



UNITED NATIONS  
DEPARTMENT OF ECONOMIC  
AND SOCIAL AFFAIRS  
STATISTICS DIVISION



ANDEAN COMMUNITY  
GENERAL SECRETARIAT



UNITED NATIONS  
ECONOMIC COMMISSION FOR  
LATIN AMERICA AND THE  
CARIBBEAN

**Regional Workshop on Country Practices in Compilation of  
International Merchandise Trade Statistics, 7-11 May 2007, Lima**

**Agenda item No. 8:** Goods for processing  
**Meeting Document**  
**Language:** English

## GOODS FOR PROCESSING

Report prepared by

***United Nations Statistics Division (UNSD)***



# Goods for processing abroad

Report by Ronald Jansen  
Chief of International Trade Statistics Section  
United Nations Statistics Division  
Email: [jansen1@un.org](mailto:jansen1@un.org)

## *Introduction*

International trade has been at the centre of many recent discussions on globalization, be it from the point of view of off-shoring of the production process, operations of multi-nationals, foreign direct investments or trade negotiations. The production process of garments, motor vehicles, televisions or computers is now often spread over a number of countries not only to reduce labor and capital costs but also, for instance, to benefit from investment incentives offered by the host countries.

Even though treatment of goods for processing in the statistical sense is by no means a new discussion, it gained a lot of new attention because of proposed changes to the System of National Accounts (SNA) and because of its increasing economic importance, especially for economies like China and Mexico. At the centre of the measurement discussion stands the issue of the economic ownership of the goods being processed, in particular if these goods add to the economic wealth or the stock of resources of the country receiving them. SNA and the Balance of Payment Manual (BPM) now specifically recommend that if goods are being processed abroad but ownership of the goods have not been passed on to the processing company, that in such case the transaction would be described as an international service transaction.<sup>1</sup>

A greatly simplified scenario of this process would be a mother company in country X sends goods to its affiliate in country Y which processes these goods and returns an enhanced product back to country X. Many more complicated (but more realistic) scenarios are possible with goods coming from different countries and going to different countries, including coming from or returning to the domestic economy of the affiliate or partner company. It should be added that the ownership relation of the trading companies is of no influence to the issue of goods for processing. The term affiliate is used here just for anecdotic purposes to make it more believable that goods did not change ownership. If affiliate in Y becomes economic owner, then we have a trade in goods; if not, we have a trade in services. In a nutshell, this is the issue at stake.

---

<sup>1</sup> In the latest draft of BPM6 IMF introduces the wording “Manufacturing services on physical inputs owned by others” instead of goods for processing, to stress the fact that the goods have not changed ownership to the manufacturer.

## *Purpose of paper*

This paper attempts to clarify the statistical measurement problems involved in the processing of goods abroad. The paper does not dispute the principles adhered by any of the three major frameworks in this area, namely the framework of international merchandise trade statistics (IMTS), the one of the system of national accounts and that of balance of payments. Its main goal is to clarify the data collection problems that will be encountered in the effort to obtain sufficient information for making valid and reliable estimates of the components of the Rest of the World Account for SNA and of those of the Current Account for BOP. The basic data collection of trade in goods statistics is done by IMTS statisticians. SNA and BOP statisticians use IMTS data to derive the goods components of the Rest of the World and the Current Account. Given the stricter application of the change of ownership by the new SNA and BOP, information in addition to the IMTS data will be necessary to derive those goods components.

## *First response*

Already a few years ago the Task Force on International Merchandise Trade Statistics (IMTS) warned of data collection problems arising from the wish by SNA and BOP statisticians to separately identify, revalue and reclassify goods for processing without change of ownership. It indicated the different elements that could be recorded and those elements that would be very difficult to measure.

1. Goods for processing and the resulting products can enter/exit a country under the specially designed customs procedure called “inward or outward processing” or under “clearance for home use”/“outright exportation” procedures depending on practical considerations of the parties involved.
2. Under inward or outward processing procedure certain goods can be brought into a customs territory conditionally relieved from payment of import duties and taxes; such goods must be intended for re-exportation within a specific period after having undergone the specified processing; processing may involve use of goods of national origin or previously imported. It should be noted that compensating products can be re-declared for exportation to any third country or for home use (Kyoto Convention, annex E.6). Customs records in the case of application of inward or outward processing may/or may not contain all information needed for the purposes of trade statistics depending on national legislation. IMTS Compilers Manual recommends, therefore, that trade statistics compilers cooperate with the customs administrations to ensure full coverage of both import and export flows in trade statistics, as well as better availability and comparability of data. In general, national statistical systems can identify goods under those procedures and pass the relevant information to SNA/BOP compilers.
3. However, if goods are sent for processing but are declared (in the country where processing is performed) for home use and goods after processing are declared for outright exportation, there will be no separate identification and they will be treated as any regular imports and exports. In such cases, compilers of international trade statistics (normally) will not be able to assist SNA/BOP compilers.

4. IMTS recommends application of the general trade system that is to record goods which enter/exit any part of the economic territory of the compiling country. Many countries apply special trade system (that is recording system which excludes some parts of its economic territory from its statistical territory). If a country applies a strict definition of the special system and excludes industrial free zones then movements of goods for processing and goods after processing will not be captured.
5. In countries, like members of the European Union and other customs unions, which abolished customs controls, identification of imported goods as goods for processing in merchandise trade statistics is even more difficult.

This paper aims at elaborating on this first response by giving illustrations and by proposing enterprise surveys in some cases as an additional source of data.

### *Scope of paper*

There are still other approaches [to the issue of measuring “goods for processing”] than those of IMTS, SNA and BOP such as the views of trade negotiators, foreign affiliate statisticians, classification experts or customs experts. The scope in this paper, however, is limited to the established statistical frameworks of IMTS, SNA and BOP<sup>2</sup>. The following papers constitute important input to this discussion note and essential parts of them are reproduced in full in the annex.

1. Task Force letter, 2005 (contributions of OECD, UNSD and WTO)
2. WTO discussion paper to Workshop in Bangkok, 2006
3. AEG position paper, 2005
4. ISWGNA, Full set of recommendations paper, 2006
5. Draft BPM6, Chapter 10 – the Goods and Services Account, 2007

### *Conceptual Frameworks*

The basic principles of the framework of international merchandise trade statistics are that (1) trade is the physical movement of goods across the borders, (2) the statistical value is the transaction value of the goods at their market rate (including insurance and freight cost for imports), and (3) the trading partner country is determined by the origin of the goods and the final destination of the transaction. The principle of substantial transformation – which is directly related to goods for processing – will determine if there is a change of origin of the produced goods and, consequently, if there will be a recording of an export or a re-export when the (compensation) goods leave the country after processing.

The basic principle of the framework of SNA and BOP (in relation to this topic) is that trade in goods is a transaction between a resident and a non-resident where the economic ownership of the goods changes from one to the other. If residency is identical there is no trade. If there is a resident/non-resident transaction but no change of economic ownership,

---

<sup>2</sup> Referenced manuals are IMTS, Rev. 2, the 1993 SNA and the draft BPM6.

then the SNA/BOP framework defines the processing of the goods as an international service transaction and not as a goods transaction. In the revision process of the 1993 System of National Accounts it was stated as a point of principle never to impute change of ownership in international transactions. It was argued that globalization of the production process makes it increasingly necessary to more closely observe who owns the goods and who may be delivering services under contract to process the goods.

## Different scenarios

More [goods for processing] scenarios were given by WTO in a recent discussion note. The graphical illustration below shows goods sent abroad for processing that subsequently (i) return to the country of origin, (ii) enter the domestic economy of the country of processing, or (iii) are shipped to a third country. Scenarios (ii) and (iii) assume that during processing the goods were still owned by country A, and the change of ownership took only place with respect to the produced goods.

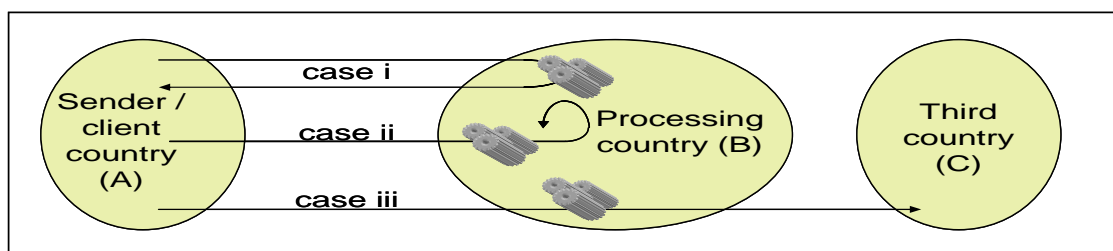


Table 1 hereafter illustrates recording in IMTS, Rev. 2 depending on whether processing is "substantial" (hence changes origin) or not (re-exports and related flows) and given by bilateral flows of origin and last known destination, which are assumed known to all transactors. IMTS tracks physical movement of goods across borders independent of the ownership of the goods. Moreover, IMTS does not recommend (so far) to record flows in relation to processing of goods (such as import for inward processing, export after inward processing, export for outward processing and import after outward processing).

Table 2 shows for SNA/BOP cases where there was no change of economic ownership. In case (i) goods move from and back to the country of economic ownership of the goods. Although in this case flows are not to be included in the BOP trade in goods account it is necessary to identify these flows in IMTS in order to adjust IMTS to the general merchandise item in BOP, since IMTS is the main data source. A new requirement of SNA/BOP for case (i) is the assessment of the service fee for processing (as was already recommended in previous guidelines for cases (ii) and (iii)).

Note that the nature of the goods (before and after processing) has been added. Goods before processing are indicated as X and goods after processing as Y. Whereas IMTS makes a distinction between marginal and substantial processing, such distinction is not made for SNA/BOP. In fact, processing of goods (in case(i)) is now recommended to be treated in the same way as returned goods except for recording of the transaction fee of the processing service.

**Table 1: Classification of bilateral flows for processing of goods in IMTS, Rev. 2**

Case	IMTS, Rev. 2	
	marginal processing	substantial processing
(i)	<b>A:</b> exports of Good X to B, then re-import of Good X from B <b>B:</b> import of X from A, then re-export of X to A	<b>A:</b> export of Good X to B, then import of Good Y from B <b>B:</b> import of X from A, then export of Y to A
(ii)	<b>A:</b> export of X to B <b>B:</b> import of X from A	<b>A:</b> export of X to B <b>B:</b> import of X (or Y?) from A
(iii)	<b>A:</b> export of X to C <b>B:</b> import of X from A, re-export of X to C <b>C:</b> import of X from A	<b>A:</b> export of X to B <b>B:</b> import of X from A, export of Y to C <b>C:</b> import of Y from B

**Table 2: Classification of bilateral flows for processing of goods in SNA/BOP**

Case	SNA/BOP	
	Goods processing	Processing services
(i)	<b>A and B:</b> no flow as goods remain the property of sending country (A)	
(ii)	<b>A:</b> export of X to B <b>B:</b> import of Y from A (including processing fee)	<b>A:</b> import from B <b>B:</b> export to A
(iii)	<b>A:</b> export of Y to C (including processing fee) <b>C:</b> import of Y from A (including processing fee)	

Tables 1 and 2 could be investigated more in-depth from the data collection point of view, when considering the recording process at the customs office and the possibility of adding enterprise surveys. Some detailed information on the activities of inward processing companies could be surveyed, as well as acquisitions from enterprises which buy goods from inward processing zones, even though such survey would already be much more complicated to conduct.

## From concepts to basic data source

Table 1 can be revisited and be investigated more in-depth from the data collection point of view. The same cases are spelled out here to draw attention to obstacles in the statistical measurement. In the following text boxes a description is attempted of the recording process at the customs office both from the sending country as well as from the country where the processing occurs.

**Case 1. General Motors exports automotive parts for assembly by an affiliate in Mexico. Finished vehicles are shipped back from Mexico to USA. Ownership of goods remains with GM-USA for the entire process.**

*Data Source (A) – Customs declaration at the US border.*

Part A.1 (Before processing) US Customs 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 GM-USA as the company liable for customs obligations.

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

Questions: First of all, how likely is it that a company files the outward processing procedure over the outright export procedure? Is there still any duty/tax benefit to obtain by recording the declaration as outward processing to Mexico? Secondly, do US Customs forms allow for linking of outgoing with incoming declarations?

**Case 1. General Motors exports automotive parts for assembly by an affiliate in Mexico. Finished vehicles are shipped back from Mexico to USA. Ownership of goods remains with GM-USA for the entire process.**

*Data Source (A) – Customs declaration at the Mexican border*

Part A.3 (Before processing) Mexican Customs registers imports of automotive parts under the inward processing customs procedure. Again GM-USA would be recorded as the liable party.

Part A.4 (After processing) Mexican Customs registers exports of vehicles after inward processing. Officially, GM-USA should be the company on record.



Questions: Is there a link between the incoming goods declaration and the subsequent export declaration? Can a foreign and non-resident company export goods out of Mexico? Would this foreign and non-resident company be part of the business register of Mexico?

The text boxes above show customs declarations as data source at the US and the Mexican side. How can those declarations be supplemented with enterprise surveys?

**Case 1. General Motors exports automotive parts for assembly by an affiliate in Mexico. Finished vehicles are shipped back from Mexico to USA. Ownership of goods remains with GM-USA for the entire process.**

*Data Source (B) – Enterprise Surveys by US Statistical Authority*

Enterprises involved in outward processing need to be identified. If companies can be identified on customs declarations, companies requesting outward processing procedure could be selected for survey. Similar to Outward FATS, companies would need to be able to provide information about economic activities of its affiliates.

The questions here are (1) can companies sending goods for processing be identified and (2) can these companies provide information about economic activities of its affiliates?

**Case 1. General Motors exports automotive parts for assembly by an affiliate in Mexico. Finished vehicles are shipped back from Mexico to USA. Ownership of goods remains with GM-USA for the entire process.**

*Data Source (B) – Enterprise Surveys by Mexican Statistical Authority*

Enterprises involved in inward processing need to be identified. If companies can be identified on customs declarations, companies requesting inward processing procedure could be selected for survey. Similar to Inward FATS, detailed information on economic activity could be derived on the processing company. However, little to no information could be requested on the mother company.

In conclusion, four pieces of one puzzle could be envisioned for this case. It will be more challenging how to put these pieces of information together. Is bilateral cooperation a pre-requisite to obtain sufficient information for BOP purposes?

For the other two cases mentioned by WTO the data collection challenge will be even more daunting. In Case 2, the goods are not shipped back to the mother company but are consumed by the economy where processing was done.

**Case 2. General Motors exports automotive parts for assembly by an affiliate in Mexico. Finished vehicles enter the Mexican economy. Ownership of goods only changes after the finished goods are sold.**

*Data Source (A) – Customs declaration at the US border.*

Part A.1 (Before processing) Similar to Case 1, US Customs records exports of automotive parts under the outward processing customs procedure with indication for the approximate date of return. The declaration form should also have GM-USA as the company liable for customs obligations.

Part A.2 (After processing) At best, GM-USA will be requested to file a customs form to terminate the outward processing..

Questions: If some vehicles return to the USA and some are sold in Mexico, how would you be able to trace this via customs?

**Case 2. General Motors exports automotive parts for assembly by an affiliate in Mexico. Finished vehicles enter the Mexican economy. Ownership of goods only changes after the finished goods are sold..**

*Data Source (A) – Customs declaration at the Mexican border*

Part A.3 (Before processing) Mexican Customs records imports of automotive parts under the inward processing customs procedure. GM-USA would be recorded as the responsible company.

Part A.4 (After processing) Mexican Customs records 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. GM-USA would still be the exporting company and a domestic company or individual would be the importer.

Questions: Will there be a direct link between the inward processing declaration and the subsequent declaration of imports of the finished good into Mexico?

In which way can the customs information be supplemented with enterprise surveys? As in the first case, it will be mostly the Mexican Statistical Authority that would be able to get some detailed information on the activities of the inward processing companies. The Mexicans could also survey the enterprises which would buy from inward processing zones, even though such survey would already be much more complicated to conduct.

For the US Statistical Authority it is virtually impossible to retrieve any survey information, besides some scarce information via multi-nationals in the USA of their foreign affiliates in Mexico.

In Case 3, the goods are not shipped back to the mother company but are instead shipped to a third country. The problems for collecting information via customs declarations or enterprise surveys are almost identical to those of case 2. Mexican Customs will have export declarations which may be linked to the inward processing declaration. Further, the Mexican Statistical Authority could obtain some information via the manufacturing and trading companies on its economic territory. On the US side no extra information would be available at Customs and only scarce information from enterprise surveys of the multi-nationals.

## The additional information

The previous section shows the problems associated with gathering additional information. The inward and outward processing procedures described in the Revised Kyoto Convention seem most helpful. In addition, enterprise surveys may help for the compiling economy.

The reasons why inward and outward processing procedures are useful are that (a) customs declarations are still the principle input to international merchandise trade statistics, and (b) customs procedures are internationally highly regulated, which implies fully comparable among countries.

Just recently in February 2006, the Revised Kyoto convention was ratified by the necessary number of WCO members to make it an obligation for all WCO members. The implication is that all of the standards mentioned in the Revised Kyoto convention need now to be laid down in national legislation and – consequently – need to be followed by Customs authorities. This harmonization of customs procedures makes it not only very predictable by traders what they can expect on their transactions, but also assures the statisticians of the exact nature of transaction which is recorded on the customs declaration. To do justice to the thoroughness of the descriptions of these customs procedures, they have been reproduced in large part in the annex to this paper.

The main features of importance to the identification and measurement of “goods for processing” can be illustrated in the following way.

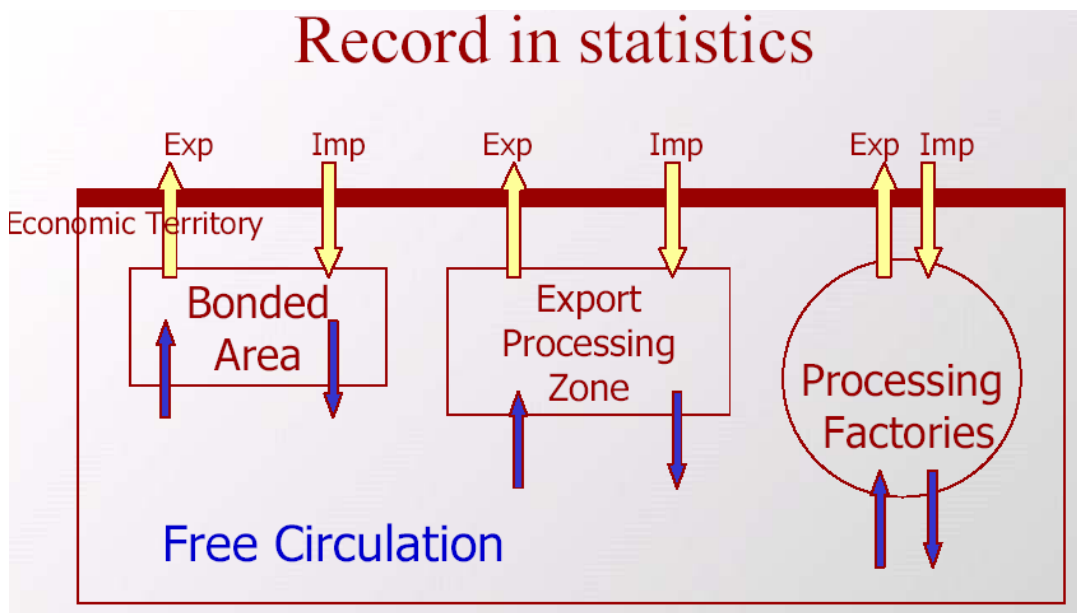
The customs declaration has on it – among others – a description of the goods, their value (including insurance and freight), net weight and additional quantity (if required). It will also have the country of origin and the requested customs procedure. In this case the procedure would be Inward Processing which will exempt the importer from paying duties and taxes, since the first standard of this procedure reads *“Goods admitted for inward processing are relieved from import duties and taxes”*.

At the factory in the Export processing zones the goods coming from abroad could be mixed with goods brought in domestically, as specified in a standard which says *“Inward processing is not limited to goods imported directly from abroad, but shall also be granted for goods already placed under another Customs procedure”*.

There are also two other elements of direct importance to the issue of change of economic ownership, namely *“The right to import goods for inward processing shall not be limited to the owner of the imported goods”* and *“The competent authorities should permit processing operations to be carried out by a person other than the person accorded the facilities for inward processing. Transfer of ownership of the goods admitted for inward processing should not be necessary, provided that the person accorded the inward processing facilities remains responsible to the Customs for compliance with the conditions set out in the authorization for the entire duration of the operations”*. This last statement is a recommended practice and not a standard, which means that it is not mandatory.

Given the importance to know if a change of economic ownership took place, the responsibilities of the processing company towards Customs [as well as of course the responsibilities of that company towards the “client” company] need to be fully understood. An example can be given from customs China.

## The example of China



At the UNSD Workshop on Compilation of IMTS in Bangkok from 12 to 15 December 2006, Customs China explained how Goods for Processing took place in China and how it was recorded. As shown in the illustration below, China distinguishes three different

regulated processing zones or factories, namely (1) Export processing zones, (2) Processing factories, and (3) Bonded areas. There are imports and exports of goods from abroad into those zones and then there are imports and exports of goods in and out of those zones from China itself. The latter are indicated with blue arrows in the illustration. All of those flows need to be accounted for to get a clear picture of “goods for processing”.

Customs China keeps so-called accounting books for each of the processing factories<sup>3</sup>, whether or not they are located in an export processing zones<sup>4</sup>.

## Preliminary Conclusion

This paper shows the problems associated with gathering additional information on the issue of “Goods for processing”. The inward and outward processing procedures described in the Revised Kyoto Convention seem most helpful. In addition, it may be necessary for the compiling economy to conduct enterprise surveys. Finally, country practices – such as the example of China – may show additional possibilities for obtaining information.

---

<sup>3</sup> Processing factories are defined as ..

<sup>4</sup> The export processing zones account for more than 70% of all factories doing processing.

## **ANNEX 1: Inward processing**

“**inward processing**” means the Customs procedure under which certain goods can be brought into a Customs territory conditionally relieved from payment of import duties and taxes, on the basis that such goods are intended for manufacturing, processing or repair and subsequent exportation.

### **Field of application**

1. Goods admitted for inward processing shall be afforded total conditional relief from import duties and taxes. However, import duties and taxes may be collected on any products, including waste, deriving from the processing or manufacturing of goods admitted for inward processing that are not exported or treated in such a way as to render them commercially valueless.
2. Inward processing shall not be limited to goods imported directly from abroad, but shall also be granted for goods already placed under another Customs procedure.
3. The right to import goods for inward processing shall not be limited to the owner of the imported goods.
4. (Recommended practice) The possibility of determining the presence of the imported goods in the compensating products should not be imposed as a necessary condition of inward processing when:
  - a. the identity of the goods can be established :
    - i. by submitting the details of the inputs and the process of manufacture of the compensating products; or
    - ii. during the processing operations by Customs control; or
  - b. the procedure is terminated by the exportation of products obtained from the treatment of goods identical in description, quality and technical characteristics to those admitted for inward processing.

### **Placing goods under inward processing**

#### *(a) Authorization for inward processing*

5. National legislation shall specify the circumstances in which prior authorization is required for inward processing and the authorities empowered to grant such authorization.
6. The inward processing authorization shall specify the manner in which operations permitted under inward processing shall be carried out.
7. Where goods admitted for inward processing are to undergo manufacturing or processing, the competent authorities shall fix or agree to the rate of yield of the operation by reference to the actual conditions under which it is effected. The description, quality and quantity of the various compensating products shall be specified upon fixing or agreeing to that rate.

*(b) Identification measures*

8. The requirements relating to the identification of goods for inward processing shall be laid down by the Customs. In carrying this out, due account shall be taken of the nature of the goods, of the operation to be carried out and of the importance of the interests involved.

**Stay of the goods in the Customs territory**

9. The Customs shall fix the time limit for inward processing in each case.
10. Provision shall be made to permit compensating products to be exported through a Customs office other than that through which the goods placed under inward processing were imported.
11. (Recommended practice) The competent authorities should permit processing operations to be carried out by a person other than the person accorded the facilities for inward processing. Transfer of ownership of the goods admitted for inward processing should not be necessary, provided that the person accorded the inward processing facilities remains responsible to the Customs for compliance with the conditions set out in the authorization for the entire duration of the operations.

**Termination of inward processing**

*(a) Exportation*

12. Provision shall be made to permit inward processing procedures to be terminated by exportation of the compensating products in one or more consignments.
13. Upon request by the person concerned, the competent authorities shall authorize the re-exportation of the goods in the same state as imported, with termination of inward processing.

*(b) Other methods of disposal*

14. (Recommended practice) Provision should be made for suspending or terminating inward processing by placing the imported goods or the compensating products under another Customs procedure, subject to compliance with the conditions and formalities applicable in each case.
15. (Recommended practice) National legislation should provide that the amount of import duties and taxes applicable in the case where the compensating products are not exported shall not exceed the amount of import duties and taxes applicable to the imported goods admitted for inward processing.

## **ANNEX 2: Outward processing**

“**outward processing**” means the Customs procedure under which goods which are in free circulation in a Customs territory may be temporarily exported for manufacturing, processing or repair abroad and then re-imported with total or partial exemption from import duties and taxes.

### **Field of application**

1. Temporary exportation of goods for outward processing shall not be restricted to the owner of the goods.

### **Placing goods under outward processing**

#### *(a) Formalities prior to temporary exportation of the goods*

2. National legislation shall enumerate the cases in which prior authorization is required for outward processing and specify the authorities empowered to grant such authorization.
3. (Recommended practice) The competent authorities should fix a rate of yield for an outward processing operation when they deem it necessary or when it will facilitate the operation. The description, quality and quantity of the various compensating products shall be specified upon fixing that rate.

#### *(b) Identification measures*

4. The requirements relating to the identification of goods for outward processing shall be laid down by the Customs. In carrying this out, due account shall be taken of the nature of the goods, of the operation to be carried out and of the importance of the interests involved.
5. The Customs shall fix the time limit for outward processing in each case.

### **Importation of compensating products**

6. Provision shall be made to permit compensating products to be imported through a Customs office other than that through which the goods were temporarily exported for outward processing.
7. Provision shall be made to permit compensating products to be imported in one or more consignments.
8. Upon request by the person concerned, the competent authorities shall allow goods temporarily exported for outward processing to be re-imported with exemption from import duties and taxes if they are returned in the same state.
9. Unless national legislation requires the re-importation of goods temporarily exported for outward processing, provision shall be made for terminating the outward processing by declaring the goods for outright exportation subject to compliance with the conditions and formalities applicable in such case.