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Summary report of the consultation on SIEC with the UN Expert Group on Economic and Social Classifications

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1. Introduction

The development of a classification of energy products is a key element in the preparation of the *International Recommendations for Energy Statistics* (IRES). Given the fact that it is expected to become an international classification for energy statistics, it was considered important to consult with the United Nations Expert Group on Economic and Social Classifications (referred to as the 'Expert Group on Classifications' in the rest of the report) to ensure that the principles and criteria of international standard classifications are taken into account in the development of SIEC and that the Expert Group on Classifications has an opportunity to express its views.

To this end, the Expert Group on Classifications was informed of the development of such classification and consulted during its meeting in September 2009[1]. The Group was invited to comment on the scope, criteria and structure of the proposed classification and a number of suggestions for improvements were provided.

The further development of SIEC was carried out during the period from February to May 2010 in the context of the preparation of the preliminary draft of IRES for the worldwide consultation. The classification was developed on the basis of the list of harmonized definitions that emerged from the work of the InterSecretariat Working Group on Energy Statistics (InterEnerStat).

The provisional draft of IRES, which was circulated for the 2nd stage of the worldwide consultation in July 2010, presents a revised version of SIEC which takes into account the decisions of the Oslo Group at its fifth meeting in February 2010 and the comments from the Expert Group on Classifications. At the same time chapter 3 of IRES was also circulated for comments to the Expert Group on Classifications.

Overall nine members of the Expert Group provided detailed comments. This report summarizes the comments received by members of the Expert Group on Classifications received during the period July-August 2010 and contains suggestions on how to address them in order to facilitate the discussion during the Expert Group Meeting on Energy Statistics (2-5 November 2010).

The comments have been structured in this report along five broad topics: conceptual issues; balance and structure; explanatory notes; correspondence with other classifications; miscellaneous. They are presented in the next sections.

2. Conceptual issues

The main conceptual issues raised by the Expert Group on Classifications refer to the clarity of the classification and the underlying classification criteria. These are presented below.

[1] Meeting of the Expert Group on International Economic and Social Classifications, New York, 1-4 September 2009. Documents available at:
http://unstats.un.org/unsd/class/intercop/expertgroup/2009/ac190-2.asp

(a) Clarity

One main concern by members of the Expert Group was a perceived lack of clarity about the basis of the classification. It was pointed out that the introductory text to the classification, while clarifying the scope of the classification better than in the previous draft, still needed further explanation and clarification of the underlying conceptual base. It was also felt that more explanation was needed on the purpose and use of the classification, and in particular how the Sections, Divisions, Classes and Subclasses of SIEC are formed.

Specific points that were considered in need of further clarification are presented below with a suggestion on how to address the issue.

Issue	**Explanation**	**Possible suggestions**
Underlying concept and statistical unit is not sufficiently made clear. It must be clearly explained that SIEC is a product classification, as well as what 'energy products' are.	To make it clear that SIEC is a *product* classification, it was suggested by some EG members to change the title of the classification to include the word 'product'. Expert Group members were also concerned that the concept of 'energy product', despite being the fundamental base of the classification, was introduced relatively late in the text. Lack of clarity of what the statistical unit being measured is was also perceived as a problem.	A change of the title of the classification can be considered to make explicit reference to the fact that it is a classification of products. The concept of 'energy product' is first explained and defined in Chapter 2 (paragraph 2.8). A reference to this definition, or a summary of it, could be introduced early in the SIEC text, before the discussion of purpose and scope. In addition, to underline the point that SIEC is not intended for use as an industry classification, it could be made clear in the introduction that the classification of industries will be discussed separately in IRES Chapter 5.
Purpose and use of the classification is unclear.	Members of the EG would like some clarification on *how* SIEC is intended to fulfill its purpose as a reference classification, including a description of its role and relationship with existing standards (HS, CPC, SEEA).	Additional text could be introduced in IRES to describe how SIEC addresses some shortcomings in existing product classifications (CPC, HS) for use in energy statistics, and explaining that in this regard, distinctions made in SIEC might also provide useful input for the revision of these classifications. A reference to the relationship between SIEC and the classifications in the SEEA could be made in the introduction of Chapter 3.
	The text on purpose and conceptual basis of SIEC should also make it clear how the different levels (i.e. Sections, Divisions, Group, Classes) are formed.	It is unclear at this point how much extra information on the formation of the different levels could be added to the text without further discussion, but main considerations can be provided in the text.

(b) Criteria used

Some members of the Expert Group on Classifications expressed the opinion that the distinction between primary and secondary energy products, and renewable and non-renewable products could be used as classification criteria in SIEC. Although neither of these criteria is explicitly recognized by SIEC, some members considered it important to link SIEC to these concepts and provided some suggestions on their use.

Issue	**Explanation**	**Possible suggestions**
Distinction between primary and secondary energy products should be acknowledged in SIEC.	The importance of this distinction was emphasized. It was pointed out that although para. 3.18 explicitly mentions that these are not classification criteria for SIEC, they seem to be implicitly used to group categories in SIEC section 1 and 2.	The use of the distinction between primary and secondary products as classification criteria was discussed within the Oslo Group and it was decided that it would not be an explicit classification criteria for the top level categories in SIEC. However, given its importance every product is labeled in IRES as primary/secondary as well as renewable/non-renewable.
	It was suggested that SIEC should explicitly use this distinction as a classification criteria. Alternatively, each product category could contain an additional label specifying whether it is considered primary or secondary.	The labeling of each product in SIEC as 'primary' or 'secondary' (and as 'renewable' or 'non-renewable) is currently provided in IRES as an annex. It might be beneficial to move this information into chapter 3 on SIEC (but not as part of the item description).
Current breakdown of waste could be improved	In reference to para. 3.102, it was suggested by one member of the EG on Classifications that the distinction between renewable and non-renewable energy products seems more important than the distinction between industrial and municipal waste. The latter could be replaced by a split according to the nature of waste: organic, non organic, mixed.	Currently, industrial waste is considered as the non-renewable component of waste other than municipal waste. The renewable component is classified under biofuels. Perhaps a clearer explanation of this treatment would be useful.

3. Balance and structure

It was pointed out by several members of the Expert Group on Classifications that the proposed SIEC structure is not statistically balanced. This was considered a fundamental issue which, if left unsolved, could preclude the elevation of SIEC into the International Family of Economic and Social Classifications. It was pointed out that the number of levels used (five) is not representative for the classification as a whole, as there are only a couple of cases where such detail is required. It was also seen as a shortcoming that Section 5 and 6 contain no further subdivision. Two proposals for a re-designed four-level SIEC structure were provided.

Issue	**Explanation**	**Possible suggestions**
The structure is over-elaborated.	It was suggested to change SIEC into a 4-level structure by removing excessive detail, in particular for division 22.	The point is recognized and should be reviewed.
Section 5 and 6 lack detail.	Several members pointed out that the level of detail in Section 5 and 6 did not compare with the detail provided in other Sections of SIEC. One suggestion was to further subdivide these sections according to production process or conditions of use (high, medium or low voltage).	It was an explicit decision of the Oslo Group not to further disaggregate Section 5 and 6 according to production processes. Production processes for electricity and heat are identified in Chapter 5. Perhaps this point could be further explained in the text. It should be pointed out that although the classification does not appear balanced in terms of detail, it might be more balanced in terms of relative importance of each Section. The text in IRES could clarify this point.

4. Explanatory notes

Members of the Expert Group on Classifications had several suggestions for improving the explanatory notes provided, ranging from substantial additions to editorial changes. More detail was requested not only for the product definitions themselves, but for higher levels as well (Sections, Divisions, Groups and Classes). It was also suggested to add a glossary to explain technical terms used in the definitions.

Issue	**Explanation**	**Possible suggestions**
Technical terms used in the definitions should be explained.	It was suggested to include a glossary or guideline document to explain terms used in the definitions such as 'Gross Calorific Value' or 'Vitrine Mean Random Reflectance'.	IRES is expected to contain a glossary of terms. The document will be reviewed to ensure that relevant terms are properly defined in the Glossary.
The definitions should not be divided into 'explanation' and 'remarks'.	It was pointed out that the structuring of the explanatory notes into separate 'explanation' and 'remarks' parts might not be necessary, and that the information provided in the remarks were sometimes important for a complete understanding of the scope. It was therefore suggested to remove this distinction.	Currently IRES reflect the structuring of the definitions of products from InterEnerStat. However, for the purposes of SIEC, we might consider reviewing the description of the products by presenting as 'explanatory notes' as conventionally done in other International Classifications. Thus the labeling of 'remarks' and 'explanations' could be integrated into the "explanatory notes".
Explanatory notes should be expanded.	More detailed information on composition and scope of all Sections, Divisions, Groups, Classes and Subclasses was requested. In addition to detailed descriptions, lists of "inclusions" and "exclusions" (similar to those used in ISIC and CPC) were seen as an important component.	The current explanatory notes are based on the product descriptions of InterEnerStat. If more explanation is to be provided, care should be used in order not to change the scope of the definitions.
The definitions might not adequately reflect products or processes used in developing countries.	SIEC being intended as an international standard, concern was raised by some members of the EG on Classifications on the suitability of the classification for developing countries. It was suggested than when submitted for final approval, the accompanying report should make clear who had been consulted and what endorsements they have provided.	A number of developing countries are represented and have been active in the Oslo Group itself. In addition, the IRES development process includes two worldwide consultations. The list of harmonized definitions is the outcome of the InterEnerStat process. Following the ongoing worldwide consultation, attention should be given to the feedback provided by developing countries to ensure that the classification suits their needs.

5. Correspondence with other classifications

The relationship between SIEC and other classifications was considered to be a topic of large importance, and Members of the Expert Group on Classifications were particularly concerned about its correspondence with the Central Product Classification (CPC). It was suggested that a mention could be added in the introduction to the fact that the scope of SIEC is a subset of the scope of CPC. However, the large number of partial links in the provided CPC 2 correspondence table was seen as a cause for concern. In particular, the fact that the scope of SIEC does not follow existing CPC distinctions but cuts across CPC subclasses was seen as an important obstacle for adoption in the native country of one respondent, who also suggested that the situation might be the same in other countries.

Correspondence tables with other classifications than CPC 2 and HS 07 were also considered important.

Issue	**Explanation**	**Possible suggestions**
SIEC does not follow established distinctions of the CPC.	It was pointed out that CPC is the international standard product classification, and that the scope of SIEC should be considered a subset of the scope of CPC. The large number of partial concordances between SIEC and CPC categories was seen as problematic, and especially the fact that a number of CPC subclasses are only partially within scope of SIEC. Moreover, one EG member pointed out that the de facto division of SIEC Division 2 into primary and secondary products correspond poorly with similar distinctions made in CPC.	It will be clarified in the text the relationship between the scope of SIEC and CPC. For now, we cannot avoid partial links with CPC and HS, as there classification systems have important shortcomings when it comes to classifying energy products in a suitable way for compiling energy statistics. Improving compatibility between SIEC and CPC/HS can be envisioned as a longer harmonization process between classifications.
There is need for more concordance tables.	Additional concordance tables between SIEC and HS2012, ISIC Rev.4 and SITC 4 were suggested.	A reference could be made in the SIEC text that additional correspondences could be published later in electronic form, but there should be more discussion on the relevant classification to link with.
SIEC and HS treats *coking coal* differently	It was suggested to link coking coal with the HS code for bituminous coal, since SIEC places coking coal as a sub-category of bituminous coal.	SIEC considers coking coal to be a form of bituminous coal, whereas HS does not. According to the HS support material (index and explanatory notes), coking coal should not be classified under bituminous coal, but rather in a residual category.

6. Miscellaneous

A number of other comments were made that do not pertain directly to the topics already discussed above. These are summarized in the below table:

Issue	**Explanation**	**Possible suggestions**
Current coding structure is impractical and naming of categories does not follow standard practice.	In the opinion of Expert Group members, the current naming of higher-level categories is not ideal and does not follow standard naming conventions (e.g. precise, accurate and relevant).	This has been recognized as an issue.
	Moreover, Expert Group members considered the proposed code structure to be over-elaborate, and suggested a fixed-length coding scheme without dots, and with a consistent use of last digit ('0' for 'not further defined', '9' for 'not elsewhere classified')	Also, unless restructuring is done to the SIEC hierarchy itself, there are a handful of categories where double digit level codes are necessary, which makes fixed-length coding schemes problematic as well.
	The acronym '*nec'* for residual categories was considered to be preferred above '*n.e.s.'*, which has been used in SIEC.	Changing *'n.e.s.'* to *'nec'* would not pose much difficulties.
There is no specified custodian for SIEC.	According to the 'Best Practice Guidelines for Developing International Statistical Classifications', every classification should have a designated custodian. It was pointed out by EG members that it has not been made clear who will be the custodian for SIEC.	
Maintenance Schedule, Implementation and Dissemination	Although not considered as critical issues at this stage, members of the EG on Classifications pointed out that it would be good for SIEC to make provision for maintenance schedule, implementation and dissemination.	These points could be discussed and formulated.