Summary

This paper presents the Terms of Reference and Work Programme of the Task Force on Global Production. The objectives of the Task Force are twofold. The first goal is to develop guidance on the unresolved conceptual issues arising from the System of National Accounts 2008 and the sixth edition of the Balance of Payments and International Investment Position Manual in relation to global production. The second goal is to develop further guidance on implementation aspects of these new global standards. In doing so, the Task Force will study the existing practices of countries in relation to the different types of global production arrangements.

The Task Force met on 19-20 January 2012 in Geneva and agreed on the annotated list of research issues. The list is divided into six conceptual and six measurement issues. It includes the division of work between the TF members, prioritization and a time frame for each individual research issue.
I. Terms of Reference

A. Background

1. Global manufacturing is a topical issue which significantly complicates the compilation of economic statistics. It has evolved to encompass a broad range of business arrangements and organizational forms. Today, multinational enterprises account for a large share of international trade between countries. National statistical offices need to handle the changing forms of global manufacturing to produce the regular statistics. It is important to identify best practices developed by countries, and agree internationally on the practical guidelines needed in order to foster international comparability.

2. Already in 2007 the Conference of European Statisticians (CES) established an Expert Group on the Impact of Globalization on National Accounts. This group was asked to examine how globalization affects economic statistics and national accounts in particular. By the end of 2011 the findings of this expert group will be published in a statistical guide “The Impact of Globalization on National Accounts”.

3. In the course of drafting the chapters on industrial processing (chapter 5), merchanting (6) and international transactions in intellectual property (7), and measurement issues associated with administrative trade data (9), quite some attention was paid to the phenomenon of global manufacturing. At a rather late stage in the drafting process it was decided that the issue of global manufacturing would deserve a chapter (8) on its own. Although in a short period of time many aspects of global manufacturing were discussed and presented in this chapter, some important issues were not sufficiently dealt with and need further attention.

4. The CES consultation of the guide “The Impact of Globalisation on National Accounts” identified conceptual and practical aspects of global manufacturing arrangements in relation to the implementation of the new global standards 2008 SNA and BPM6 as the major priority for the future research agenda. In June 2011 the CES approved the guide including the proposed work. On this background the CES Bureau decided to make an in-depth review of global manufacturing and requested Statistics Netherlands to prepare a paper to provide basis for the discussion.

5. The in-depth review paper by Statistics Netherlands was sent for comments to the UNECE Steering Group on National Accounts and to the authors of the relevant chapters in the guide “The Impact of Globalization on National Accounts” i.e. to the following countries and organizations: Armenia, Canada, Finland, Ireland, Israel, Netherlands, Norway, Russian Federation, Sweden, The former Yugoslav Republic of Macedonia, United States, Eurostat, OECD, CIS-STAT, UNSD and IMF.

6. The consultation stressed the importance of establishing an expert group (in the form of a Task Force) to elaborate on the conceptual and measurement issues related to global manufacturing. The Steering Group also pointed out that rather than global manufacturing the research should focus on global production arrangements in general, not to understate the importance of production of services and transactions in intellectual property products.

7. Furthermore, UNSD and OECD highlighted the support of the ISWGNA for further work on global production arrangements as part of the global effort to develop implementation guidance for the 2008 SNA.
B. Mandate

8. The Task Force (TF) is established under the CES Steering Group on National Accounts. It will report to the Conference of European Statisticians (CES) and its Bureau. It will provide progress reports on its activities and outputs to be evaluated by the CES Bureau.

9. The TF will also regularly consult and provide progress reports to the ISWGNA and the Advisory Expert Group (AEG) on National Accounts to ensure the international coordination of the work related to implementation of the 2008 SNA.

C. Objectives

10. The objectives of the TF are twofold. The first goal is to develop guidance on the unresolved conceptual issues arising from 2008 SNA and BPM6 in relation to global production. The second goal is to develop further guidance on implementation aspects. In doing so, the TF will study the existing practices of countries in relation to the different types of global production arrangements.

D. Planned activities and outputs

11. The TF will agree on the content and structure of the report and organize the drafting of the sections. Drafts of the report will be circulated for discussion to the UNECE Group of Experts on National Accounts (organized jointly with OECD and Eurostat) and the OECD National Accounts Working Party. Consultation with other forums, such as BOPCOM and ESCAP Committee, shall be sought.

12. The output will be a report including guidelines on global production which should:

(a) Focus mainly on national accounts and balance of payments aspects;
(b) Collect information of existing global production arrangements and country experiences for their treatment in national accounts and balance of payments accounting;
(c) Clarify typology, concepts and definitions;
(d) Address arising conceptual and measurement issues;
(e) Provide practical guidance on the statistical treatment of global production arrangements;
(f) Provide guidance on the required data collection, including the use of administrative data;
(g) Recommend examples of good practices whenever appropriate.

13. The TF should develop a more detailed priority list and timetable for the work on the outstanding conceptual and measurement issues and consider what is possible to achieve within its mandate.
E. Timetable

14. The following timetable is proposed:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 2011</td>
<td>The TF constitutes itself with members and chairs.</td>
</tr>
<tr>
<td>January 2012</td>
<td>The First meeting of the TF to agree on the more detailed research agenda and plan for the division of work for the February 2012 CES Bureau.</td>
</tr>
<tr>
<td>October 2012</td>
<td>Interim report with first results to the CES Bureau, BOPCOM, and OECD WPs on national accounts and international trade.</td>
</tr>
<tr>
<td>December 2012</td>
<td>Interim report with first results to the ISWGNA.</td>
</tr>
<tr>
<td>February 2012 – October 2013</td>
<td>Preparation of the draft sections of the report.</td>
</tr>
<tr>
<td>September 2013</td>
<td>Draft report to the ISWGNA and AEG.</td>
</tr>
<tr>
<td>October 2013</td>
<td>Draft report to the CES Bureau, BOPCOM, and OECD WPs on national accounts and international trade.</td>
</tr>
<tr>
<td>Early 2014</td>
<td>Finalization of the report and global consultation.</td>
</tr>
<tr>
<td>June 2014</td>
<td>Presentation of the final report to the CES plenary session for endorsement.</td>
</tr>
</tbody>
</table>

F. Methods of work

15. The TF starts its work with the face to face meeting in mid January 2012 in Geneva. The work agreed in the meeting will mostly be carried out by use of e-mail and audio-conferences. The TF may use the wiki infrastructure available at the UNECE website. The TF will also meet in conjunction with National Accounts meetings of the UNECE and OECD.

G. Membership

16. The following countries and international organizations have expressed interest to participate in the TF: Canada, Finland, Ireland, Israel, Italy, Netherlands, Norway, Sweden, United States, Eurostat, IMF and OECD. The TF members may decide to involve additional countries in the work e.g. countries beyond the UNECE region.

17. The TF will be chaired by the Netherlands and the secretariat will be provided by UNECE.
II. Work Programme

A. Proposed list of research issues

18. The TF met on 19-20 January 2012 in Geneva and agreed on the annotated list of research issues. The list is divided into six conceptual (1.-6.) and six measurement (7.-12.) issues. It includes the division of work between the TF members, prioritization and a time frame for each individual research issue. The action to be taken under each research issue is indicated in italics. Summary of research issues, division of responsibilities and a time table are presented in the table below:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Leading author*</th>
<th>Other contributors</th>
<th>Priority</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Typology of global production arrangements</td>
<td>BEA</td>
<td>Israel Netherlands Sweden Italy WTO</td>
<td>1</td>
<td>Interim report in October 2012</td>
</tr>
<tr>
<td>2. Principles of economic ownership</td>
<td>Ireland</td>
<td>BEA OECD (reviewer) Finland Italy</td>
<td>1</td>
<td>Interim report in October 2012</td>
</tr>
<tr>
<td>3. Transfers of intellectual property products (IPP)</td>
<td>Israel</td>
<td>OECD Netherlands Ireland</td>
<td>1</td>
<td>Interim report in October 2012</td>
</tr>
<tr>
<td>4. Multi-territory enterprises</td>
<td>Norway</td>
<td>Finland IMF Australia (tbc)</td>
<td>1</td>
<td>Interim report in October 2012</td>
</tr>
<tr>
<td>5. Merchanting of services</td>
<td>Ireland</td>
<td>IMF WTO UNECE</td>
<td>2</td>
<td>Final report in October 2013</td>
</tr>
<tr>
<td>6. Quasi-transit trade</td>
<td>IMF</td>
<td>Eurostat Italy</td>
<td>1</td>
<td>Interim report in October 2012</td>
</tr>
<tr>
<td>7. Recording international commodity trade</td>
<td>Eurostat</td>
<td>IMF WTO UNSD (tbc)</td>
<td>1</td>
<td>Interim report in October 2012</td>
</tr>
<tr>
<td>8. Recording of production abroad</td>
<td>Canada</td>
<td>Netherlands Norway Ireland</td>
<td>1</td>
<td>Interim report in October 2012</td>
</tr>
<tr>
<td>9. Complex units (country case studies)</td>
<td>UNECE</td>
<td>Israel Italy</td>
<td>2</td>
<td>Memorandum item</td>
</tr>
<tr>
<td>10. Large and complex cases</td>
<td>Ireland</td>
<td>Country examples of large enterprise units</td>
<td>2</td>
<td>Final report in October 2013</td>
</tr>
<tr>
<td>11. Trade in value added</td>
<td>OECD</td>
<td>Eurostat Canada Netherlands WTO</td>
<td>2</td>
<td>Final report in October 2013</td>
</tr>
<tr>
<td>12. Price and volume measurement</td>
<td>Eurostat</td>
<td></td>
<td>2</td>
<td>Memorandum item</td>
</tr>
</tbody>
</table>

* The leading author is responsible for coordinating the work with other contributors and will combine all contributions to the final report.
19. The issues 9 and 12 are called memorandum items as it is not yet clear whether they
will be discussed separately or under the other research issues.

20. Contributors will provide an annotated outline of their research issue by 2 March
2012. These outlines will be circulated for comments within the TF, combined into one
document and then consulted with the Group of Experts on National Accounts at their
meeting on 30 April - 4 May 2012 in Geneva.

B. Conceptual issues

1. Developing a typology of global production arrangements and providing guidelines
   for recording related activities in national accounting

   Leading author: BEA

   Other contributors: Israel, Netherlands, Sweden, Italy, WTO

   Priority: 1

   Deadline: To be included in the interim report in October 2012

21. Global production can be understood as a chain of interlinked production activities
   that are spread over several countries whereby one entity, usually the principal, exerts a
certain level of control. Often the outputs of the various units active in the global
production chain are difficult to observe independently due to strategic alliances and tight
mutual relationships. Chapter 8 of the Globalisation Guide provides a number of examples.
In the in-depth review reference is made to the literature on global value chains to obtain an
overview of the possible forms of global production arrangements. Among the most
complex examples of global production are those managed by so-called factoryless
producers.

22. To extend this work, the TF will develop a ‘typology’ of global production
   arrangements, preferably based on real life examples, with the purpose of formulating
guidelines on how to account for each of the identified arrangements on a country-by-
country basis. Attention needs to be given to properly assigning the kind of economic
activity (in terms of ISIC) of principals, contract producers and other participating units in
the global production chain. Expectedly, a crucial step in this process is identifying the
economic ownership of inputs, outputs and intellectual property in all stages of the
production chain.

2. Clarify the principles of economic ownership of products and assets inside global
   production arrangements including recording of inventories abroad

   Leading author: Ireland

   Other contributors: BEA, OECD (reviewer), Finland, Italy

   Priority: 1

   Deadline: To be included in the interim report in October 2012

23. The strong linkages of units operating in global production arrangements complicate
identifying economic ownership of products and assets transferred along the production
chain. The general SNA principles of determining economic ownership should be tightened
to make them applicable to the various forms of global production. This task becomes even
more complicated when looking at the different (foreign) affiliates of one enterprise
representing together a global production chain. The 2008 SNA provides some guidance,
for example by stressing the possible differences between legal and economic ownership,
i.e. those entities that are in control, carry the risks and obtain (most of the) benefits of holding goods or assets.

24. The TF aims to develop more sophisticated decision models to identify the economic ownership of goods and assets inside the global production chain. Also the exchange of experiences on how to apply these guidelines in practice is undoubtedly useful.

25. A related issue concerns measuring inventories held abroad in connection to activities such as processing, merchanting and production abroad. This measurement issue has its mirror image, namely those inventories physically held in the domestic economy but subject to foreign ownership.

3. Recording transfers of intellectual property products (IPP) inside global production chains

Leading author: Israel
Other contributors: OECD, Netherlands, Ireland
Priority: 1
Deadline: To be included in the interim report in October 2012

26. Several multinational enterprises perform (part of) their research and development (R&D) in centralized units while those affiliates using this R&D in their production activities should be considered the beneficial units. Direct invoice methods to recover R&D costs are not always applied by the headquarters of such enterprises. As a result statistical sources may fail to map these (international) intra-company flows of R&D. This may lead to an incomplete coverage of R&D imports and exports, and subsequently to wrong R&D investment estimates. So this issue has both conceptual and measurement aspects.

27. Another issue highlighted in Chapter 7 of the Globalisation Guide is that the intangible nature of intellectual property also means that the legal ownership could be assigned to a unit in a low tax country while being used in production somewhere else. This may give rise to so-called phantom imports and subsequently distorted valued added and investment figures. The TF will consider alternative recording options for these tax driven arrangements.

28. The issue extends beyond transactions in those IPPs recognised as fixed assets in the SNA asset boundary however. Firms are increasingly offshoring other intangibles, such as brand names, where payments, if recorded, are registered as property income flows. Ensuring the correct recording of these transactions is important but in practice this may be highly complicated as often payments for the use of IPPs recognised as fixed assets are not always distinguishable from these 'other intangibles'.

4. Treatment of multi-territory enterprises

Leading author: Norway
Other contributors: Finland, IMF, Australia (tbc*)
Priority: 1
Deadline: To be included in the interim report in October 2012
*) to be contacted by the IMF

29. The activities of multi-territory enterprises represent a special case of global production. Multi-territory enterprises operate their activities on a temporary or permanent basis over more than one economic territory. Typical examples of such enterprises are airlines, shipping lines and the creation and operation of cross border infrastructure, e.g.
bridges, tunnels. The activities of project vendors of large construction projects are presented as an example in chapter 8 of the Globalisation Guide.

30. The TF aims at drafting additional guidance to properly account for the activities of multi-territory enterprises. Splitting the economic activities of multi-territory enterprises per country on the basis of ‘prorating’ or the creation of ‘notional units’, as recommended by the international guidelines, does not seem to match very well with the general national accounting principles of recording imports and exports on a strict transfer of economic ownership basis. The creation of notional units may give rise to imputations of transactions (cross border movement of materials and assets) which may be difficult to account for in practice.

5. Merchanting of services

Leading author: Ireland

Other contributors: IMF, UNECE, WTO

Priority: 2

Deadline: To be included in the final report in October 2013

31. This issue was not addressed in the in-depth review. However, the Globalisation Guide (Chapter 6) mentions it as an item for further conceptual work. The significance of merchanting of services appears to be growing, particularly in areas such as telecommunications and web-based (internet) services. Sixth edition of the Balance of Payments Manual (BPM6) recognizes the issue of merchanting of services, but proposes no distinct treatment for such transactions.

32. The TF will consider the question how the services being merchanted should be measured, e.g. in a similar way as merchanting of goods which refers to the ‘net’ approach: a negative export (the purchase) followed by a positive export (the sales).

6. Measurement issues associated with quasi-transit trade and similar phenomenon

Leading author: IMF

Other contributors: Eurostat, Italy

Priority: 1

Deadline: To be included in the interim report in October 2012

33. For countries in the European Union an entity that does not meet the statistical definition of a resident may import and export goods. This may influence some other countries as well, although this phenomenon has so far been noted as important only in EU countries. When these goods are imported by the non-resident (sometimes called a “fiscal representative”), they are declared for customs purposes. The goods may later be sold to a resident of the importing country at a price that substantially exceeds the declared value, because the declared value may be based on the wholesale prices whereas the actual sales price reflects retail prices. This results in a statistical discrepancy as imports recorded in the current account are less than the financial transaction recorded in the financial accounts.

34. A similar outcome results when goods are imported into a country by the fiscal representative and later exported by it (this case has sometimes been called “quasi-transit trade”). For customs purposes, such goods are declared in imports and exports of the country in which the fiscal representative is located. If the imports are recorded at wholesale prices and the exports at retail prices, a statistical discrepancy results that is equal to the value of the net trade flow. The TF needs to consider ways of measuring quasi-transit trade to help avoid statistical discrepancies.
C. Measurement issues

7. Recording international commodity trade on the basis of transfer of economic ownership

Leading author: Eurostat

Other contributors: IMF, WTO, UNSD (tbc*)

Priority: 1

Deadline: To be included in the interim report in October 2012

*to be contacted by UNECE

35. Global production arrangements may contain elements of industrial processing and merchanting causing measurement problems. One important obstacle to consider is that the International Merchandise Trade Statistics Manual (IMTS 2010) requires the value of materials sent abroad for processing to be recorded as exports of goods, irrespective of whether change in ownership takes place or not. The returned processed goods are according to the IMTS recorded as imports. This recording is according to 2008 SNA not allowed in the national accounts.

36. Following the new SNA standard, measuring purchases and sales of products abroad in terms of imports and exports becomes even more complicated. It should be noticed that this measurement issue is similar to that of merchanting. Generally, it is not expected that the national accounts recording of imports and exports of those goods that do not physically cross country boarders can be directly obtained from foreign trade statistics. As such alternative data sources need to be considered. Expectedly, these measurement issues will also be discussed in the Eurostat TF on Goods sent Abroad for Industrial Processing. This TF will rely on and work in close coordination with the current work of Eurostat in this area.

8. Recording of production abroad

Leading author: Canada

Other contributors: Netherlands, Norway, Ireland

Priority: 1

Deadline: To be included in the interim report in October 2012

37. The design of business surveys may need to be adjusted according to the new 2008 SNA in order to properly capture the output or turnover of production abroad. The TF aims at providing recommendations on how to capture production abroad. This issue has a 'mirror image', namely restricting the recording of output in the national accounts of those domestic production activities carried out under the direct control and ownership of foreign producers to the industrial services provided. The output should not include the value of manufactured products.

9. Complex units (Memorandum item)

Leading author: UNECE

Other contributors: Israel, Italy

Priority: 2

Deadline:
38. The idea of this research topic is to collect country examples of complex units which do not fall under any other topic listed above. Should several of such cases arise, they may be grouped into their own research topics. A decision on this will be taken at the end of 2012.

39. For example, global production activities may be managed or assisted by units whose kind of economic activity is very difficult to grasp:

(a) Factoryless producers;
(b) Holdings;
(c) Project vendors;
(d) Special purpose entities and other administrative kind of entities (often legal owners but not necessarily economic owners of goods or assets);
(e) Other complex units.

It is expected that a better understanding of some of these units will be obtained via one of the research items introduced before.

40. The TF may develop guidelines to properly identify complex units in terms of ISIC. Determining appropriate volume measures or price deflators for measuring the output of these activities in volume terms is a complementary issue the TF may want to investigate. Again, this research issue becomes more apparent by the end of this year.

10. Large and complex cases

Leading author: Ireland

Other contributors: Country examples of large enterprise units

Priority: 2

Deadline: To be included in the final report in October 2013

41. Several national statistical institutes have installed special units for understanding the activities and measuring properly the economic activities of large and complex enterprises. The TF may consider how organizational units, specialized to large enterprises, may be able to measure properly the activities of enterprises engaged in global production. The main purpose of this item is to collect country experiences and formulate best practices in this area.

11. Trade in value-added

Leading author: OECD

Other contributors: Eurostat, Canada, Netherlands, WTO

Priority: 2

Deadline: To be included in the final report in October 2013

42. International trade flows are measured on a gross basis which can overemphasize the importance of trade to economic growth and the contribution it makes to value-added, a problem that has increased in recent years as production becomes more fragmented and globalized. Efforts to better estimate the contribution of trade to value-added are being coordinated by the OECD with a number of important partners such as the WTO. This TF will rely on and work in close coordination with the current work of OECD on trade in value-added.
43. The key statistical issue is to derive and motivate the development of improved estimates of bilateral trade flows both in goods and services and also to motivate the development of input-output tables that better reflect international production networks. This is being tackled on a number of fronts, such as the development of improved estimates of bilateral trade in services, databases that allocate imports by BEC classification to final users, and the use of microdata linking trade and business registers and structural business statistics.

44. Most of the work envisaged in the Global Production activity impacts the recording of trade in value-added; one area in particular that is relatively unchartered territory is to extend the concept of trade in value-added to trade in income, which requires an investment in detailed data on property income flows. The focus of trade in value-added estimates using an input-output approach is also an opportunity to extend recommendations into the area of supply-use tables and, in particular, to develop guidance on the treatment of certain flows within a supply-use framework, as well as identify areas where supply-use tables are able to improve estimates.

12. Price and volume measurement (including transfer pricing)

   Leading author: Eurostat
   Other contributors: tbc
   Priority: 2
   Deadline: To be included in the final report in October 2013

45. The examination of those establishments active in managing global production arrangements may also lead to issues related to the price and volume measurement of their output. It is expected that a better view on the significance of price and volume measurement issues will be obtained halfway the taskforce’s term. Price and volume measurement may also be discussed under the other research issues. The TF will rely on and work in close coordination with the current work of Eurostat in this area.