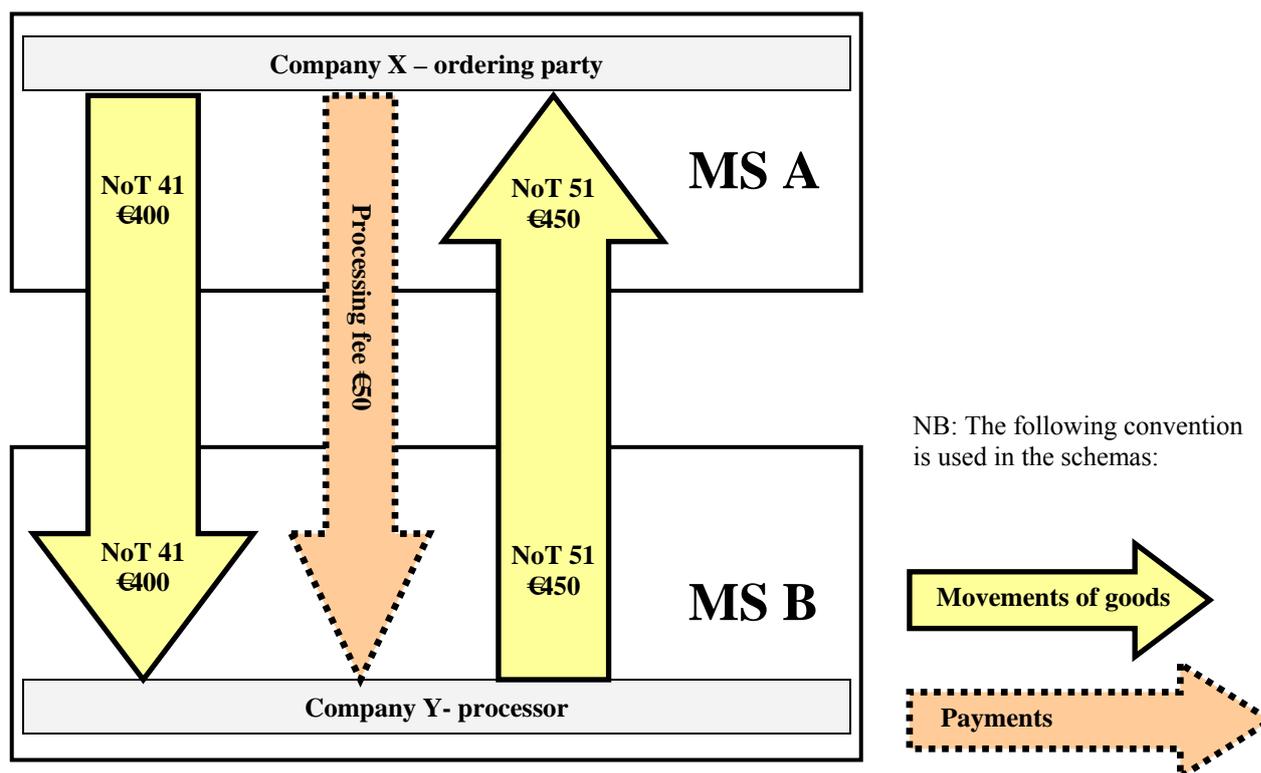
While NoT codes are helpful, further information is needed about the final destination of the goods than is currently provided by NoT code 42/52.

- 5.8 2-digit NoT codes are an important source of information to the compiler, although their usability will vary between Member States. Member States that record 2-digit NoT codes in both Intrastat and Extrastat will have the most complete data available. However, a number of Member States only require traders to report 1-digit codes, meaning that it is not known whether the goods are expected to return to the original country of export, or be sold abroad. This is necessary to determine whether the goods should be excluded from the trade in goods figures. If goods are sent abroad (with no change of ownership) and are expected to return, then they should be excluded from the trade in goods figures as there is no change of ownership. However, if they are sent abroad for processing, but then sold on to either another company in the country where the processing takes place, or a third country, then the sale should be recorded as merchandise trade in national accounts and BoP. (Although it should be noted that the price of these goods should be following processing, rather than the value recorded in the IMTS).
- 5.9 A further problem is the quality of data reported under processing NoT codes. As processing will often change commodity codes, matching consignments becomes more difficult. Valuation may also be difficult, due to transfer pricing between related enterprises not reflecting a fair market value.
- 5.10 While recognising these difficulties, the Task Force considered the NoT codes an important source of information and developed a set of case studies to illustrate their use. The standard goods for processing case is set out below, with other examples included in Annex B.

Standard case — Goods sent abroad for processing and returned after processing

5.11 Company X — from Country A — sends goods worth EUR 400 to a company Y in Country B for processing. Company X is the owner of the goods. Company Y is receiving EUR 50 for work carried out. The processed goods are delivered back to company X, now with a value of EUR 450.

Figure 8: Standard Goods for processing case



NB: The following convention is used in the schemas:

Table 5: Recording of standard goods for processing case in IMTS and NA/BoP

	IMTS	ESA 95 (BPM5)	ESA 2010 (BPM6)
Country A	Export of goods to B = EUR 400 (NoT 41)	Export of goods to B = EUR 400 (NoT 41)	Import of services from B = EUR 50 (NoT codes 41 and 51 used to exclude Goods for Processing from IMTS data)
	Import of goods from B = EUR 450 (NoT 51)	Import of goods from B = EUR 450 (NoT 51)	
	Balance = – EUR 50	Balance = – EUR 50	
Country B	Import of goods from A = EUR 400 (NoT 41)	Import of goods from A = EUR 400 (NoT 41)	Export of processing services to A = EUR 50
	Export of goods to A = EUR 450 (NoT 51)	Export of goods to A = EUR 450 (NoT 51)	NoT codes 41 and 51 used to exclude Goods for Processing from IMTS data)
	Balance = EUR 50	Balance = EUR 50	Balance = EUR 50

Note: processing services are manufacturing services on physical inputs owned by others.

- 5.12 This example illustrates how NoT codes 41 and 51 can be used to exclude goods for processing from the IMTS cross-border flows where there is no change of ownership. In this standard case, NoT codes can be used to identify the goods being sent abroad by company X (NoT 41) and then returned from country Y (NoT 51). If completed correctly, these codes allow the compiler to collect the value of goods sent abroad for processing and the value of goods returning from abroad after processing (where there is no change of ownership). The estimates of total goods for processing can then be deducted from the IMTS aggregates to derive national accounts and balance of payments estimates of trade in goods in line with the new international standards. The difference in the value of the goods sent abroad for processing and returning from abroad after processing, gives an estimate of the value of the processing services (manufacturing services on physical inputs owned by others). However, the value of the processing service is not necessarily the same as the difference between the goods sent for processing and the value of goods after processing. It is therefore recommended that the value of the processing service is also collected directly from the trader (outward processing) or the processing service provider (inward processing).
- 5.13 Where 2-digit NoT codes exist and results are validated, then the data will be useful. However, NoT codes often fail to recognise goods returning after processing and are not appropriate for deriving estimates of processing services. It is therefore recommended that even where NoT codes are in place, data are supplemented with direct reporting (e.g. balance of payments surveys, international trade in services questionnaires) to validate the results.

Surveys

- 5.14 Goods for processing and processing fees can be collected by amending existing business or balance of payments surveys.

Business surveys

- 5.15 Business surveys to enterprises, such as structural business surveys, collect information on processing services and should be amended to also collect data on the value of the goods sent and received from abroad for processing, as well as the associated processing fees.
- 5.16 In the case of inward processing, the following variables are required:
- The value of the processing service provided to a non-resident,
 - The value of the goods received from abroad for processing (if available),
 - The value of the goods returned to the non-resident owner after processing (if available).
- 5.17 As there is no transfer of ownership and therefore no financial transactions, the resident processor is unlikely to know the value of the goods received or the goods returned to the non-resident owner. One option is to link the processing activity with information on goods received from abroad for processing from customs and Intrastat declarations. If it is not possible to link the processing with the goods declarations, it may be necessary to estimate the goods flows from aggregate IMTS data.
- 5.18 Structural business statistics surveys can also be adapted to collect the following variables for outward processing:
- The value of the processing service provided by a non-resident.
 - The value of the goods sent abroad for processing

- The value of the goods returned to the resident owner after processing by a non-resident processor.
- 5.19 For outward processing, the owner of the goods will be reporting, so is able to provide information on the value of goods originally sent abroad and returned after processing.
- 5.20 Separate collection of outward processing (goods sent abroad for processing abroad) and inward processing (goods received from abroad for processing by a domestic company) will be required. If possible, information on the product breakdown should also be collected so that the ‘processing margin’ can be allocated across the SUT products. If this is not possible, due to the cost of collecting such detail, a product breakdown of goods sent abroad for processing should be estimated from available Customs data.
- 5.21 The survey questions must distinguish between processing undertaken on own account from processing undertaken on goods owned by others. Goods processed on own account may include purchases of goods from foreign suppliers. In this case, an import of goods is recorded in national accounts and BoP, as there is a change of ownership.
- 5.22 The population of enterprises who undertake processing in the compiling economy (inward processing) can be determined from business registers or other domestic surveys. Determining the population of companies sending goods abroad for outward processing is more difficult, as the companies will be less concentrated in industries known to undertake a large element of processing work. However, as such activity is closely associated with multi-nationals, it is recommended that any surveys of outward processing, focus on domestic multi-nationals, making use of Euro-Group Register information.
- 5.23 The value of survey data on goods sent to and received from abroad, should be compared with information from the NoT codes (if available) and the confrontation of data used to make adjustments needed to the IMTS data to derive international trade in goods and services on the ESA 2010 basis.
- 5.24 A more comprehensive approach would be to use a unique company identification code (such as a tax number) to link information companies report to business surveys to the foreign trade information reported via the IMTS. This would allow the compiler to validate both IMTS and survey results at the individual company level ⁽⁴⁾. The National Statistical Institute would often be best placed to undertake this sort of analysis, and would require access to individual company level trade data and Intrastat declarations from Customs. To minimise the resources required, such analysis would only be undertaken on an occasional basis, for those companies with significant inward and outward processing activity.

Balance of Payments surveys

- 5.25 In the same way business surveys can be adapted to collect the variables necessary to derive goods for processing and processing services, trade in services and balance of payments surveys used to meet Eurostat Balance of Payments requirements (Questionnaire Q1 and Y1) can be similarly adapted. Many EU countries have moved to collecting trade in services via surveys or as part of BoP direct reporting ⁽⁵⁾. Such surveys and BoP direct reporting can be amended to collect the additional variables required to identify goods for processing and the associated processing service. See Annex A for the model survey questions that can be used for both inward and outward processing. These should be adapted to Member States requirements, in order to balance the need

⁽⁴⁾ IMTS publish annual trade by enterprise characteristics where the data from Intrastat and customs declarations are linked with information on the trader held in the business register. <http://epp.eurostat.ec.europa.eu/newxtweb/>

⁽⁵⁾ International Transaction Reporting Systems (ITRS) are becoming less used in the EU following the 2008 amendment to Regulation No 2560/2001 which raised the reporting threshold on cross-border payments to EUR 50 000.

for more data against the demand to reduce (or at least not increase) burdens on business. If an International Transaction Reporting System is used as the prime source of BoP data, additional coding should be introduced to separately identify goods for processing and manufacturing services transactions.

Other sources

- 5.26 The Task Force also considered other sources that could be used in the compilation of Goods sent abroad for Processing. These are discussed briefly in this section.

Prodcom

- 5.27 Prodcom provides statistics on the production of manufactured goods. Production statistics are an important measure of sales of goods. But in order to give an accurate picture, they must be linked to import and export figures. For this reason, the production statistics published by Eurostat are accompanied by the related trade data. However, trade data is collected independently using a different nomenclature (the Combined Nomenclature), so there can be discrepancies between the two sets of figures. Prodcom may be particularly useful to derive a product breakdown of goods for processing needed for SUT balancing.

VAT information

- 5.28 VAT registered businesses are required to report two additional boxes on their regular VAT returns to the national tax authorities. These show the total value of intra-EU exports of goods to customers in other Member States and the total value of intra-EU imports of goods from suppliers in other Member States. Additional information on goods for processing transactions and service trade may also be collected. This information allows the compiler to cross-check the results against Intrastat declarations.
- 5.29 A number of Member States have a specific difficulty of non-residents that trade on their territory that distort the value of imported and exported goods. Two examples are considered:
- Foreign controlled entities which have registered offices in the host economy and pay income taxes due to their economic activities on the territory of the host economy. They are considered as residents in national accounts and balance of payments statistics.
 - Foreign entities which are registered for VAT in the host economy but have no other physical presence. Such companies are defined as non-residents for balance of payments statistics and national accounts purposes.
- 5.30 A foreign firm is obliged to register for VAT in any country where they realise any taxable transaction, without being required to set up a business, a local unit or to employ any person. Non-residents registered for VAT are issued tax numbers and execute their trade-related VAT payments under these tax numbers. However, as Intrastat relies on VAT rules, the 'VAT registrations' are considered to be data suppliers for the purposes of intra-EU trade and their data included in the trade figures.
- 5.31 To compile international merchandise trade statistics, export and import data are collected directly from the non-resident VAT traders on the basis of customs and Intrastat records. Due to non-residents' imports of goods into the host country (often as part of global manufacturing arrangements), a phenomenon similar to quasi transit trade can occur within a single country. The declared value in the Intrastat/customs declarations can differ significantly from actual payments to residents. The value of exports and imports will be subsequently distorted. If these non-residents participate in processing, then the processing fee will also be distorted if it is derived as

the difference between the value of goods arriving and the value of goods despatched after processing.

- 5.32 It is recommended that compilers check whether they can rely on the tax numbers to identify non-resident VAT traders. This should include validating that the entities are non-resident by checking their status against the ESA 2010 residency criteria. This may be done by linking the non-resident VAT traders to the domestic business register and checking that there is no employment or turnover reported by that unit).
- 5.33 Once the population of non-resident VAT registrations is identified, it will be necessary to track their IMTS trading activity, so that inflows and outflows of goods can be excluded from IMTS for national accounts and balance of payments purposes.

EuroGroups Register

- 5.34 The EuroGroups Register (EGR) project has created a network of business registers used for statistical purposes in Member States, focused on multinational enterprise groups. A multinational enterprise group (MNE) is defined as an enterprise group composed of at least two enterprises or legal units located in different countries. In order to create the EGR, Eurostat collects enterprise group information from commercial sources and the national business registers of the EU Member States and participating EFTA countries. The EGR contains the following variables:
- Legal units: identity, demographic, control and ownership characteristics;
 - Enterprises: identity and demographic characteristics, activity code (NACE), number of persons employed, turnover, institutional sector;
 - Enterprise groups: identity, demographic characteristics. The structure of the group, the group head, the country of global decision centre, activity code (NACE), consolidated employment and group turnover.
- 5.35 After the consolidation and validation process, the EGR contains the global structure of the registered enterprise groups. Statistics compilers in national statistical institutes and national central banks receive access to all units of the MNE, if at least one unit of the group is located in their national territory. These populations can be used for survey frames at national level and are a useful source of information for deriving national registers of companies who either undertake processing on behalf of non-residents (inward processing), or send goods abroad for processing (outward processing).
- 5.36 The Task Force recommended an EU approach to monitor and exchange information relating to multinationals manufacturing activity across the EU. An exchange of micro-data and mirror comparisons should take place at least for the largest companies.

Recommended sources for each activity

- 5.37 It is not possible to recommend a single data source for all elements of goods for processing. Member States will use either IMTS sources, survey sources, or preferably a combination of both. The tables that follow set out the preferred data sources for:
- outward processing;
 - inward processing;
 - manufacturing services on physical inputs owned by others;

- merchanting; and
- quasi transit trade.

5.38 Recognising that data sources are not of equal quality or importance in each Member State, alternative sources are also provided, with separate recommendations on cross-checking data from different sources where possible.

Table 6: Outward processing

Outward processing	Preferred source	Alternative source	Validation	Notes
Goods sent abroad for processing (no change of ownership)	Either IMTS (NoT codes) or NA enterprise survey (by product)	Either enterprise survey or IMTS (NoT codes)	Different MS will rely on either of these 2 main sources. Where goods for processing is significant, it is recommended that the results from the IMTS are cross-checked against enterprise survey results	Remove from IMTS data (but report as a supplementary item) Product breakdown from source needed for SUT
Goods returned after processing (no change of ownership)	Either IMTS (NoT codes) or NA enterprise survey (by product)	Either enterprise survey or IMTS (NoT codes)	Different MS will rely on either of these 2 main sources. Where goods for processing is significant, it is recommended that the results from the IMTS are cross-checked against enterprise survey results	Remove from IMTS data (but report as a supplementary item) Product breakdown from source needed for SUT
Goods sent abroad for processing, but subsequently sold abroad	NA or BoP enterprise survey	IMTS – NoT codes	NoT codes will be useful to identify the population of enterprises reporting goods sent abroad for processing and then sold abroad	Add to IMTS data to compile exports of goods NoT codes may identify traders that send goods abroad for processing that are intended for sale abroad, but the value of the goods after processing will not be available Assume product breakdown is the same as processed goods returned
Goods acquired abroad for processing abroad	NA enterprise survey	BoP survey		Add to IMTS imports data. As goods do not enter compiling economy, information is not included in IMTS Assume product breakdown is the same as goods sent abroad for processing
Manufacturing services on physical inputs owned by others	Trade in services survey, directed at traders who send goods abroad for processing	IMTS – NoT codes	The difference between goods sent abroad and returned after processing should be compared with the trade in services survey results	Include in imports of services Manufacturing services is not necessarily equal to the difference in goods sent abroad and returned after processing, but should be broadly in line Breakdown by processed product not required. Industry breakdown estimated from trade in services sources

Table 7: Inward processing

Inward processing	Preferred source	Alternative source	Validation	Notes
Goods received from abroad for processing (no change of ownership)	Either IMTS (NoT codes) or NA enterprise survey (by product)	Either enterprise survey or IMTS (NoT codes)	Different MS will rely on either of these 2 main sources. Where goods for processing is significant, it is recommended that the results from the IMTS are cross-checked against enterprise survey results	Exclude from imports of goods (but report as a supplementary item) Product breakdown needed from source so it can be removed from SUT balancing
Goods returned after processing (no change of ownership)	Either IMTS (NoT codes) or NA enterprise survey (by product)	Either enterprise survey or IMTS (NoT codes)	Different MS will rely on either of these 2 main sources. Where goods for processing is significant, it is recommended that the results from the IMTS are cross-checked against enterprise survey results	Exclude from exports of goods (but report as a supplementary item) Product breakdown needed from source so it can be removed from SUT balancing
Goods received from abroad for processing, but subsequently sold in compiling economy	NA or BoP enterprise survey	IMTS – NoT codes	NoT codes will be useful to identify the population of enterprises engaged	Include in imports of goods NoT codes may identify the intention that goods will be sold after processing, but not the value of the goods after processing Assume product breakdown is the same as processed goods returned after processing
Goods purchased by non-resident in compiling economy for processing	NA enterprise survey	BoP enterprise survey	NoT codes will be useful to identify the population of enterprises engaged	Add to exports of goods Assume product breakdown is the same as goods received from abroad for processing
Manufacturing services on physical inputs owned by others	Trade in services survey directed at processing enterprises	Enterprise survey. Separately identify processing on own-account and processing under contract	Results from survey sources should be compared with the IMTS difference in goods sent abroad and returned after processing	Include in exports of services Manufacturing services is not necessarily equal to the difference in goods sent abroad and returned after processing, but should be broadly in line No product breakdown needed, only processing output by industry (from enterprise survey)

Table 8: Merchanting

Merchanting	Preferred source	Alternative source	Validation	Notes
Goods under merchanting — both sales and purchases	Enterprise survey of merchants in the compiling economy	BoP survey/direct reporting	If data are available from both BoP and enterprise surveys, they should be reconciled and a single source used	Include in trade in goods. Only relevant for merchants resident in compiling economy. Not captured by IMTS as goods do not enter compiling economy

Table 9: Quasi transit trade

Quasi transit trade	Preferred source	Alternative source	Validation	Notes
Quasi transit trade — arrivals and dispatches	IMTS data on non-resident reported 'trade'	VAT declarations by non-residents of transactions on the internal market	SUT balancing and by checking against BoP financial account	Exclude from national trade in goods, where the customs clearance takes place, if there is no change of ownership Product breakdown can be identified from IMTS sources or Prodcop

Section 6 — Task force recommendations

6.1 This section reviews the recommendations of the Eurostat Task Force on Goods sent abroad for Processing and the steps needed to implement the recommendations as set out in the *Manual on goods sent abroad for processing*. For the detailed reasoning leading to the recommendations, the final report of the Task Force should be consulted.

(a) Principle of ownership as key point for goods for processing

The Task Force agreed that goods sent abroad for processing were goods sent abroad or brought into a country for processing without a change of ownership. The key point is the principle of no change in ownership, when deciding to classify the transactions as goods for processing. The extent of the physical transformation of a product, as a criterion for determining whether the goods had been processed or not, was considered as less important.

The Task Force considers cases as processing, in which the principal maintained legal and economic ownership of the raw materials and semi-processed goods throughout, as well as of the processed goods. Cases, in which a principal outsources processing and does not own material inputs or provides a small quantity of additional materials for processing, should be recorded as merchanting or general merchandise under the new requirements. The Task Force proposes for further work to elaborate on a threshold which could be applied to delineate processing from merchanting.

Implementation. The guidance in the *Manual on goods sent abroad for processing* identifies change of ownership as the key principle in determining whether cross-border movements of goods are treated as general merchandise in national accounts and BoP, or not. Where there is no change of ownership, then there is no general merchandise entry in the trade in goods account, but rather a trade in service transaction (manufacturing services on physical inputs owned by others) that reflects the fee for processing paid by the owner.

Where the principal outsources processing, but does not own the inputs, cross-border movements of goods are included in the trade in goods account. Where the goods are transformed by the processor, the goods are treated as general merchandise. Where goods are not transformed, merchanting transactions are recorded by the country where the merchant is resident.

Where the principal provides a small quantity of goods for processing and the processor sources other components from within its own economy (or elsewhere), then it is recommended that a manufacturing service entry is made, rather than merchandise trade. Any goods sent for processing, should be identified as such from the NoT system, so to ensure consistency with a key data source, no threshold is recommended.

Factory-less production is a particular example of goods for processing. The difference is the extent to which the production process has been outsourced to a contract manufacturer. In the case of factory-less production the process has been entirely outsourced whereas the case of goods for processing covers different scenarios from the extreme situation where all the production has been outsourced, to the situation where only a small element of the production has been outsourced.

Factory-less producers supply intellectual property capital and marketing services and control the production process, while using contract manufacturers to produce goods. Such factory-less producers are to be considered goods producers and should not be classified in distributive services. Similarly, cases in which a principal outsources processing and does not own material inputs or provides only a small quantity of additional materials for processing but owns the intellectual property products being used and controls the production process, should also be treated as processing.

Cases where the principal does not contribute intellectual property capital, nor material inputs or provides a small quantity of additional materials for processing, should be recorded as merchandising or general merchandise under the new standards. The Manual suggests that ‘small quantity’ is defined as less than 20 % of the total inputs, to delineate processing from merchandising.

IMTS 2010-CM (16.09) provides advice on how to determine the country of origin for processed goods based on whether they have been substantially transformed:

...any manufacturing or processing which results in the reclassification of a product in another HS subheading can be treated as a substantial transformation. Where the substantial transformation criterion is expressed in terms of the ad valorem percentage rule, the values to be taken into consideration should be:

- (a) for the materials imported, the dutiable value at importation or, in the case of materials of undetermined origin, the first ascertainable price paid for them in the territory of the country in which manufacture took place; and
- (b) for the goods produced, either the ex-works price or the price at exportation, according to the provisions of national legislation.

IMTS 2010-CM (16.10) presents operations which should not be regarded as substantial transformation:

- (a) operations necessary for the preservation of goods during transportation or storage;
- (b) operations to improve the packaging or the marketable quality of the goods or to prepare them for shipment, such as breaking bulk, grouping of packages, sorting and grading, repacking;
- (c) simple assembly operations;
- (d) mixing of goods of different origin, provided that the characteristics of the resulting product are not essentially different from the characteristics of the goods which have been mixed.

Where both the principal and the processor provide inputs to the manufacturing process, can we use this IMTS rule to determine whether the goods returned should be treated as trade in goods or manufacturing services? A simple rule is required. In this case, it is recommended that where the principal sends goods abroad to be processed, the manufacturing service provided should include both the value of the processing, together with any other costs (including locally sourced components). This is consistent with the change of ownership principle. As the principal only takes ownership of the finished product, not the local-sourced components, there is no trade in goods transaction. Instead, the value of the manufacturing service will include the value of locally sourced components and ensure that it is in line with the difference in the value of goods sent abroad for processing and returned after processing.

- (b) Nature of transaction system for identifying processing

The Task Force welcomed a paper setting out 9 examples of case studies (Annex B: Nature of transaction — case studies on the treatment of processing under contract in International trade in goods statistics) prepared by Eurostat, illustrating various scenarios of goods for processing and their recording according to Intrastat and Extrastat. The case studies propose practical solutions and guidelines to the main difficulties encountered during the meetings. The Task Force confirmed that the case studies could not tackle all the varieties of cases.

The Task Force considered the 'Nature of transaction' system as promising to allow – to some extent — identifying transactions in goods which should be removed from international merchandise trade statistics and replaced by processing fees when preparing national accounts and the balance of payments statistics. This is especially suitable for cases in which goods sent abroad for processing subsequently return to the initial country of export. In addition, direct reporting (e.g. balance of payments surveys, international trade in services questionnaires) are needed to get information on goods sold abroad after processing and on inputs purchased by the principal in foreign countries intended for processing abroad.

Implementation. Where Member States have reliable two-digit information from NoT codes, these estimates should be used. Evidence from Member States reporting to the Task Force however, supports the view that NoT codes are often not sufficient (on their own) to derive estimates of both goods sent (and returned from) abroad for processing. Even where reliable data exists on the values of goods sent abroad for processing and returned after processing, the value of the processing service, cannot simply be assumed to be the difference between the values (BPM6 para 10.70).

Instead, even where NoT codes are available, it is recommended that countries also collect imports and exports of manufacturing services on physical inputs owned by others as part of their BoP /trade in services data collection. This will then allow the reconciliation of the import of manufacturing service, with the difference between the goods sent abroad for processing and returned from abroad after processing. In addition exports of manufacturing services should be reconciled with the difference between goods returned after processing and goods received from abroad for processing.

Similarly, while goods that are subsequently sold abroad after processing can be identified by NoT codes, they will be valued at the price they were originally sent abroad and not include the value of the processing. It is recommended that the NoT codes are analysed to determine whether the activity is important in the compiling economy and if necessary additional questions are added to existing surveys to collect the value of goods sold abroad after processing.

(c) Flexibility of data sources

The Task Force considers that flexibility is needed in the use of data sources, because each country could use the data sources which are most relevant in its particular case.

The Task Force concluded that for the implementation of the new statistical standards for goods for processing, the following variables will be needed:

To record export and import of goods in the balance of payments statistics and the national accounts, when domestic principal units provide for goods to be processed abroad (outward processing), it is necessary to adjust the international trade in goods statistics data before its application in the supply-use tables:

- Values of exports for outward processing (cross-border movements of goods without change of economic ownership).
- Values of re-imports after outward processing (cross-border movements of goods without change of economic ownership).
- Sales revenues related to goods produced abroad and sold and transported directly to non-resident customers (goods never cross the national border).
- Value of raw materials (goods to be processed) paid for by domestic principal units to non-resident suppliers, used in outward processing (goods never cross the national border).

Further, when goods are processed by domestic processors (inward processing: the principal is non-resident and supplier of processing services is resident), the following data are needed:

- Export value related to goods sent abroad after inward processing (cross-border movements of goods without change of economic ownership).
- Import value related to goods sent from non-resident units to be processed by domestic suppliers (cross-border movements of goods without change of economic ownership).

In addition export and import of processing fees must be calculated.

The Task Force recommends applying data sources for the compilation of goods for processing with broad breakdown by product and at least annual frequency. Examples of such sources were the balance of payments surveys and the structural business surveys.

The non-imputation of the change of ownership principle in ESA 2010 requires removing goods for processing from data where required for administrative purposes and to align them with annual surveys on production. Consequently, national statistical institutes will need to continue to gather a significant amount of information on goods sent abroad for processing.

The Task Force recognises the usefulness of tables to reconcile the often conflicting messages between the international merchandise trade statistics and the domestic system of balance of payments and business surveys. The Task Force recommends that each Member State should draw up such tables to enable explanations to be given for the discrepancies between the international merchandise trade statistics and other national accounts and balance of payments measures of imports and exports of goods and services.

Implementation. It is not possible to agree a common source for each activity across all Member States as the potential sources are not equally available or reliable in each country. However it is possible to make some general recommendations on sources and methods to allow robust estimates of goods for processing and manufacturing services on physical inputs owned by others to be compiled.

In Member States where inward or outward processing is important, it is recommended that countries add questions to existing enterprise surveys (such as Structural Business Statistics surveys), or Balance of Payments surveys to establish the nature and relative importance of both inward and outward Goods for Processing in the compiling economy. The results from the enterprise survey should be compared and reconciled with data from the IMTS, so that best estimates can be made according to the relative merits of the sources.

Separate reconciliation should be undertaken for both inward processing (where resident processor does not take ownership of the goods) and outward processing (where the resident company retains ownership of the goods).

The Task Force highlighted the need to classify processing fees according to CPA 2008. Unlike retail and wholesale services and retail services (Section G), there are no sections covering manufacturing services. Instead, manufacturing services are included within the sections related to the products, including:

- 10.11.9 Sub-contracted operations as part of manufacturing of processed and preserved meat
- 10.39.99 Sub-contracted operations as part of manufacturing of other processed and preserved fruit and vegetables
- 10.41.9 Sub-contracted operations as part of manufacturing of oils and fats
- 14.13.9 Sub-contracted operations as part of manufacturing of outerwear

- 14.19.9 Sub-contracted operations as part of manufacturing of other wearing apparel and accessories
- 15.20.9 Sub-contracted operations as part of manufacturing of footwear
- 26.20.9 Computers and peripheral equipment manufacturing services; sub-contracted operations as part of manufacturing of computers and peripheral equipment
- 26.60.91 Medical instrument manufacturing services
- 32.99.9 Sub-contracted operations as part of manufacturing of other manufactured goods n.e.c.
- 84.13.13 Administrative mining- and mineral resources-, manufacturing- and construction-related services

(d) Strengthening cooperation and exchange of experiences

The Task Force considers it necessary to strengthen cooperation and exchange of experiences between national statistical institutes and central banks. The statistical measurement of domestic economic activities of multinational enterprises needed follow-up. The Task Force recommends, as far as possible, the establishment of 'large and complex cases units' at the national statistical institutes to consistently observe the largest and most complex multinational enterprises in general and specifically their merchanting and processing activities. International exchange of experiences would help to improve the effectiveness of these units, including observation techniques, data analyses, strategies of communication with representatives of multinationals' headquarters and the required skills of staff.

Implementation. Member States that have established large and complex case units have found them a useful way of collecting good quality data from those companies that have the biggest impact on the accounts – in particular the largest multinationals. For Member States where inward and/or outward processing is important, establishing 'large and complex case units' to observe and manage data collection from large multinationals would improve data quality.

In addition, it is recommended that work continue to overcome the obstacles to data sharing. Goods for processing is an activity that is closely linked to multinationals. While countries are able to measure what multinationals do within their own economies, it is more difficult to collect information on activity abroad. For instance, if a multinational sends goods to a foreign subsidiary for processing, it will be possible to collect information on the value of the goods sent and the cost of the manufacturing service (or processing) fee paid. However, if the goods are subsequently sold within the country of the foreign subsidiary, it may be easier to collect information directly from the foreign subsidiary, rather than the owner of the goods. In this case, if it was possible to reconcile information from both the resident parent and the foreign subsidiary, via data exchange, the quality of the data in both the country of the parent and the foreign subsidiary would be improved.

(e) Activities of non-residents registered for VAT

The Task Force acknowledges that progress has been made in addressing practical measurement issues related to goods for processing. There were, however, some conceptual and measurement challenges that need further attention like non-residents registered for VAT: case studies presented by Hungary and the Czech Republic dealt with VAT registered entities with little or no physical presence in the host country, which caused distortion in data and imposed important changes on national accounts and balance of payments. In Belgium their activities are mainly related to distribution and transport of goods.

Recommendations on the treatment of goods sent abroad for processing involving non-residents registered for VAT will be addressed – amongst other issues – in a manual on 'goods for processing' to be finalised by Eurostat in 2013. In the context of non-residents registered for VAT

the Task Force recommends fostering cooperation on a bilateral level with regard to multinationals operating subsidiaries in a number of Member States with each subsidiary registered for VAT separately in every Member State in which it carries out a transaction. The Task Force suggests analysing the issue at a company level using company ledgers. A link between trade and business data would be the solution although this may be difficult to implement. An international exchange of micro-data and mirror comparisons should take place at least for large companies.

Implementation. The Task Force was unable to agree how information from non-residents registered for VAT should be used. The Manual recommends that non-resident VAT traders' movement of goods is a form of quasi transit trade. Data available from the VAT records of these traders should be incorporated in the data confrontation exercise and given appropriate weight in the derivation of best estimates.

Where such activity is important for the national estimates, compilers should work directly with IMTS compilers to identify the population of non-residents registered for VAT (usually distinguished via a specific VAT ID). Data from this population should be separately identified in the Intrastat/Extrastat dataset, so that the figures for non-resident VAT registrations can be excluded from national trade figures.

(f) Development of price deflators for processing fees

Industry statistics are not only prepared in nominal terms but also in real terms. Price indices are normally available for goods, but much less information is available about prices associated with assembling these goods. Further analysis on this issue is recommended.

Since the price of goods processed and the price for processing fees will most likely differ, the Task Force recommends the development of price deflators for processing fees.

Implementation. Processing can be classified according to the standard industrial activity (NACE Rev.2, ISIC 2008) of the goods being processed e.g. clothing products, petroleum products, computer products. It is recommended that prices charged for each processing activity are assumed to move in line with the Producer Price Index (PPI) for that manufacturing activity. Processing in the compiling economy can be deflated by the domestically collected PPI, but a different approach will need to be adopted for processing abroad i.e. imports of manufacturing services. In this case, it would be appropriate to use the industry specific PPI in the country undertaking the processing, adjusted for any exchange rate differences. If this level of detail is not available, it is recommended that imports are deflated using the domestic PPI, adjusted for exchange rate movements.

(g) Areas for future work

Future work should focus on the development of operational criteria to distinguish between processing and merchanting, as well as other forms of global manufacturing. This includes especially factory-less goods producers.

Implementation. This manual gives guidance on the criteria to use in compiling goods for processing and related activity. It also discussed merchanting, manufacturing services and quasi transit trade, although in less detail. As the nature of global production continues to evolve it is recommended that the Manual be expanded and updated to reflect the latest developments.

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Annex A — Model survey questions to collect Goods for Processing information

Inward processing

Model questions for resident companies engaged in processing activity.

1. Do you undertake processing? YES/NO
2. Do you undertake processing on own account? (where you take ownership of the inputs) YES/NO
3. Do you undertake processing on behalf of others? (where you do not take ownership of the inputs) YES/NO
4. Do you undertake processing on behalf of non-resident companies, where the non-resident company retains ownership of the inputs? YES/NO
5. If YES, what fee did you charge for the processing service?
6. Which country did you charge?
7. What were the value of the inputs (owned by the non-resident company) when they reached you (if known)?
8. What was the value of the products when they left you?
9. If the difference between the value of the goods when they arrived and when they left is different to the processing fee, please explain why.

Outward processing

Model questions for resident companies that outsource processing abroad.

1. Do you outsource processing work abroad? YES/NO
2. If yes, do you send goods to the non-resident company that undertakes processing on your behalf? YES/NO
3. What was the value of the goods when they left your premises?
4. Did you arrange for other goods to be sent to the processor that did not originate from [your country]? YES/NO
5. If yes, what was the value of these goods and where did they originate?
6. What was the value of the goods after the processing was completed and they were returned to you?
7. What was the value of the fee you paid to the non-resident company undertaking the processing work?
8. If the difference between the value of the goods sent abroad and the value of the goods returned to you after processing is different to the processing fee paid, please explain why.
9. Did you sell the processed goods in the country where the processing was undertaken, or a third country (without the goods returning to you)? YES/NO. If YES, what was the price received?

Note: Compilers need to consider burdens on business when adding questions to surveys. Therefore it is recognised that a subset of these questions will be used when implementing data collection. The IMF's BoP Compilation Guide provides an example of a survey form to collect both imports and exports of processing (manufacturing) services, together with the value of goods received from non-residents for processing, the value of goods returned to non-residents after processing and the value of goods sold in the compiling economy. This is repeated below.

Example of a questionnaire on manufacturing services

Part A: Manufacturing services undertaken by your company

In the period covered by this survey, did your company perform manufacturing (processing) services on goods belonging to foreign owners?

Yes No

If your response to the above question is 'yes', please

- Provide a short description of i) the goods received for manufacturing and ii) the manufactured (finished) goods;
- Complete the table below with information regarding the manufacturing of these goods.

Information on manufacturing services sold by your company

(Report in foreign currency or Newland dollars)

Country of origin	Currency	Value of goods received/dispatched during the quarter		Value of manufacturing services during the quarter		Value of goods sold in Newland on behalf of the foreign owner
		Goods received from non-residents for manufacturing	Goods dispatched to non-residents after manufacturing (*)	Total	of which payment in kind (Estimated value of goods)	
A	B	C-1	C-2	D-1	D-2	E
Total	X					X

(*) Final value of manufactured goods that takes into account any concessions granted (e.g., special taxes and custom regulations).

Part B: Manufacturing services undertaken by non-residents abroad for your company

In the period covered by this study, did your company send goods for manufacturing (processing) abroad?

Yes No

If your response to the above question is 'yes', please

- Provide a short description of i) the goods sent abroad for manufacturing and ii) the returned manufactured (finished) goods;
- Complete the table below with information regarding the manufacturing abroad of these goods.

Information on manufacturing services purchased abroad

(Report in foreign currency or Newland dollars)

Country of manufacturing	Currency	Value of goods dispatched/received during the quarter		Value of manufacturing services during the quarter		Value of manufactured goods sold abroad on behalf of your company
		Goods dispatched to non-residents for manufacturing	Goods received from non-residents after manufacturing	Total	of which payments in kind (Estimated value of goods)	
A	B	C-1	C-2	D-1	D-2	E
Total	X					X

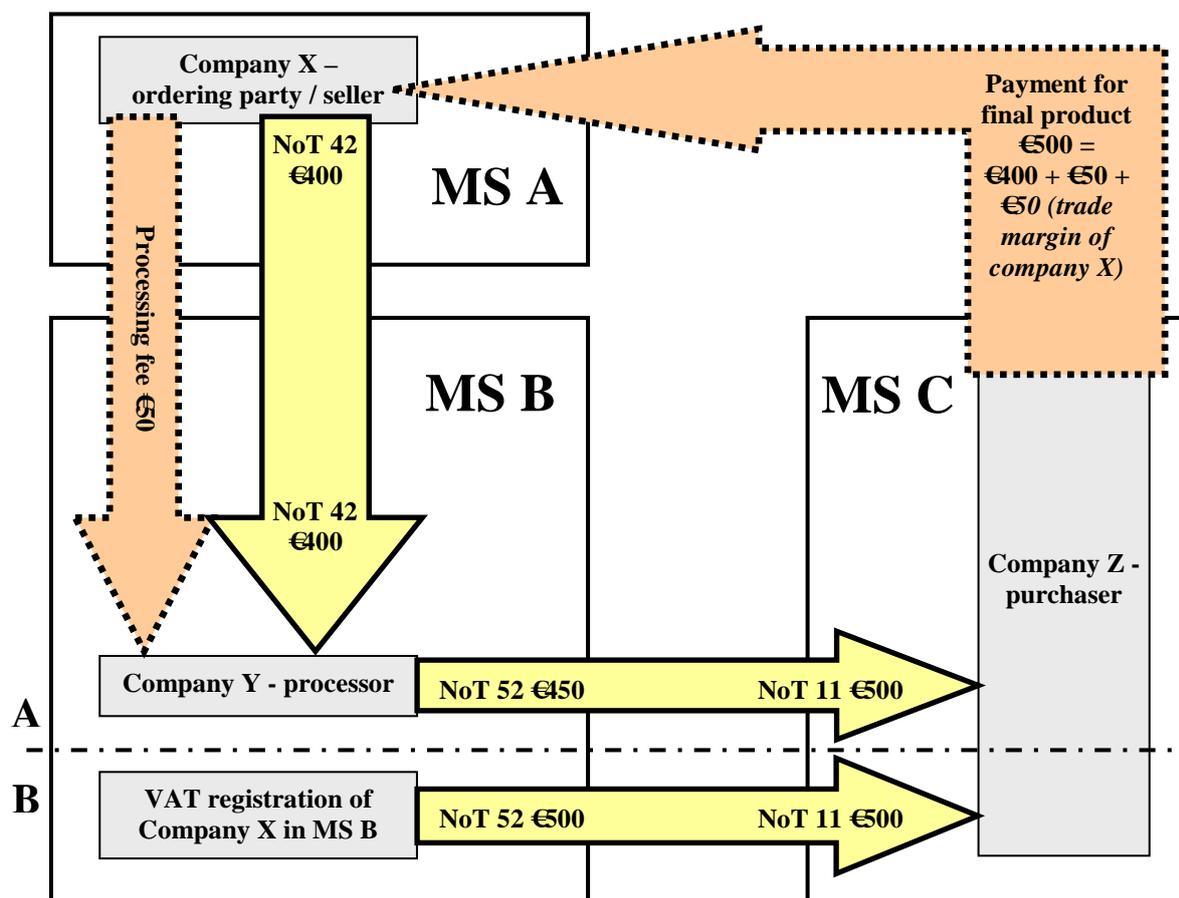
Annex B — Nature of Transaction case studies

Case I — Processing with subsequent sale to another Member State

Company X from Member State (MS) A sends goods worth EUR 400 to a company Y in MS B for processing. Company X is the owner of the goods. Company Y is receiving EUR 50 for work carried out. The final products are sold by company X to a company Z in MS C for EUR 500. The processed goods are delivered from company Y directly to company Z.

In this example, company X retains the ownership of the goods until they are sold on to company Z. Company X imports manufacturing services from MS B and exports goods to MS C. Goods originally sent abroad to MS B need to be excluded from the IMTS dataset as these are goods sent abroad for processing (with no change of ownership). In contrast, the export of goods to MS C will not be captured by MS A's IMTS system (they do not cross MS A's border), so will need to be added to the existing IMTS dataset. Within the Intrastat system, Company X is required to register for value added tax (VAT) in MS B and therefore make Intrastat returns. Therefore data may be available to Country A from MS B's Intrastat system. Alternative sources, including surveys, may also be needed to capture information directly from Company X.

Note: Since an intra-EU supply from MS B to MS C is declared for taxation purpose, the taxable amount reported within Intrastat by the VAT registration of company X in MS B (EUR 500) is higher than the value of goods after the processing (EUR 450); the reported value comprises also the trade margin of company X.



The transactions will be recorded in IMTS and NA/BoP as follows:

	IMTS	ESA 95 (BPM5)	ESA 2010 (BPM6)
MS A	Export of goods to B = EUR 400	Export of goods to B = EUR 400 (*)	Export of goods to C = EUR 500 Import of processing services from B = EUR 50
	Balance = EUR 400	Balance = EUR 400	Balance = EUR 450
MS B	Import of goods from A = EUR 400	Import of goods from A = EUR 400	Export of processing services to B = EUR 50
	Export of goods to C = EUR 450/EUR 500	Export of goods to C = EUR 450	
	Balance = EUR 50/EUR 100	Balance = EUR 50	Balance = EUR 50
MS C	Import of goods from B = EUR 500	Import of goods from B = EUR 500	Import of goods from A = EUR 500

(*) Also under ESA 95/BPM5 adjustments, based on the payment flows, could have been implemented.

Reasoning:

Goods undergo processing in MS B; the processor — resident in MS B — is not owner of the goods because neither Company X nor its VAT registration in MS B transfer ownership. The processed goods do not return to the initial MS of export.

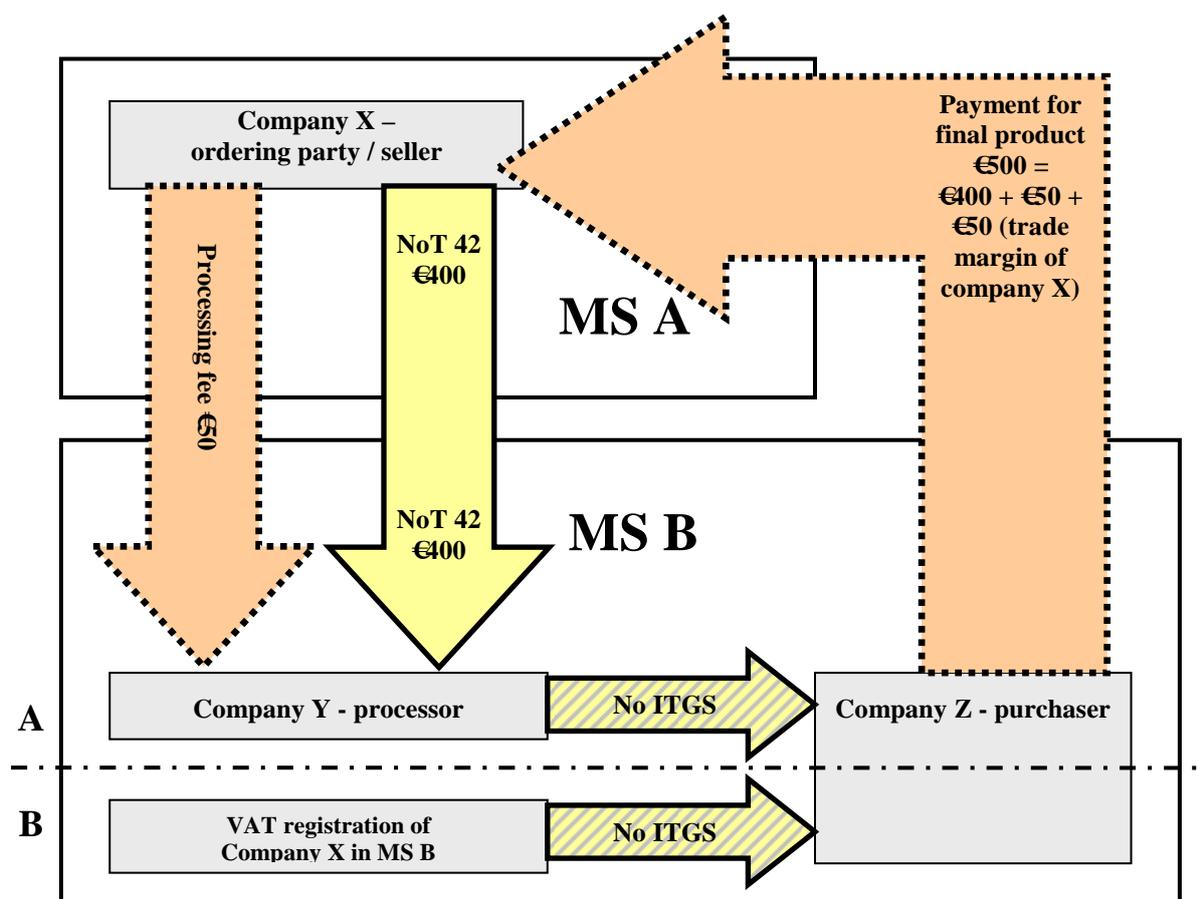
Case II — Processing with subsequent sale in Member State of processing

Company X from MS A sends goods of value EUR 400 to a company Y in MS B for processing. Company Y receives EUR 50 for work carried out. The final products are sold by company X to a company Z in MS B for EUR 500. The processed goods are delivered from company Y directly to company Z; goods are sold in MS B — MS of processing.

In this example, company X retains the ownership of the goods until they are sold on to company Z in MS B. Company X imports manufacturing services from MS B and exports goods to MS B. Goods originally sent abroad to MS B need to be excluded from the IMTS dataset as these are goods sent abroad for processing (with no change of ownership). In contrast, the subsequent export of goods to company Z will not be captured by MS A's IMTS system (they do not cross MS A's border), so will need to be added to the existing IMTS dataset. Within the Intrastat system, Company X is required to register for value added tax (VAT) in MS B and therefore make Intrastat returns. Therefore data may be available to MS A from MS B's Intrastat system. Alternative sources, including surveys, may also be needed to capture information directly from Company X.

In this case company X is required to register for VAT in MS B and thus to report within Intrastat; company Y would report only if company X omitted to register for VAT in MS B. The transaction is considered as transfer of goods⁽⁶⁾ and thus as intra-EU supply from MS A to MS B and the subsequent sale as 'domestic' supply of goods in MS B.

⁽⁶⁾ Article 17(1) of Council Directive 2006/112/EC 'Transfer to another Member State' shall mean the dispatch or transport of movable tangible property by or on behalf of the taxable person, for the purposes of this business, to a destination outside the territory of the Member State on which the property is located, but within the Community.



The transactions will be recorded in IMTS and NA/BoP as follows:

	IMTS	ESA 95 (BPM5)	ESA 2010 (BPM6)
MS A	Export of goods to B = EUR 400	Export of goods to B = EUR 500	Export of goods to B = EUR 500 Import of processing services from B = EUR 50
	Balance = EUR 400	Balance = EUR 500	Balance = EUR 450
MS B	Import of goods from A = EUR 400	Import of goods from A = EUR 500	Export of processing services to A = EUR 50 Import of goods from A = EUR 500
	Balance = – EUR 400	Balance = – EUR 500	Balance = – EUR 450

Reasoning:

Company X does not transfer ownership of goods to the processor in MS B; the processed goods do not return to the initial MS of export.

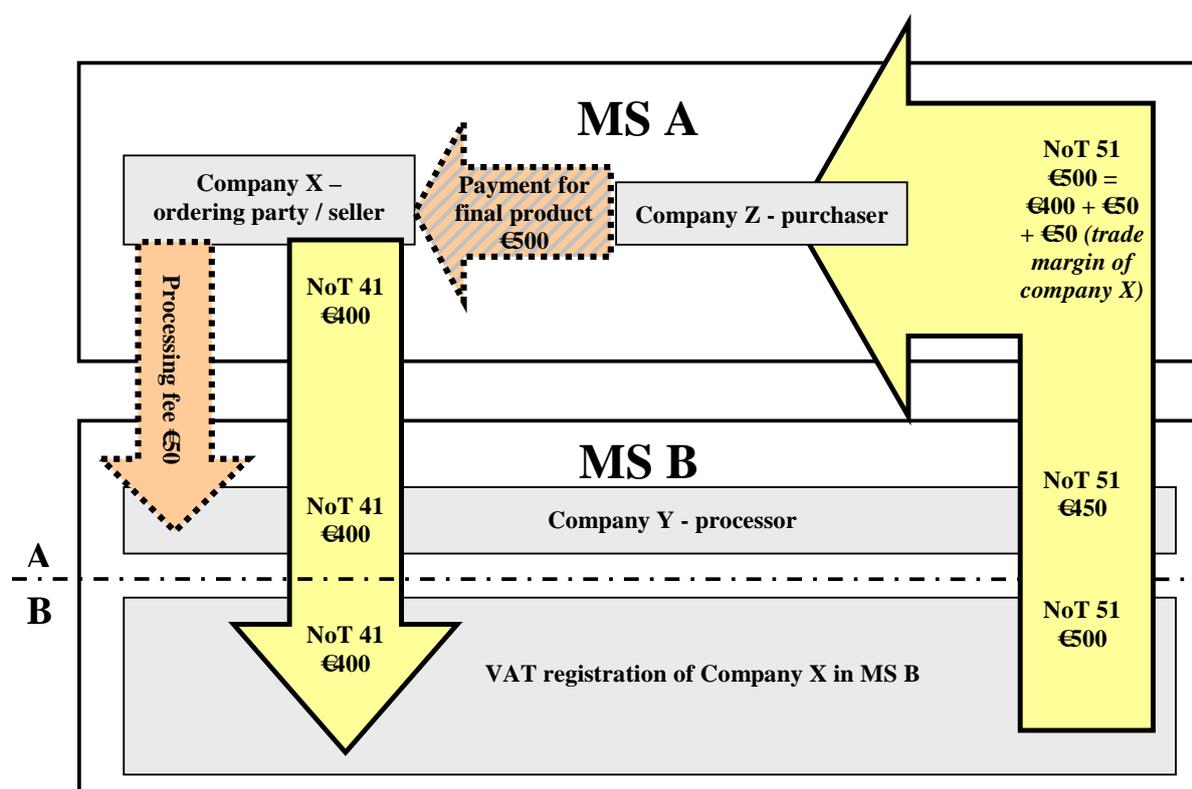
Case III — Processing with subsequent sale within the initial Member State of export

Company X from MS A sends goods of value EUR 400 to a company Y in MS B for processing. Company Y receives EUR 50 for work carried out. The final products are sold by company X to a company Z in MS A for EUR 500. The processed goods are delivered from company Y directly to company Z; the goods return after the processing to the initial MS of export.

In this case, the only cross-border transaction is the import of manufacturing services by company X. The subsequent sale to company Z from company X is a domestic transaction that must be excluded from MS B's IMTS dataset. Even in this case company X is obliged to register for VAT in MS B as the goods do not return to that company ⁽⁷⁾. Company X provides statistical information within Intrastat; company Y would report only if company X omitted to register for VAT in MS B. The transaction is considered as transfer of goods (see footnote 6) and thus as intra-EU supply from MS A to MS B.

It can be assumed that the subsequent sale of the final products will be realised under the VAT registration of company X in MS B as company X – its VAT registration in MS B may deduct VAT due in respect of the supply to it of service ⁽⁸⁾ by company Y. Since the supply of goods to another Member State is exempted from VAT, it is possible that the amount of deductions of the VAT registration of company X in MS B exceeds the amount of VAT due and therefore the registration will be entitled to a refund of the excess ⁽⁹⁾.

Delivery of goods to company Z is considered as intra-EU acquisition in MS A from MS B. Therefore company Z is obliged to report the transaction within Intrastat. Company Z receives a foreign invoice with the VAT number of company X issued in MS B.



⁽⁷⁾ Council Directive 2006/112/EC, Article 17(2):

The dispatch or transport of goods for the purposes of any of the following transactions **shall not be regarded as a transfer** to another Member State:

- (f) the supply of a service performed for the taxable person and consisting in valuations of, or work on, the goods in question physically carried out within the territory of the Member State in which dispatch or transport of the goods ends, provided that the goods, after being valued or worked upon, **are returned to that taxable person** in the Member State from which they were initially dispatched or transported;

⁽⁸⁾ Processing under contract is considered as supply of service – supply of 'work on movable tangible property' according to VAT provisions.

⁽⁹⁾ Council Directive 2006/112/EC, Article 183.

The transactions will be recorded in IMTS and NA/BoP as follows:

	IMTS	ESA 95 (BPM5)	ESA 2010 (BPM6)
MS A	Export of goods to B = EUR 400	Export of goods to B = EUR 400	Import of processing services from B = EUR 50
	Import of goods from B = EUR 500	Import of goods from B = EUR 500	
	Balance = -EUR 100	Balance = -EUR 100	Balance = -EUR 50
MS B	Import of goods from A = EUR 400	Import of goods from A = EUR 400	Export of processing services to A = EUR 50
	Export of goods to A = EUR 450/EUR 500	Export of goods to A = EUR 450/EUR 500	
	Balance = EUR 50/EUR 100	Balance = EUR 50/EUR 100	Balance = EUR 50

Reasoning:

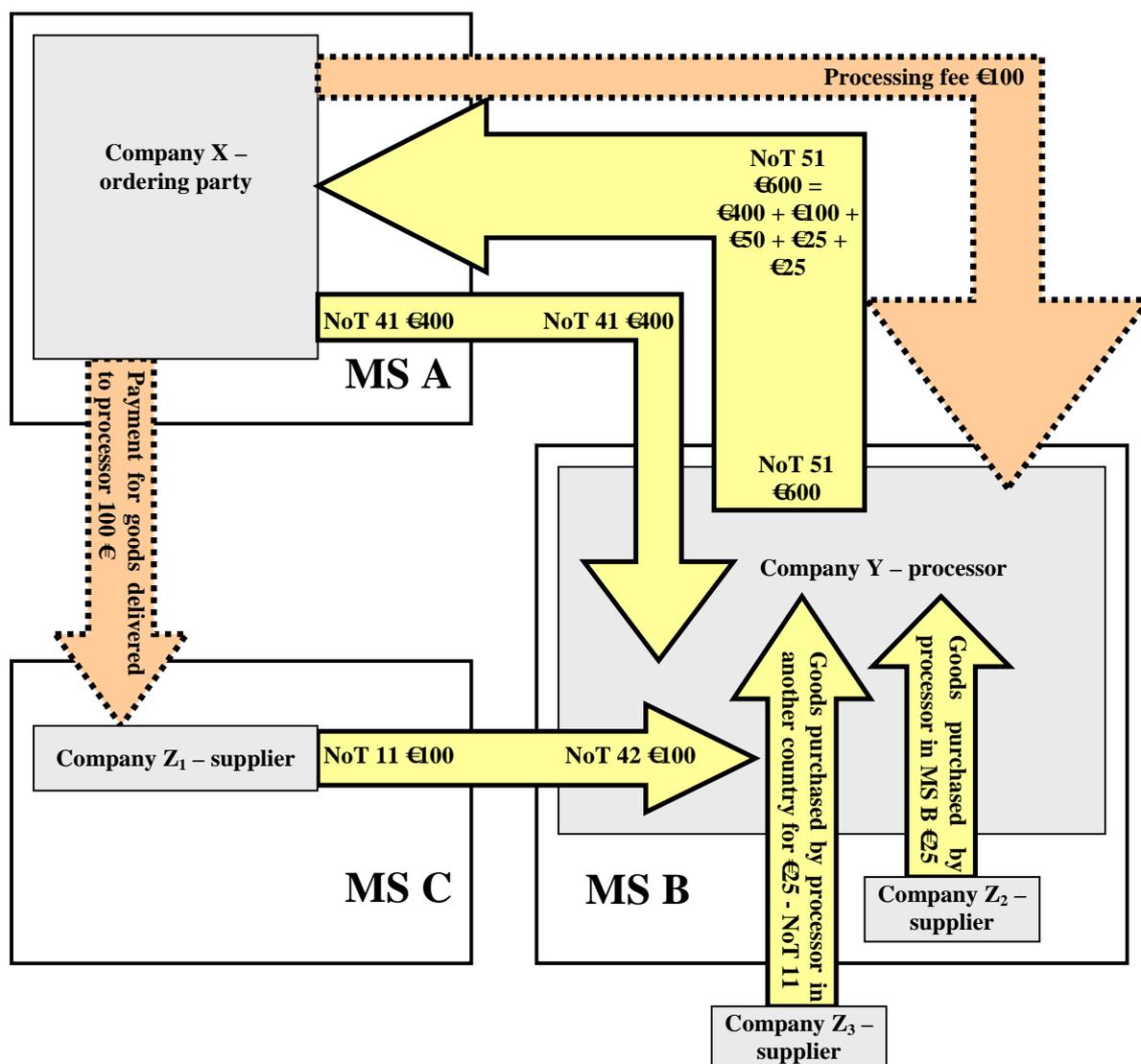
Company X does not transfer ownership of goods to the processor in MS B; the processed goods return to the initial MS of export.

NB: Since an intra-EU acquisition in MS A from MS B is declared for taxation purpose, the taxable amount reported within Intrastat by the purchaser in MS A (EUR 500) is higher than the value of goods after the processing (EUR 450); the reported value comprises the trade margin of company X. It may happen that company Z will not report the NoT 51 as it is not aware that any processing was carried out in MS B.

Case IV — Processing under contract with several suppliers

Company X from MS A sends goods of value EUR 400 to company Y in MS B for processing. There are additional goods of value EUR 100 purchased by company X from a company Z₁ and delivered directly to company Y to be used during the processing.

Company Y purchases goods of value EUR 25 in the domestic market and of value EUR 25 in another country. Company Y receives EUR 100; EUR 50 for the work carried out plus the price of additional goods purchased by itself (EUR 25 + EUR 25). The processed goods are delivered back to company X directly from company Y; goods return after the processing to the initial country of export.



The transactions will be recorded in IMTS and NA/BoP as follows:

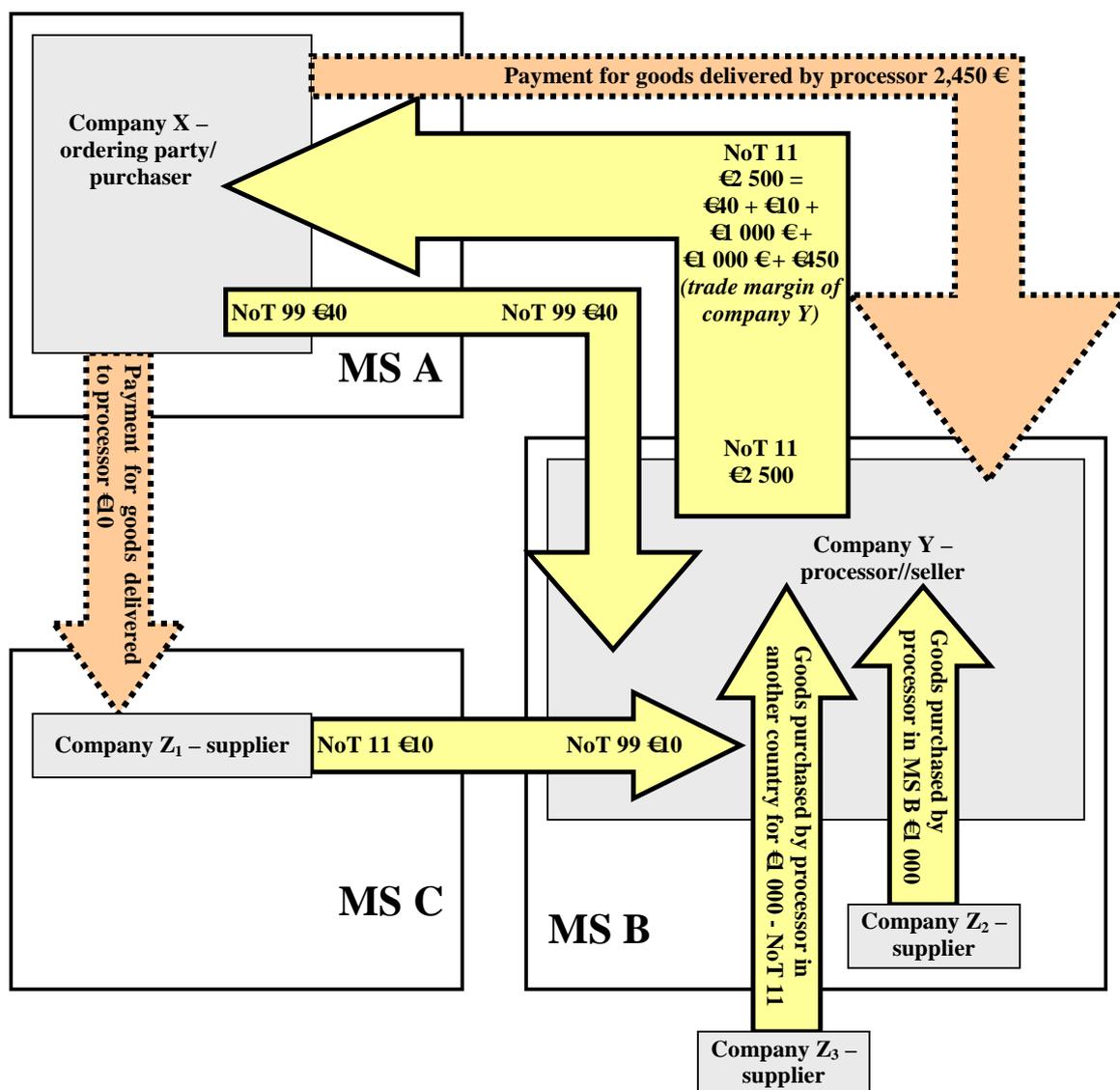
	IMTS	ESA 95 (BPM5)	ESA 2010 (BPM6)
MS A	Export of goods to B = EUR 400	Export of goods to B = EUR 400	Import of goods from C = EUR 100
	Import of goods from B = EUR 600	Import of goods from C = EUR 100 Import of goods from B = EUR 600	Import of processing services from B = EUR 100
	Balance = -EUR 200	Balance = -EUR 300	Balance = -EUR 200
MS B	Import of goods from A = EUR 400	Import of goods from A = EUR 400	Import of goods from another country = EUR 25
	Import of goods from C = EUR 100	Import of goods from C = EUR 100	Export of processing services to A = EUR 100
	Import of goods from another country = EUR 25	Import of goods from another country = EUR 25	
	Export of goods to A = EUR 600	Export of goods to A = EUR 600	
	Balance = EUR 75	Balance = EUR 75	Balance = EUR 75
MS C	Export of goods to B = EUR 100	Export of goods to A = EUR 100	Export of goods to A = EUR 100

Case V — Goods with negligible ⁽¹⁰⁾ value sent for processing

Company X from MS A sends goods of value EUR 40 to company Y in MS B to be used as material/parts in manufacturing of a product. There are additional goods of value EUR 10 purchased by company X from a company Z₁ in MS C and delivered directly to company Y, to be used in the productions as well.

Company Y purchases additional goods of value EUR 1 000 on the domestic market and of value EUR 1 000 in another country, to be used in manufacturing of the final products.

Company Y delivers the final products to company X decreasing the price by the value of goods delivered by company X free of charge. Company Y does not become owner of the goods provided by company X.



Processing activities on a processor's own account are not covered by NoT items 4 and 5 (Processing under contract) and should be registered under item 1 (Transactions involving actual or intended transfer of ownership).

Reasoning:

‘In general, CPA distinguishes between goods produced for own account and the services performed on goods on a fee or contract basis. Specific categories and subcategories, usually coded as zx.yy.9 and zx.yy.99

⁽¹⁰⁾ Note: Negligible is taken to be less than EUR 100.

respectively, have the heading “sub-contracted operations as part of manufacturing of...”. These subcategories include partial or whole operations within the process of production of the products mentioned, carried out by a contractor on materials owned by the principal. These contractors are paid for work done and can include the provision of a **small quantity of additional materials** needed for this work. These subcategories do not include goods of the same category, if produced by a contractor who owns most of the input material’ ⁽¹⁾.

NACE rev. 2 guidelines do not specify the threshold defining when the proportion of goods sent for processing to the final products is so significant that company X is considered a principal ordering processing services and that the processor acts under contract. The following principle to distinguish ‘processing under contract’ and ‘processing activities on a processor’s own account’ for the purpose of IMTS shall be applied:

- When the value of material provided by ordering party without transfer of ownership is **significant**, then the transaction should be treated as **processing under contract**.
- When the value of material provided by ordering party without transfer of ownership is **negligible (less than EUR 100)**, then the transaction should be treated as **processing activities on a processor’s own account**. Activities of the ordering party (principal) should be considered as merchanting and not as goods for processing.

Applying the above mentioned principle, goods statistically leave MS A and enter MS B for temporary use; no exclusion as temporary movement since the processing is carried out ⁽¹²⁾. Therefore the goods sent for processing should be reported on both sides of the transaction under NoT 99. While the goods sent for processing do not change their ownership, the ownership of the finished products is transferred from the processor to the ordering party. That is why the transaction should be reported by both actors under NoT11 (transactions involving actual or intended transfer of ownership). *NB: In general, NoT 9 should be excluded from IMTS when reconciling IMTS data with BoP.*

The transactions will be recorded in IMTS and NA/BoP as follows:

	IMTS	ESA 95 (BPM5)	ESA 2010 (BPM6)
MS A	Export of goods to B = EUR 40	Export of goods to B = EUR 40	Import of goods from C = EUR 10
	Import of goods from B = EUR 2 500	Import of goods from C = EUR 10 Import of goods from B = EUR 2 500	Import of goods from B = EUR 2 500
	Balance = – EUR 2 460	Balance = – EUR 2 450	Balance = – EUR 2 510
MS B	Import of goods from A = EUR 40	Import of goods from A = EUR 40	Import of goods from x = EUR 1 000
	Import of goods from C = EUR 10	Import of goods from C = EUR 10	Export of goods to A = EUR 2 500
	Import of goods from x = EUR 1 000	Import of goods from x = EUR 1 000	
	Export of goods to A = EUR 2 500	Export of goods to A = EUR 2 500	
	Balance = EUR 1 450	Balance = EUR 1 450	Balance = EUR 1 500
MS C	Export of goods to B = EUR 10	Export of goods to A = EUR 10	Export of goods to A = EUR 10

⁽¹⁾ Eurostat, NACE Rev. 2 — Statistical classification of economic activities, p. 9

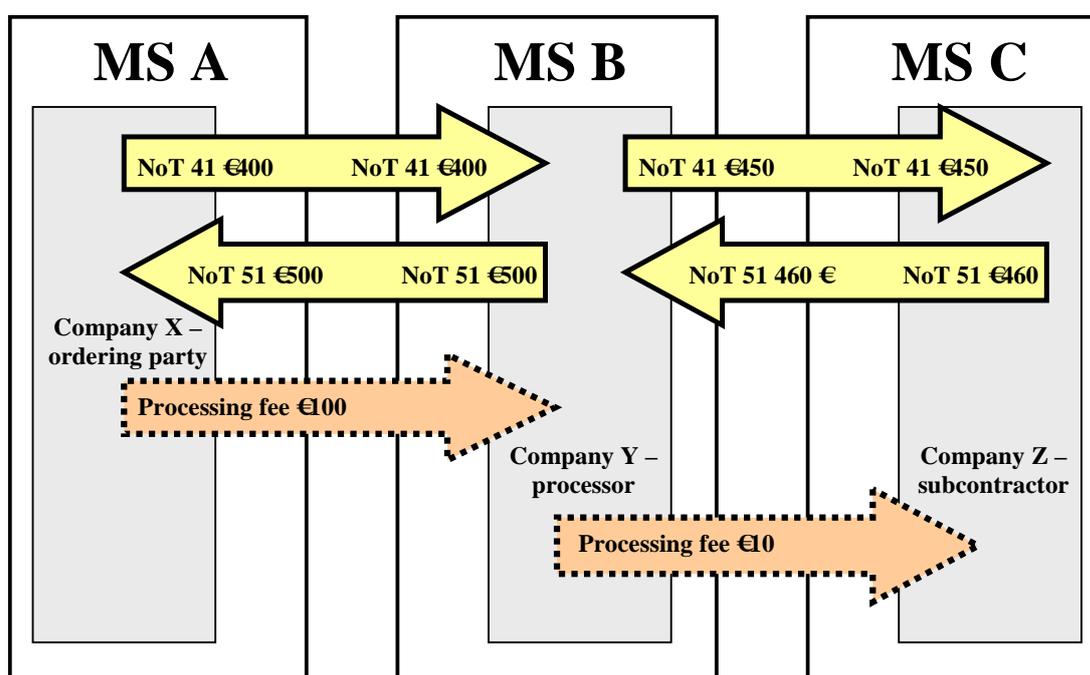
⁽¹²⁾ Commission Regulation (EC) No 1982/2004, Annex I, point (c).

Case VI — Multi-country processing

Alternative A:

Company X from MS A sends goods of value EUR 400 to company Y in MS B for processing. Company X is the owner of the goods. Company Y receives EUR 100 for work carried out. Company Y — the processor from MS B subcontracts an intermediate processing in MS C. The fee for the subcontracted processing is EUR 10 which is paid by company Y to a company Z — subcontractor. When the goods leave MS B their value has increased by EUR 50, i.e. the value of processing already carried out by company Y.

When the goods return to MS B after intermediate processing in MS C, the processing continues. Subsequently company Y delivers the final products to company X.



The transactions will be recorded in IMTS and NA/BoP as follows:

	IMTS	ESA 95 (BPM5)	ESA 2010 (BPM6)
MS A	Export of goods to B = EUR 400	Export of goods to B = EUR 400	Import of process. services from B = EUR 100
	Import of goods from B = EUR 500	Import of goods from B = EUR 500	
	Balance = – EUR 100	Balance = – EUR 100	Balance = – EUR 100
MS B	Import of goods from A = EUR 400	Import of goods from A = EUR 400	Export of processing services to A = EUR 100
	Export of goods to C = EUR 450	Export of goods to C = EUR 450	Import of processing services from C = EUR 10
	Import of goods from C = EUR 460	Import of goods from C = EUR 460	
	Export of goods to A = EUR 500	Export of goods to A = EUR 500	
	Balance = EUR 90	Balance = EUR 90	Balance = EUR 90

	IMTS	ESA 95 (BPM5)	ESA 2010 (BPM6)
MS C	Import of goods from B = EUR 450	Import of goods from B = EUR 450	Export of processing services to B = EUR 10
	Export of goods to B = EUR 460	Export of goods to B = EUR 460	
	Balance = EUR 10	Balance = EUR 10	Balance = EUR 10

Reasoning:

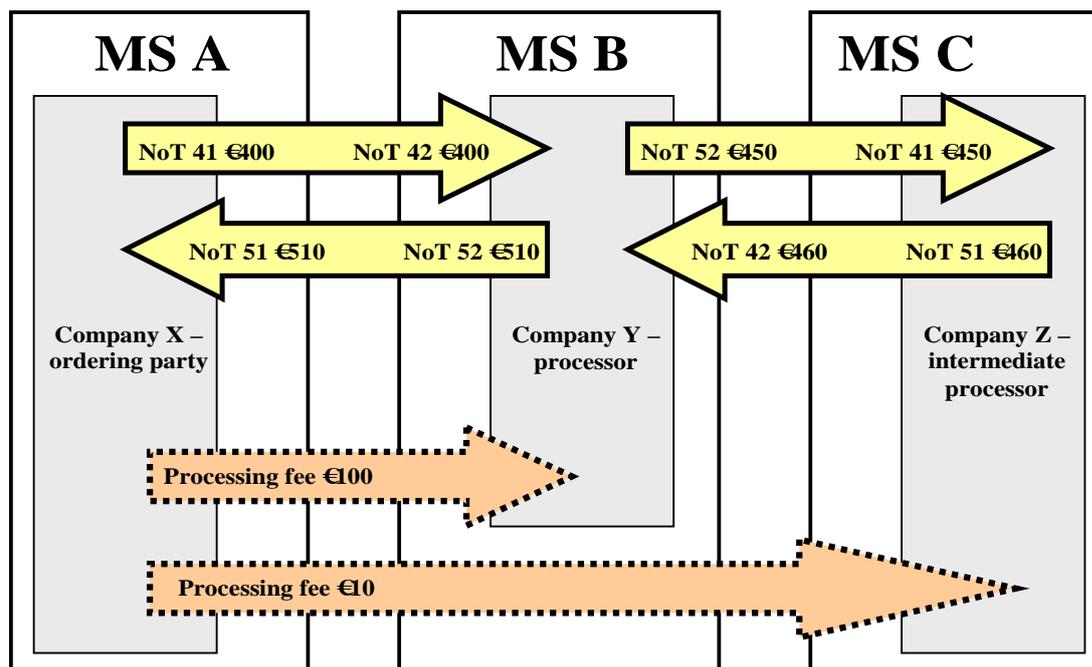
Company X does not transfer ownership of goods to company Y — the processor in MS B. As company Y is not owner of semi-processed goods, it cannot transfer their ownership to company Z — the subcontractor in MS C. Both companies, the initial processor and the subsequent subcontractor do processing under contract. Intermediate processing in MS C will not finish statistically the initial processing started in MS B.

If there was only one processing in MS B, either the first or the last one, i.e. company Y only passes either the material from MS A to MS C or the finished goods from MS C to MS A, the same coding should be used.

Alternative B:

Company X from MS A sends goods of value EUR 400 to company Y in MS B for processing. Company X is the owner of the goods. Company Y receives EUR 100 for work carried out. Company X also subcontracts an intermediate processing in MS C. The fee for the intermediate processing is EUR 10 paid by company X to a company Z — intermediate processor. When the goods leave MS B their value has increased by EUR 50, i.e. the value of processing already carried out by company Y.

When the goods return to MS B after the intermediate processing in MS C, the processing continues. Subsequently company Y delivers the final products to company X.



The transactions will be recorded in IMTS and NA/BoP as follows:

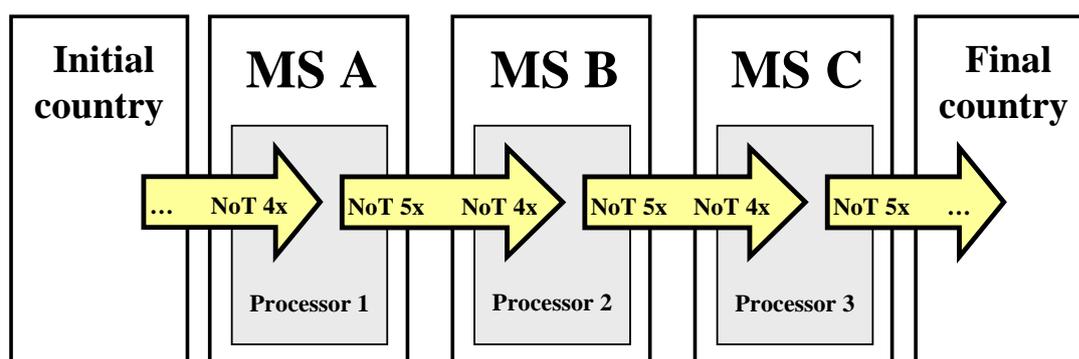
	IMTS	ESA 95 (BPM5)	ESA 2010 (BPM6)
MS A	Export of goods to B = EUR 400	Export of goods to B = EUR 400	Import of process. services from B = EUR 100
	Import of goods from B = EUR 510	Import of goods from B = EUR 510	Import of processing services from C = EUR 10
	Balance = – EUR 110	Balance = – EUR 110	Balance = – EUR 110
MS B	Import of goods from A = EUR 400	Import of goods from A = EUR 400	Export of processing services to A = EUR 100
	Export of goods to C = EUR 450	Export of goods to C = EUR 450	
	Import of goods from C = EUR 460	Import of goods from C = EUR 460	
	Export of goods to A = EUR 510	Export of goods to A = EUR 510	
	Balance = EUR 100	Balance = EUR 10	
MS C	Import of goods from B = EUR 450	Import of goods from B = EUR 450	Export of processing services to A = EUR 10
	Export of goods to B = EUR 460	Export of goods to B = EUR 460	
	Balance = EUR 10	Balance = EUR 10	

Reasoning:

Company X does not transfer ownership of goods to company Y — the processor in MS B nor to company Z — the intermediate processor in MS C. Both companies, the initial processor and the subsequent processor, do processing under contract. Intermediate processing in MS C will finish statistically the initial processing started in MS B.

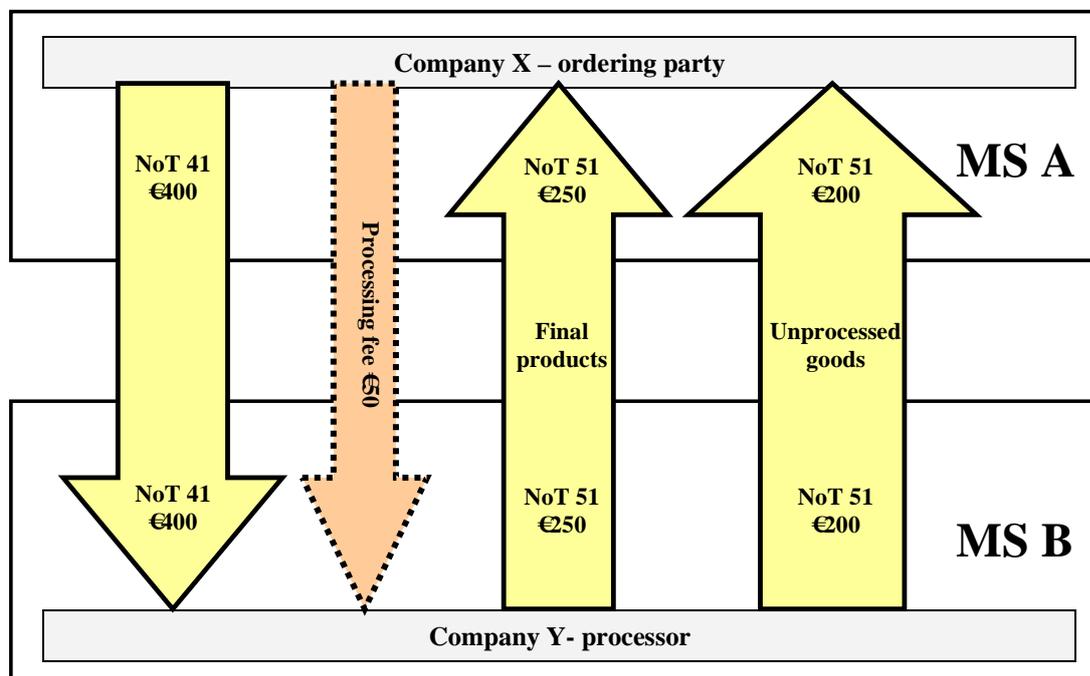
The same coding should be used for case when the goods return in MS B but processing is carried out by another company.

NB: The proposed coding enables one to identify the processing operation in the Member States, where the processing occurs, without regard to whether the goods return to the initial company or not. Usage second digit of NoT code should reflect contractual relationship between ordering party and processors or processors themselves and thus follow the principle applied in the above described alternatives. Recording of the transaction in initial and final country (which could be the same ones or different) should follow the coding described in the case I, II and III reflecting the possible transfer of ownership.



Case VII — Return of unprocessed goods

Company X — ordering party from MS A — sends goods of value EUR 400 to company Y in MS B for processing. Company X owns the goods. Company Y receives EUR 50 for work carried out. Half of the goods undergo processing while the other half return to company X, unprocessed.



Reasoning:

Company X does not transfer ownership of goods to the processor in MS B; the goods return to the initial MS of export in unaltered state.

Case VIII — Processing vs. waste disposal

Waste materials (including recoverable material) are in the scope of IMTS to be recorded as border-crossing goods transactions since waste is not mentioned on the list of exclusions.

The IMTS definition of ‘processing’ covers operations (transformation, construction, assembling, enhancement, renovation...) with the objective of producing a new or really improved item. Therefore it is expected that the value of goods sent for processing increases by the value added by processing including the work carried out and the added material if any.

However, in the case of waste treatment the value of goods after ‘processing’ either remains the same or decreases by the value of rendered services. If the initial value is negligible then the value of goods after the processing might be negative.

Reasoning:

‘The recovery of waste, i.e. the processing of waste into secondary raw materials is classified in NACE group 38.3 (Materials recovery). While this may involve physical or chemical transformations, it is not considered to be a part of manufacturing. The primary purpose of these activities is considered to be the treatment or processing of waste and they are therefore classified in Section E (Water supply; sewerage, waste management and remediation activities). However, the manufacture of new final products (as opposed to secondary raw materials) is classified in manufacturing, even if these processes use waste as an input. For example, the production of silver from film waste is considered to be a manufacturing process.’⁽¹³⁾

The distinction between waste processing and waste disposal is based on the definitions and guidelines used in

⁽¹³⁾ Eurostat, NACE Rev. 2 — Statistical classification of economic activities, p. 112

NACE rev. 2. So if the operation is classified within the NACE group 38.3 — *Materials recovery* then it shall be considered as processing from the IMTS point of view. Moreover dismantling of automobiles, computers, televisions and other equipment to obtain and re-sell usable parts ⁽¹⁴⁾ (class 46.77) should be regarded as processing in the IMTS. NoT coding shall follow the rules described in the previous cases.

If the operation is classified within the NACE group 38.2 — *Waste treatment and disposal*, then it shall not be considered processing and NoT code 99 — *Other transactions which cannot be classified under other codes* should be used. If the waste leaves a Member State temporarily; no exclusion as temporary movement since the processing (transformation) will be carried out.

Cases from NACE group 38.2 when some usable products can be obtained after the specific treatment of waste may be also considered processing (e.g. 38.21.29 [...] processing of agricultural and other waste in order to obtain biogas, 38.22.19 [...] these procedures may lead to a disposable residual or result in the recovery of a recyclable material). In such case the same coding of NoT

NB: In general, NoT 9 should be **excluded** from IMTS when reconciling IMTS data with BoP.

⁽¹⁴⁾ NACE class 38.31 — Dismantling of wrecks. This class includes dismantling of wrecks of any type (automobiles, ships, computers, televisions and other equipment) for materials recovery. This class excludes:

- disposal of used goods such as refrigerators to eliminate harmful waste, see 38.22
- dismantling of automobiles, ships, computers, televisions and other equipment to obtain and to re-sell usable parts.

Annex C — IMTS Supplement to the Compiler Manual — use of customs procedures

Example 1: A company in country A exports automotive parts for assembly by an affiliate in country B. Finished vehicles are shipped back from B to A. Ownership of the goods remains with the company in A for the entire process.

Data source (A): Customs declaration at the border of country A

Part A.1 (Before processing). Customs A records exports of automotive parts under the outward processing customs procedure. There should be an indication on the form for the approximate date of return. The declaration form should also have the company of country A as the company liable for customs obligations.

Part A.2 (After processing). Customs A records imports of vehicles as a regular import. The company of country A will request duty exemption on the basis of the previously declared outward processing form.

Data source (B): Customs declaration at the border of country B

Part B.1 (Before processing). Country B registers imports of automotive parts under the inward processing customs procedure. Again the company of country A would be recorded as the liable party.

Part B.2 (After processing). Country B registers exports of vehicles after inward processing. Officially, the company of country A should be the company on record.

Data source (C): Enterprise surveys by the statistical authority of country A

Enterprises involved in outward processing need to be identified. If companies can be identified on customs declarations, companies requesting the outward processing procedure could be selected for survey.

Data source (D): Enterprise surveys by the statistical authority of country B

Enterprises involved in inward processing need to be identified. If companies can be identified on customs declarations, companies requesting the inward processing procedure could be selected for survey.

On the importing side (country B) in example 1, the customs declarations could properly record goods for inward processing, especially if there is a tax incentive to do so. For countries engaged in bilateral or multilateral agreements where such tax incentives are diminishing, it may be necessary to conduct a survey to find out if the inward processing procedure is still used by the traders. According to the Kyoto Convention compensating products subsequently exported should be linked to the goods originally imported for inward processing. Data compilers should find out from customs how the link between those declarations is established in practice.

Whereas BOP compilers may be requesting additional information on change of ownership, verifying ownership of the traded goods may be difficult. For instance, national legislation may require the foreign company to register a resident company that might assume ownership of the goods as representative in the transactions. Data compilers should be aware of such requirements and practices.

To adequately conduct enterprise surveys on outward processing, companies sending goods for processing need to be separately identified. These companies should also be asked to provide information about the processing service they purchased from abroad.

For inward processing, a survey of enterprises that provide processing services should be conducted. The enterprises need to be identified and should be requested to give details on imported and exported products and the processing fees.

In conclusion, four different data sources spread over two countries are involved in example 1. Bilateral cooperation and sharing of data sources would be helpful, but national legislation may prove a serious obstacle for such cooperation.

Example 2: A company of country A exports automotive parts for assembly by an affiliate in country B. Finished vehicles enter country B. Ownership of the goods changes after the finished goods are sold.

Data source (A): Customs declaration at the border of country A

Part A.1 (Before processing). As in example 1, customs A records exports of automotive parts under the outward processing customs procedure with an indication of the approximate date of return. The declaration form should also have the company of country A as the company liable for customs obligations.

Part A.2 (After processing). At best, the company of country A will be requested to file a customs form to terminate the outward processing.

Data source (B): Customs declaration at the border of country B

Part B.1 (Before processing). Customs B records imports of automotive parts under the inward processing customs procedure. The company of country A would be recorded as the responsible company.

Part B.2 (After processing). Customs B records an entry record for goods coming into the domestic economy. This declaration terminates the inward processing procedure and the buyer would need to pay import duty, if applicable. The company of country A would still be the exporting company and a domestic company or individual would be the importer.

The same compilation issues explained in the previous example apply. It will be almost impossible for the country sending the goods for processing to connect its export declaration to the subsequent exportation of the finished goods to a third country.

For the country receiving goods for inward processing, more information will potentially be available and, as stated previously, it may prove possible to link the imports of the finished products into the domestic economy with the original imports declaration of the goods for inward processing. In the same way, it might be possible to link the exports of the finished goods to a third country with the original imports declaration.

Annex D — Reconciliation between IMTS source data and trade in goods on a BoP and NA basis

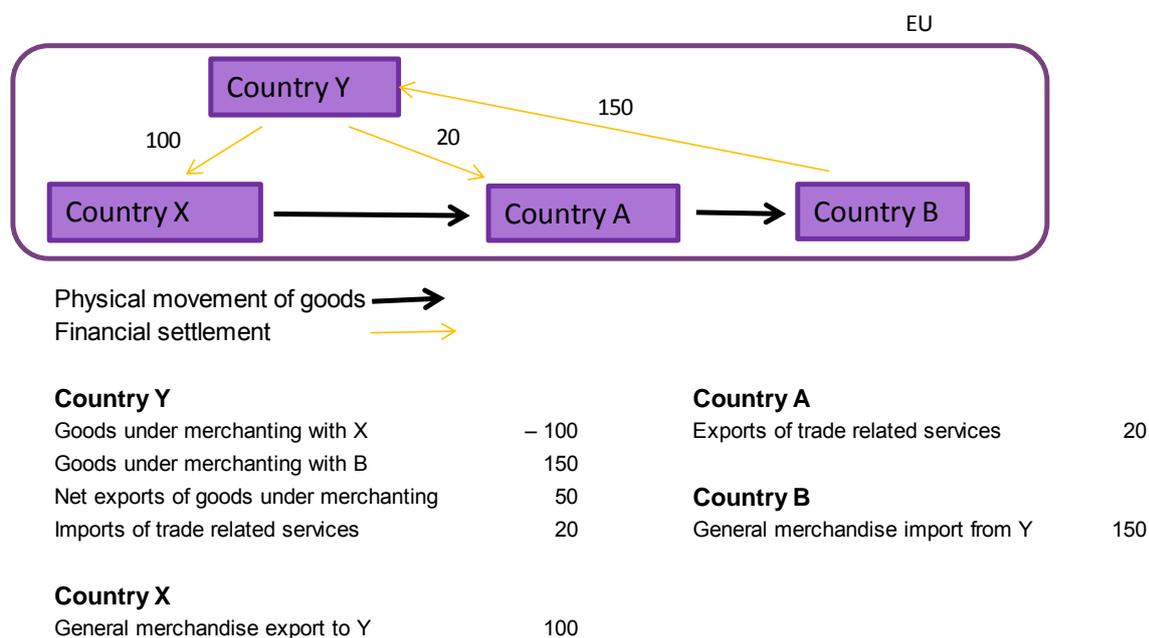
Reconciliation between IMTS Source Data and Goods on a BoP (and NA) basis ⁽¹⁵⁾

	Exports	Imports
Merchandise trade statistics as provided in source data		
+ Goods acquired from other economies for processing abroad	n/a	
+ Goods sold abroad after processing in other economies		n/a
+ Illegal goods	n/a	
+ Goods procured in ports		
+ Inventories of goods held abroad		
+ Fish catch (etc) sold from resident operated vessels in foreign ports		
+ Net exports of goods under merchanting		n/a
+/- Goods lost or destroyed in transit		
- Migrants' personal effects		
- Goods imported for construction projects by non-resident enterprises		
- Goods for repair or storage without change of ownership		
- Goods sent abroad or returned after processing without change of ownership		
- Returned goods		
+/- High-value capital goods, if delivery differs from change of ownership		
- CIF/FOB adjustment		

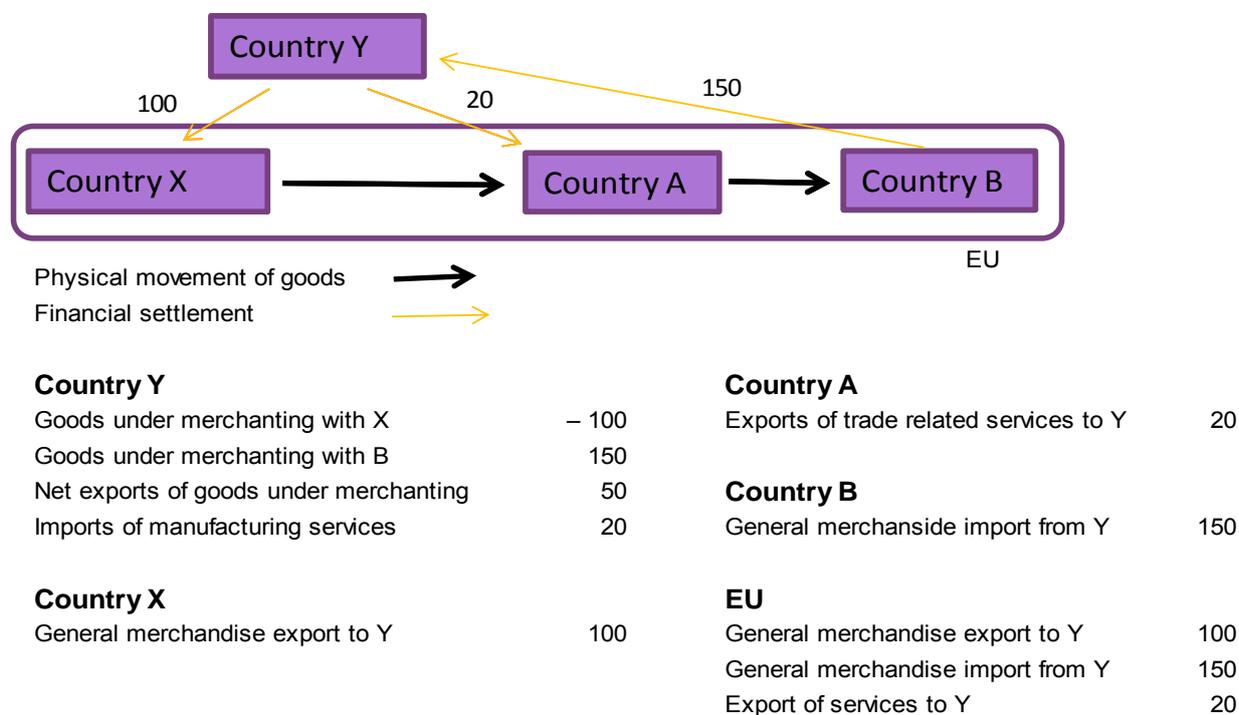
⁽¹⁵⁾ Table is from International Merchandise Trade Statistics: Supplement to the Compilers Manual (UNSD, 2008).

Annex E — Extra examples of quasi transit trade

Example 3: Intra EU recording of quasi transit in national accounts and national BoP



Example 4: Intra EU recording of quasi transit trade in national accounts and national BoP



Glossary

CIF	Cost, Insurance and Freight
CPA 2008	Classification of Products by Activity 2008
BPM5	IMF Balance of Payments Manual (5 th edition)
BPM6	IMF Balance of Payments and International Investment Position Manual (6 th edition)
DMES	Directors of Macroeconomic Statistics
ESA 95	European System of Accounts (1995)
ESA 2010	European System of Accounts (2010)
FOB	Free on Board
IMTS 2010	International Merchandise Trade Statistics, Concepts and Definitions 2010
IMTS 2010-CM	International Merchandise Trade Statistics, Compilers Manual, Revision 1
ISIC 2008	International Standard Industrial Classification of all economic activities (2008)
ITGS	International Trade in Goods Statistics
MSITS 2010	Manual on Statistics of International Trade in Services (2010)
n/a	not applicable
NACE Rev.2	European Classification of Economic Activities (Rev.2)
NAWG	National Accounts Working Group
n.i.e	not included elsewhere
SNA 93	System of National Accounts (1993)
SNA 2008	System of National Accounts (2008)
SUT	Supply and Use Tables

Goods sent abroad for processing — includes goods for assembly, packing, labelling, or processing by an entity that does not own the goods concerned. Both inward and outward movements should be tracked to help identify associated manufacturing services on physical inputs owned by others.

Goods under merchanting — purchase of goods by a resident of the compiling economy from a non-resident, with the subsequent resale of the same goods to another non-resident, without the goods entering the compiling economy.

International merchandise trade statistics (or foreign trade statistics) — recording all goods which add to or subtract from the stock of material resources of a country by entering (import/arrival) or leaving (export/dispatch) its economic territory.

Manufacturing services on physical inputs owned by others — covers processing, assembly, labelling, packing services etc. undertaken by enterprises that do not own the goods concerned.

Quasi transit trade — goods imported from non-member countries into a Member State of the European Union / euro area by an entity which does not acquire ownership of the goods and then dispatched to another Member State of the European Union / euro area;

and

Goods arriving from a Member State of the European Union / euro area which are then exported to third countries by an entity which is not considered an institutional unit.

Re-exports — foreign goods that were imported and subsequently exported, without substantial transformation.

Trade — exports and imports of goods and services used in national accounts and balance of payments statistics.

Trade in Goods — cross-border exports and imports of produced items, where ownership passes between a resident and non-resident unit. Includes general merchandise, net exports of goods under merchanting and non-monetary gold.

Trade in Services — cross-border transactions in services between a resident and non-resident unit. Ownership rights cannot generally be established. Includes manufacturing services on physical inputs owned by others.

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