

PROCESSING OF GOODS AND RELATED FLOWS
Note prepared by WTO's International Trade Statistics Section

I. INTRODUCTION

The aim of this paper is to initiate discussion within the community of trade statisticians and customs specialists on the issue of measuring processing activities in merchandise trade where the goods do not change ownership. The reasons for discussions are threefold:

- First, many trade statisticians encounter difficulties in the separate identification of goods sent or received to/from abroad which have undergone offshore processing (either for minor or substantive transformation), and to assess the actual substantial change brought to the good;
- Second, the draft revisions of the Balance of Payments Manual (BPM) and the System of National Accounts (SNA) conceptual guidelines terminate an exception to the principle of change in ownership which had been in place in the previous editions of these manuals.¹ This notably emphasises a fundamental difference in which goods undergoing processing abroad are regarded within the International Merchandise Trade Statistics: Concepts and Definitions, Revision 2 (IMTS, Rev. 2) on the one hand (physical movements of goods and country of origin), and BPM and SNA on the other (change of ownership principle and residence of owners); and
- Finally in the context of globalisation and the offshoring of industrial processes there is an increasing interest in learning more on the activities of processors and associated international flows.

Merchandise trade statistics being a central source for estimating the flows necessary with respect to the three points above and in the light of the different treatment of goods undergoing international processing, trade statisticians are asked to explore the various possibilities for recording and adjusting statistics on international processing trade.

II. TREATMENT IN INTERNATIONAL STATISTICAL STANDARDS

IMTS, Rev. 2 concentrates on physical movements of goods and their origin, which among others, is the relevant information for application of preferential trade schemes. When a good is imported after having undergone substantial processing in a foreign country, it is considered as originating from this country even when it actually remained the property of the same owner.

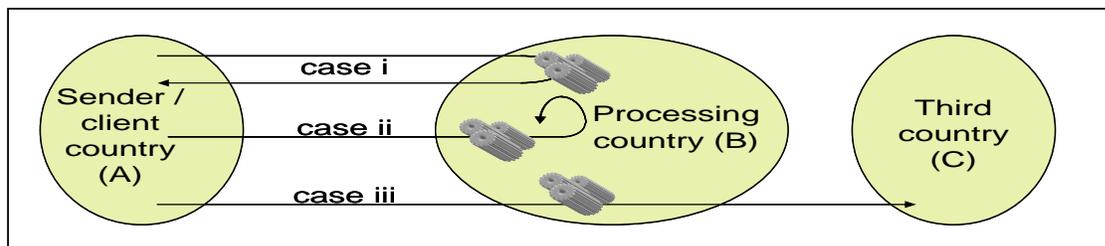
According to the Kyoto Convention, goods crossing the border for inward processing (into a free circulation area or industrial free zone) or temporary exports for outward processing need to be included in merchandise trade statistics. This requires a separate registration of the imported goods under the respective customs regime and the registering of the country of origin in accordance with the country's rules of origin. Countries normally use either the value added (a specific percentage of the value of the product need to be added through processing in the country of origin, e.g. 40%) or the result of the processing² (change in tariff classification) as a principle to determine the country of origin.

¹ A change in ownership was imputed in case of "substantial processing" in SNA 1993, and systematically in BPM5.

² If the result of the processing requires a change in the tariff classification for the processed product, that is, if the product's physical properties are changing, the processing country will become the new origin.

BPM (and SNA) is concerned as to whether such goods are sold internationally or not (change in ownership), and if they are, the economy of residence of the buyer/seller needs to be identified.

As illustrated in the chart below, goods sent abroad for processing may subsequently (i) return to the country of origin, (ii) remain in the country of processing, or (iii) be shipped to a third country.



In line with the principles outlined above IMTS, Rev. 2 and BPM/SNA provide for recording transactions as represented in table 1. The table illustrates recording in IMTS, Rev. 2 depending on whether processing is "substantial" (hence confers origin) or not (re-exports and related flows). For IMTS, Rev. 2 practices illustrated in table 1, flows are allocated by origin and last known destination. It is assumed that the last destination and origins are known to all transactors.

Table 1: Classification of flows relating to the processing of goods in IMTS, Rev. 2 and revised BPM/SNA³

Case	IMTS, Rev. 2		BPM/SNA	
	no substantial processing	substantial processing	Goods	Processing services ⁴
i	A: exports to, then reimport from B B: import from, then re-export to, A	A: export to, then import from B B: import from, then export to, A	A and B: no flow as goods remain the property of sending country (A)	A: import from B B: export to A
ii	A: export to B B: import from A	A: export to B B: import from A	A: export to B B: import from A (including processing fee)	
iii	A: export to C B: import from A, re-export to C C: import from A	A: export to B B: import from A, export to C C: import from B	A: export to C (including processing fee) C: import from A (including processing fee)	

Although in case (i) flows are not to be included in the balance of payments goods account it is necessary to identify these flows in order to "convert" merchandise trade statistics to BPM/SNA standards (i.e. merchandise trade statistics being the main source for the general merchandise item of the balance of payments statement it will be necessary to identify these flows in merchandise trade statistics in order to subtract them for the needs of BPM/SNA). A new requirement of BPM/SNA for case (i) is the assessment

³ The BPM/SNA revision refers to case i only. Under previous guidelines, gross flows of goods moving from the sender's country (the client for the processing service) and returning to it needed to be identified separately for recording in a dedicated item, and recording a service transaction was not required.

⁴ Gross values of goods sent abroad for processing without change of ownership may be identified as supplementary items in economies where they are significant

of the processing service provision/processing fee (as already recommended in previous guidelines for cases (ii) and (iii)).

III. THE ISSUES

A. TERMINOLOGY – LINKS BETWEEN DIFFERENT RELEVANT DOMAINS

Using merchandise trade statistics in estimating the processing of goods and related flows implies to identify clearly the links between, on one hand, a statistical system where the differentiation of domestic and foreign goods is primarily based on criteria of substantial transformation (IMTS, Rev. 2 para 71), and on the other hand a statistical system based on a pure change of ownership principle. The processing of goods and related flows are linked to a number of different concepts in merchandise trade statistics and customs procedures:

- Industrial free zones, commercial free zones. Note that processing is not limited to free zones and is also performed within the free circulation area and premises for inward processing;
- Processing of goods also encompasses the concepts of reimports, re-exports, imports for re-exports etc, where "processing" consists of minor operations that do not confer new origin to goods;
- Customs procedures of most relevance are temporary admission for inward processing; temporary exportation for outward processing; free zones. However, depending on practical considerations, goods for processing can also enter/exit a country under the general procedures of clearance for home use and outright exportation; and
- Other procedures might be worthwhile exploring: admission for processing of goods for home use; reimport in the same state, etc.

B. RECORDING AND VALUATION

Identification of related goods flows

Statistics on goods undergoing international processing are useful for reconciliation between merchandise trade and balance of payments statistics, preparation of supply and use tables, analysis of international processing activities and trade dispute settlement.

Ideally, goods sent abroad with intention of reimporting them after processing should be identified as well as goods returning after processing. Corrections to exports are necessary to adjust for goods that eventually do not return (recorded as goods exports – cases (ii) and (iii)). In collection systems, where only goods returning after processing are identified, correction of export flows could be problematic in terms of assessing their initial export value.

The new rule in BOP/SNA for recording goods for processing implies, in case (i), exclusion of gross flows from the *goods* item (these are currently to be included in merchandise trade statistics and it could eventually be proposed to record this information in BOP in future as a supplementary item).⁵

Valuation of the processing service

Recording service fees for goods returned after processing (case (i)) is similar in substance to the (unchanged) BPM treatment of goods that eventually are sold to residents of the processing country (case (ii)) or sold abroad (case (iii)). However deriving the service charge as the net of gross *goods for processing* flows does not seem a satisfactory option, because:

⁵ Information requirement for this purpose are not more than with previous guidelines.

- matching of goods for processing and their resulting products when they enter and exit the processing country in different statistical periods could be problematic; and
- between the time of its import and the time of its export, goods might undergo significant value changes independent from the processing fee (e.g. holding gains and losses).

Borderline issues

In cases of processing contracts, not all inputs might originate from the client's country:

- the client may provide only a part of the necessary input, while the processing enterprise would need to procure the rest by its own means; or
- even where the client provides all the necessary input, they do not necessarily originate from its own economy. The client might order these goods from various countries abroad and have them shipped directly to the country of processing. While between the client and the processing enterprise the only transaction is the supply of a service, the actual movement of goods observed in customs statistics is misleading and would suggest that a change in ownership has indeed taken place (case (ii)). Actually the goods once processed could then be exported to the country of the owner.

IV. POSSIBLE SOURCES OF INFORMATION

IMF's *Balance of Payments Compilation Guide* (1995) paragraph 136 describes the information that should be recorded in the context of a gross recording of *goods for processing* (previous BPM5 guidelines). These practices should also be sufficient under the new recording rules: among others gross flows should be valued f.o.b., transportation and insurance costs should be measured separately, as well as the value of the processing and details on goods not returned to the client should be collected.

Customs statistics, International Transaction Reporting Systems (ITRS) and enterprise surveys are three possible sources to collect the necessary material relating to the processing of goods. In recent years, a number of countries have implemented improved compilation systems on processing trade flows, and could have useful experience to share.

Customs statistics

Identification of goods sent abroad

In countries where such customs procedures exist as temporary admission for inward processing, temporary exports for outward processing and free zones, these permit the identification of goods not changing ownership. However, some goods bound for processing may enter under different procedures. Additional sources are necessary to identify these goods.

Identification of ownership

An area worth exploring is whether customs can obtain additional information on origin and destination. In customs declarations, importers are requested to indicate as origin the country where goods have undergone substantial processing. Similarly, for the exporting country the last known destination of goods to be processed abroad should be the processing country (IMTS, Rev. 2, para. 227). Such a treatment does not provide an appropriate indication of change in ownership of goods undergoing processing abroad. It would therefore be useful to request in custom forms (as supplementary information):

- the country of "primary" origin ("ante-processing origin", i.e. origin of goods before processing) for imports; and

- the country of "ultimate" known destination ("Post-processing destination", i.e. destination of goods after processing) for exports.

These identifications should enable a more complete analysis of processing trade and also a proper allocation by partner country according to the change of ownership (e.g. BPM recording of case (iii) by country C). It would also permit the subtraction of the value of goods returned to their origin after processing for BPM purposes (e.g. recording of flow (i) by country A).

International Transactions Reporting System

Direct information on processing fees, reflected as a payment from the client to the processor, could be obtained from an ITRS. ITRS might also provide a useful source of information to identify those goods that actually change ownership after processing. By identifying the country of counterpart to the payment, it could also provide a useful complementary source of information on the "ultimate" destination and the "primary" origin of goods.

Enterprise surveys

The *Balance of Payments Compilation Guide* suggests that the "number of enterprises that undertake processing or send goods abroad for processing may be relatively few. Therefore, enterprises may be surveyed about processing activities in a separate survey or as a supplement to [merchandise trade statistics] or to an ITRS." (para 136).

QUESTIONS:

In the context of information needs and the analysis provided on the recording of goods sent abroad for processing, merchandise trade statisticians and customs specialists are asked to share their experiences or thoughts on issues outlined in this note. A number of questions are included to help start discussions:

- How do customs authorities identify the goods that are imported for processing and then exported from the time of import to the time it is exported?
- Do you agree with considerations relating to section III.B on the identification of goods flows.
- Do you identify separately goods sent for processing between related enterprises? How are they identified?
- Are there additional concepts in IMTS, Rev.2 that are not identified in the list of section III.A?
- What would be the best solution to estimate the processing fee (i.e. the processing service provided) from the perspective of merchandise trade statisticians?
- How could merchandise and BPM/SNA statistics accommodate the fact that no inputs (or parts) could originate from the country of the owner but from third countries or the

country of the processor? How can the reconciliation between standards be ensured (linked to merchanting – global manufacturing below)?

- What is the view of experts on considerations outlined in Section IV concerning additional inquiries in custom forms? Would compilers foresee any difficulty for collecting such information? What would be the drawbacks of such a treatment?
- How could the identification of processors be ensured? Is this something that trade statisticians could be interested in?

Additional questions:

Merchanting is defined as the "process by which a good is purchased by a resident (of the compiling economy) from a non-resident and then subsequently resold to another non-resident; during the process the good does not enter or leave the compiling economy"⁶. Management of global manufacturing may arise as merchanting (e.g. a manufacturer from A purchases goods from its subsidiary in country D and resells these goods to another subsidiary in country B for it to process the goods; the goods are directly shipped from D to B). How can bilateral statistics be reconciled (change of ownership versus physical movement) in the case of merchanting -global manufacturing for country D and for country B? This is particularly relevant, for trade between related enterprises.

⁶ BPM para. 262 and *Manual on Statistics of International Trade in Services*, para.3.123.