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DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS  
STATISTICS DIVISION

**Meeting of the Technical Subgroup for the International Standard Industrial Classification (ISIC)**

**Geneva, 18-20 May 2016**

Palais des Nations / United Nations Building Salle VI

## **Final report**

TSG-ISIC



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## Introduction

1. The meeting of the Technical Subgroup for ISIC (TSG-ISIC) of the Expert Group on International Statistical Classifications, organized by the United Nations Statistics Division (UNSD), was held from 18-20 May 2016 in Geneva, Switzerland. The meeting was attended by 11 members of TSG-ISIC including experts from 8 countries and 3 international organizations. There were two notified apologies from 2 countries for not being able to attend the meeting. The meeting was chaired by Ms. Alice Born of Statistics Canada.
2. The objective of the meeting was to review conceptual, technical and practical issues related to the identification and treatment of Factoryless Goods Producers (FGPs) in the International Standard Industrial Classification (ISIC). Main topics discussed at the meeting included the analysis of the treatment of outsourcing in ISIC, the scope of FGPs and possible indicators for the identification of possible FGPs, and research and testing to date on identifying FGPs.
3. There were 9 main documents, 8 background documents and 4 presentations at the meeting. All papers and presentations are available on the meeting's website:  
<http://unstats.un.org/unsd/class/intercop/tsg/16-05/ac315-2.asp>.
4. Furthermore, three members of the Subgroup made presentations to the meeting of the UNECE Expert Group on National Accounts on the treatment of outsourcing in ISIC, the scope of FGPs and possible indicators for their identification, and research and testing to date on identifying possible FGPs, and statistical units. The Group of Experts on National Accounts appreciated the participation of the Technical Subgroup in the joint session.
5. The Subgroup agreed to work on an issues paper on Factoryless Goods Production, and request UNSD to create an online platform for sharing up-to-date country experiences and research on FGPs.
6. The Subgroup also agreed to inquire with the Bureau of the UN Expert Group on International Statistical Classifications the idea of nominating a member for the Task Force on Statistical Units in National Accounts that is being proposed by the Group of Experts on National Accounts.
7. Annex I of this report lists action items agreed at this meeting of the Technical Subgroup. The main recommendation of the meeting was to work on an issues paper on factoryless goods production and considerations for a future revision of ISIC. Annex II of this report lists the issues paper outline and member drafting responsibilities.

## Main Remarks

### *Measuring Global Production*

8. The Technical Subgroup (TSG) noted papers for the meeting of the UNECE Expert Group on National Accounts on practices in National Accounts and discussed how to address their view. It noted that implications in the impacted statistical domains need to be considered (i.e., including employment and manufacturing statistics).

9. The TSG agreed that the main focus should be on identifying FGPs, manufacturing contractors and “traditional” manufacturers in ISIC, building on national practices, and considering indicators for the identification of FGPs. It was noted that unit characteristics (profiles) are important for identifying FGPs.

### *Analysis of the treatment of outsourcing in ISIC*

10. The TSG discussed the arrangements involving contractors, integrated manufacturers, FGPs and enterprise groups; and the implications of statistical units. In general, it was agreed that only unaffiliated business units be considered.

11. The TSG expressed both concerns and optimism on some of the criteria in ISIC4, and also their applications including on the “scale” of outsourcing, on classifying enterprises and to relevant statistical domains. There seems to be no problem with using assets (i.e., IP assets) as criteria to classify units, although this would be the first time in ISIC. There is a concern that classifying all FGPs in manufacturing and creating a new FGP manufacturing division/group would require duplicating manufacturing divisions or groups for FGPs, and it would be difficult to publish this level of detail.

12. There is a need in the guidelines or criteria to recommend focusing on final output, material and intellectual property inputs, primary activity, and percentage of outsourcing. It is important to carefully consider the definition of FGPs (i.e., they may or may not provide material inputs). What levels of outsourcing qualifies for FGPs compared to a traditional manufacturer need to be considered. Currently, the ISIC4 criterion of 100% outsourcing is too restrictive. There was little support to use economic ownership of material inputs as criteria to classify units that outsource manufacturing of goods to either manufacturing or distributive trades. Arrangements change over time depending on factors such as transportation costs, labour costs and introduction of technology in manufacturing. There was discussion on considering broadening the definition of manufacturing from the physical transformation of goods to the production of goods. Currently, for example, there is legacy treatment of apparel and construction industries.

13. It was emphasized that the treatment of FGPs should ensure consistency and compliance with classification concepts and existing applications, and also it should ensure applicability to the situation from a practical point of view.

14. It was expressed that considering FGPs as manufacturers would alter employment statistics. However it was also noted that commentaries on employment statistics become unnecessarily “focused” on production line employment but in essence the statistics include managers, and etc.

15. The proposal from the UNECE Task Force on Global Production focused on Intellectual Property Products (IPP) ownership, process control, and output ownership in classifying FGPs. Other criteria to be considered include entrepreneurship risk, control of production or sale.

### *Identifying Global Production Arrangements and FGPs*

16. There is a need for a new methodology for identifying global production arrangements that relies on available data, and that is reliable, easy to use and cost effective. For example, Eurostat is studying the possibility of using a two-step methodology to reduce the scope of potential FGPs. Indicators are used to reduce the scope of potential FGPs. In the Eurostat research and testing to-date, countries focused on a small set of ISIC codes.

17. It was reported that the EU Task force next steps will include developing the questions for identifying FGPs in surveys. For example, Eurostat’s Structural Business Statistics can include special questions in a reduced sample. However, implementation of additional questions will be a challenge from a response burden perspective. In other countries, surveys may not be needed (i.e., in Sweden, only 10 units were identified). The Eurostat timeline is to finish the FGP TF in 2016.

18. It was reported that Sweden used an indicator based on workers’ ISCO/ISCED characteristics. The TSG is interested to know more about the definition of “workers” ISCO/ISCED used.

19. The United States tried to reduce the scope with questions for units in manufacturing, wholesale, R&D that outsourced production of goods. The Canadian questionnaire sampled enterprises, and then a subset, based on the response to filter questions rather than indicators. Canada used reported R&D costs in the wholesale sector to identify potential FGPs.

20. In both the United States and Canada, research and testing showed the importance of the terminology.

21. In the United States, in up-to-date research and testing, survey questions were mandatory while follow-up was voluntary. The potential of infinitely variable answers on the problematic questions was noted.

22. Contract manufacturing terminology did not work well in the United States. Contracting was being perceived for long term arrangements in contrast to specific purchase/order itemization. The concept of product ownership was also unreliable. However, the responsibility of unsold goods or

defective goods tested well. It was mentioned that the responsibility of unsold goods is well defined, however there is potentially some shared responsibility for defective goods and was problematic.

23. The United States also tested for economic ownership of final output and IPP. Values of low shipments based on industry average were used to target contractors. The inquiry appears to be more enterprise-centric than establishment-centric as well as by manufacturing product division (e.g., home or industry product division).

24. Also, in the United States, the terminology of legal liability tends to shut down the interview. IPP did not work well with propensity for immediate referrals to legal departments. It was also not clear that IPP includes blue prints, design, and etc. The terminology of “goods for re-sale” was not well understood.

25. It was noted that the ability of finding the right person/place to report outsourcing of goods production varies. Next steps will include identifying language, contacts and companies. If this will not be successful, then the United States will also consider indirect methods (i.e., indicators of outsourcing though these are also not definite and could be also problematic).

26. It may be useful for the indicators to separately consider contractors, service providers, or manufacturers, otherwise marginal effects may disappear. Also, the TSG observed that levels of employees may not be good factor at identifying FGPs. The use of product data as a criterion was mentioned, especially manufacturing services and specific product lines.

27. France did some testing looking at several indicators based on the indicators from Eurostat’s TF on FGPs. Most indicators aligned with the indicators outlined by Eurostat but they used a core indicator - outsourcing ratio, which is not in the Eurostat outline. Among other indicators, they included high purchase of manufacturing services (informative for outsourcing). First attempted benchmarking to total expenses including salaries, but the indicator was not discriminatory compared to using other external expenses.

28. In France, data sources included administrative data sources – business register, tax data social declarations (i.e., categories of employees based on occupation and education), and status of employment – which can be translated into ISCO categories; and identified the number of production workers compared to other types of employees. Other European countries, Canada or the United States do not have this level of detail data.

29. It was noted that many countries cannot use tax data. Italy used balance sheet data; Sweden and Finland used Structural Business Statistics data. Structural Business Statistics data include output, turnover, use of capital (depreciation), investment (by categories), and employees (categories). The TSG noted that another pre-requisite of the potential indicators is that the data are available for each unit under consideration.

30. It was noted that the French study also did not consider product outputs and inputs. There is no product detail in Structural Business Statistics, but purchase statistics (i.e., total amount of goods and services (without breakdown)) in the basic module. Eurostat wants to bring together in FRIBS (Framework regulation integrating business statistics) into different surveys (including on outsourcing and business functions).

31. The study in France was on “enterprises” and only focused on FGPs and not outsourcing in general. The study identified 138 potential FGPs with 4 dominant enterprises. Excluding the biggest 4 enterprises, the total turnover of these 134 potential FGPs is about €3.3 billion and with a total number of 5,200 employees. In France, no separate subclasses are considered if turnover is below €2 billion or the number of employee is below 15,000.

32. The study used low threshold levels to ensure good coverage especially for enterprises classified in wholesale trade. The exclusion of micro-enterprises was noted as one possible limitation of the results. The TSG noted that it might be interesting to validate the coverage of the study (i.e., if some known potential FGPs were missed).

33. The TSG commented on the remarks by UNSD on the review of FGPs in ISIC. It was recommended that regular rules should apply regarding different outsourcing or production arrangements, and flagging them is recommended at the moment.

34. The TSG remarked that “goods” do not necessarily have to come from manufacturing, but could be produced by other economic activities.

## Future Work

35. The summary of the action items for the TSG-ISIC and the outline of the Issue Paper are presented in Annex I and II.



## Annex I – Summary of Action Items

	Action Item	Responsibility	Date Required	Comments
1	Issue paper	All TSG-ISIC members	May, 2017	<ul style="list-style-type: none"> <li>- Outline and drafting responsibilities as specified below (Annex II )</li> <li>- Alice Born will coordinate the editing</li> </ul>
2	Create a wiki to gather country experiences, comments	UNSD	ASAP	<ul style="list-style-type: none"> <li>- With a suitable location/link on the UNSD website</li> <li>- User-friendliness is required</li> <li>- Also need closed online collaboration tool for the issue paper</li> </ul>
3	Raise with the EG bureau the idea of nominating a member for the TF-SU	Alice Born		<ul style="list-style-type: none"> <li>- This would be in addition to country representations</li> </ul>
4	Meeting report	Alice Born Vysaul Nyirongo	May 31, 2016	<ul style="list-style-type: none"> <li>- Send to the group for approval by email by May 31 2016</li> </ul>
5	First draft of Issues paper	All TSG-ISIC members	July 31, 2016	
6	Comments on Issues paper	All TSG-ISIC members	September 30, 2016	
7	Final draft	All TSG-ISIC members	December, 2016	
8	Present Issues paper	All TSG-ISIC members	May, 2017	<ul style="list-style-type: none"> <li>- Circulate and present to EG on International Statistical Classifications for approval</li> </ul>

## Annex II – Issues Paper Outline and Drafting Responsibilities

### Issues Paper On Factoryless Goods Production and Considerations for a Future Revision Of ISIC

- I. Background and context (AF , NR)
  - Current treatment in ISIC and TFGP recommendations
  - Statistical units
  - Typology of production arrangement of goods i.e. use the typology in ac315-bk8 annex II; substituting “outsourcing in manufacturing” with “outsourcing manufacturing transformation” and “manufacturing production process” with “manufacturing transformation process” throughout
  
- II. Issues related to the current treatment (JM, AK, CD)
  - Ownership of outputs and inputs
    - o Material input
    - o Final output versus final products
      - Intermediate output?
    - o IPP, designs, blue prints
    - o Production process and logistics
    - o Marketing
  - Can “goods” come out of the non-manufacturing units?
  - Can units outputting mainly or only services be in manufacturing?
  - Distinction of goods production versus physical transformation of raw materials and intermediate inputs
  - Traditional manufacturer, FGPs, contractor and others
  - Scope of manufacturing
    - o Production bound by physical transformation or goods production
    - o Implications in impacted statistical domains
  
- III. Research and testing to-date (AC, CM, AB, AK)
  - Data sources, indicators and thresholds
  - Survey questions
  - Flags in BR and their use in surveys (IM, manufacturing contractors, FGPs)
  - AB to liaise with NA group to get more country experiences