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Clarifications and recommendations concerning differences between the OECD guidance manual on material flows and resource productivity, Volume II and the SEEA 2003

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Clarifications and recommendations concerning differences between the *OECD guidance manual on material flows and resource productivity, Volume II* and the *SEEA 2003*

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Karl Schoer and Ole Gravgård

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Summary

This paper aims at summarising and clarifying the main points where the approaches and conventions for physical and material flow accounts differ with respect to the treatment in the OECD guide and in the SEEA 2003. The paper also suggests ways to improve the presentation of the text of the OECD Manual on MFA so as to show that the MFA is an extension of the SEEA-2003 and not a competing system. Further, the paper provides preliminary recommendations for reconciling the two approaches of the SEEA and the OECD manual. It is suggested to put the whole matter of harmonizing SEEA material flow accounts and the OECD manual on the revision issue list in order to allow for further systematic discussion on the recommendations.

The main recommendations are:

Terminological issues:

It is proposed to avoid terminological differences between the OECD manual and the SEEA completely.

A common use of the terms "physical flow accounts", "SEEA-MFAcc" (SEEA material flow accounts), "EW-MFAcc" (SEEA economy wide material flow accounts), and "economy" (in contrast to socio-economic system) is recommended.

Economy wide material flow accounts (EW-MFAcc):

It is proposed to view EW-MFAcc in principle as a sub-system which is fully integrated into the SEEA-MFAcc. Therefore the opportunity of the revision process should be taken to remove the currently still existing conceptual differences completely. For that purpose the current concept of the EW-MFAcc has to be changed in some points. But on the other hand some pragmatic conventions and solutions for the demarcation of SEEA-MFAcc have to be developed without violating the strict relationship to the SNA. Concrete solutions are proposed for that purpose.

Presentation of the text on SEEA in the OECD manual :

Regarding the presentation of the text on SEEA in the OECD manual a principal suggestion is made for underlining further the SEEA related part of the material flow accounts (SEEA-MFAcc) by stressing the strong link between the System of National Accounts (SNA) and by clarifying the relationship between the conceptual framework of the SEEA-MFAcc and its sub-modules.

Moreover it is put forward that the exact role of the OECD manual in relationship to the new SEEA-MFAcc reporting system (standard, operational manuals, compilation guides) has to be clarified. That would be a precondition for further proposals on the content and the way of presentation of the manual. It is proposed to include that question into the revision issue list.

1. Introduction

This paper answers a request by the London Group from its meeting in March 2007 in Johannesburg. It aims at summarising and clarifying the main points where the approaches and conventions for physical and material flow accounts differ with respect to the treatment in the OECD guide and in the SEEA 2003. The paper also suggests ways to change the presentation of the text of the OECD Manual on MFA so as to show that the MFA is an extension of the SEEA-2003 and not a competing system.

Beyond the original request the paper also provides recommendations for harmonizing the two approaches of the SEEA and the OECD manual.

It was not possible at this moment to present a paper that is co-ordinated with EUROSTAT and OECD. That is due to time constraints as there are some rather fundamental proposals for a change of current concepts, which in view of EUROSTAT and OECD require more intensive discussion and consultation of some important stakeholders. Insofar the paper and the proposal represent the author's view and have preliminary character. It is suggested to put the whole matter of harmonizing SEEA material flow accounts and the OECD manual on the revision issue list in order to allow for further systematic discussion on the recommendations.

2. Terminology

a. Physical flow accounts, MFA, MFAcc, etc

In SEEA 2003 the general term for describing accounts for flows of natural resources, ecosystem inputs, products (including energy), and residuals is *physical flow accounts*. The basic physical flow accounts in SEEA 2003 include PSUT and PIOT. These are "conversions" of the corresponding monetary tables known from SNA into physical quantity units (not only kg, but also units like Joules, cubicmetres are applicable). However, In addition (in section five of chapter 3) SEEA 2003 describes briefly the *Economy-wide MFA*, EW-MFA. Thus, in SEEA 2003 EW-MFA was included under the term *physical flow accounts.*

In contrast the OECD guidance manual introduces the new acronym MFAcc for material flow accounts. It wants to reserve the term MFA for material flow analysis. The SEEA type physical flow accounts are included among the MFAcc, but other types of MFAcc exist as well, e.g. substance flow analysis for processes.

The SNA and the SEEA concentrate on providing macro- and meso-economic figures at a national level. Compared to that the scope of the OECD manual is much broader, as it includes also specific accounts at a more detailed level, like specific substance flow accounts, specific ecosystem accounts or life cycle accounts.

In relation to the terminologies used by the SEEA 2003 and the OECD guide an important but until now almost over-looked issue has to be raised. In the SEEA

physical flow accounts are generally defined as non-monetary accounts. Non monetary accounts may in principle include material flow accounts as well accounts for physical services (non-material physical flow accounts). For example in the German physical flow accounts variables as the use of area as settlement and traffic area, and the transport variables kilometres driven and ton-kilometres have been included and they are organised according to the PSUT format. The inclusion of those variables widens the scope of the accounts towards important sustainable development indicators. However, neither in the OECD manual nor in the SEEA 2003 chapter 3 there is any explicit mentioning of including non-material flow accounts. This current gap should be considered when deciding on terminology.

Recommendation:

It is proposed generally to avoid terminological differences between the OECD manual and the SEEA completely.

Non-material physical flow accounts should be included into the new SEEA as a part of the physical flow accounts.

On that basis it is recommended that in the SEEA the term physical flow accounts is used as a generic term for both non-material and material physical flow accounts. For the SEEA material flow accounts in principle the OECD terminology should be adopted by using the acronym SEEA-MFAcc, which then will include material related PSUT, PIOT and EW-MFA. An acronomym for SEEA non- material physical flow accounts can be added. OECD should add a new term for non-SEEA material flow accounts..

The acromym EW-MFAcc as proposed by the OECD should also be adopted for the respective sub-module of the SEEA-MFAcc.

b. Socio economic system versus eonomic system

The SEEA divides the world into nature and economy. This is a natural consequence of the fact that the SEEA is a satellite system to the national accounts, with the purpose of describing the interactions between the environment and the economy.

The material flows included in the SEEA are related to economic activities of production and final use of products. That demarcation follows strictly the production boundary of the SNA, which constitutes the economy. That applies also to the economic activities of private households (production and consumption).

In contrast the OECD manual divides the world into nature, the economic and the social system. Unlike in the SNA the consumption activities are not considered an economic but a social activity. The use of the term socio-economic is introduced to underline, that to get a full picture we have to look also at human activities and stocks, which are not strictly economic (belongs to the economy) in the core SNA. It is argued (OECD manual part I, annex 3) that unlike for production activities the material flows by activities of private households are not related to economic

transactions. Air emissions of private cars or human respiration are mentioned as examples. Another example is durable consumer goods which are not turned into waste or other material in the period of purchase. It is argued that therefore only the material flow of production activities can be related to economic flows.

In the first place it has to be stated that the flow of products into private households corresponds to the economic transaction of purchase of these goods. If the consumption and the subsequent transformation of those goods into waste, air emission or other materials takes place in the same period it is not arbitrary to relate those output flows to the purchase. Even human respiration can in an economic perspective be related to the consumption of food (goods).

Less straightforward is the situation in the case of durable consumer goods and capital goods as they are not transformed in the period of purchase. It is certainly useful from the perspective of physical accounting to disaggregate consumer goods into durables and non durables, as it is suggested in the OECD manual. In that case one has to live with the fact that no monetary reference figures are available.

The use of the term *socio-economic* in contrast to the term *economic* is principally correct and useful in the sense that it underlines that the SNA view of the world could be broadened.

However, for the SEEA as a satellite system to the SNA it seems not appropriate but rather confusing to introduce the term instead of economy/*economic* since the purpose of SEEA is exactly to get a broader view of the economic activities as described in the SNA.

Additionally, it has to be stated that the introduction of the term socio-economic is *mostly* a question of terminology since the SNA production boundary provides a comprehensive coverage of material flows from and to the environment caused by private households. Further, the purpose of a SNA satellite system like SEEA 2003 is exactly to get a broader or even an alternative view of the concepts covered by SNA. Thus it seems most appropriate to use the same terminology to the extent possible.

As far as the extraction of material by private households is concerned it has to be noted that the SNA production boundary includes also the production of goods by private households for own final use that do not appear in the market (SNA 4.147). That refers for example to the collection of firewood, other non cultivated plants or animals or the direct use of water. The value of the respective output has to be imputed on the basis of the prices of similar goods or services sold on the market. However, in the SNA it is recommended to include in practice only “significant” activities. Following this line of thought it seems straightforward to include also for example ecosystem inputs like oxygen that is used for combustion of energy carriers by private household.

As far as the disposal of material to the environment by private households is concerned, the production system of SNA covers all air, waste, waste water and dissipative missions that result from the consumption of products (including household products that were not bought in the market). Waste and waste water emissions that are disposed by private households are either collected and treated within the economy by special units or they are directly disposed to the environment

by private households (residuals). Air and dissipative emissions are always directly disposed to the environment.

Recommendation:

In relation to SEEA-MFAcc it is proposed that SEEA and the OECD guide use only the term economic and not the term socio-economic system.

It is suggested to disaggregate the accounts in the OECD guide as well as in the SEEA by explicitly showing the stocks of consumer durables.

3. Harmonising the economy wide material flow accounts

If it is accepted that the EW-MFAcc is a sub-account to the SEEA-MFAcc, it is clear that the demarcation concepts should be fully harmonized. Therefore the opportunity of the SEEA revision process should be taken to remove the currently still existing conceptual differences completely. For that purpose the current concept of the EW-MFA has to be changed in some points. But on the other hand some pragmatic conventions and solutions for the demarcation and implementation of SEEA-MFAcc have to be developed without violating the strict relationship to the SNA.

One important precondition for achieving the harmonisation also in practice is an intensive cooperation between the national and environmental accountants during the compilation process with the aim of harmonising the basic data, the estimates and assumptions to be employed.

The currently existing differences are discussed below.

a. Residence versus territory principle

The physical flow accounts of the SEEA2003 follow the *residence principle* (economic activities of resident units) as system boundary which is fully in line with the demarcation of the system boundary of the domestic economy of the SNA. That demarcation is accepted in the OECD manual for PSUT/PIOT. But for the EW-MFA it is suggested there to use the *territory principle* (activities on the national territory) as system boundary. It is proposed to provide bridge tables for linking the EW-MFA to the PSUT/PIOT.

The difference between the concepts is related mainly to international transport activities (goods and persons) of domestic economic units (production branches and private households) and vice versa[1]. In quantitative terms usually only the differences arising from the energy use and air emissions in relation to international transport (especially ships and air planes) may be relevant for some countries.

[1] As an example of a bridge table see the Danish contribution to the last London Group meeting http://unstats.un.org/unsd/envaccounting/londongroup/meeting11/LG11_8a.pdf

At the European level *bridge tables* were developed and applied between the territory and the residence concept for NAMEA energy and air emissions (specific PSUT for energy and air emissions) – but not for other kinds of physical flow accounts.

The NAMEA energy and air emissions tables (breakdown by industry) are demarcated according to the residence concept, but the totals are also available for the territory concept. The reason was to provide a clear link to the national and international reporting systems (energy balances, green house gas emissions UNFCCC), which follow the territory principle.

In practice, figures for energy and emissions demarcated according to the territory principle usually are the starting point for the SEEA MFAcc, and the conversion into the residence principle are then carried out by using internal material from the national accounts and/or foreign trade balance statistics (among other information on bunker fuels).

For the EW-MFA (and other kinds of MFAcc) not much experience on the difference between using the residence and the territory principle exist. Probably, for most countries it does not make any significant difference. However, calculations in relation to EW-MFA for Denmark show that it actually makes a big difference whether the residence or the territory principle is used, since the amount of fuel bunkered abroad by Danish ships are substantial for energy in isolation, but also in relation to the sum of all other material flows (e.g. the DMI indicator).

Besides international transport as a production activity and related emissions, there are also some other areas like transport by private cars, where the differences in approaches might be significant. For flows other than energy, for example tyre rub-off, the flows are rather marginal and could hardly be quantified. They can therefore be neglected in practice.

It must be acknowledged that when it comes to implementation of PSUT, PIOT and EW-MFAcc it will often be necessary - depending of the degree of detail and accuracy in the national accounts -to use the territory principle since no information on the non-territory but residence related flows exist.

However, since the residence principle is a key concept of the SNA and the SEEA 2003, these practical problems seems not to justify a deviation from residence as the key concept and principle of SEEA MFAcc and EW-MFAcc. Rather, it must be seen as pragmatic deviations from the principle (when no data are available).

Recommendation

It is proposed that the SEEA-MFAcc and thus the EW-MFAcc are fully demarcated according to the residence principle. In order to provide a link to the national and international reporting systems (energy balances, green house gas emissions UNFCCC), which follow the territory principle, bridge tables should be provided for energy and air emissions.

The UNCEEA should discuss working on adopting the residence principle as a standard for energy balances and the UNFCCC reporting system. Besides the

argument of linking environment and economy an additional argument could be that the territory approach systematically neglects the fast growing overseas ship and air transports.

b. Cultivated crops and trees

As far as the PSUT and the PIOT are concerned, the treatment of the production of cultivated crops, trees and animals are the same in the OECD manual and the SEEA 2003. That view is in line with the SNA, which states that the growth of crops and trees, which is organized, managed and controlled by institutional units is a production process in the economic sense.

In the physical accounts the inputs to that type of production processes are produced inputs (like energy, fertilizers, irrigation water) on the one hand and ecosystem inputs (carbon dioxide, nutrients and non produced water) on the other (”eco-system-input approach”). The outputs are the products including the net change of inventories of non harvested products (“production approach”) and the residuals generated by that production process.

Against that in the *economy wide MFA* the harvest of cultivated crops and cultivated trees is regarded as extraction of biotic raw materials from the environment. Thus the borderline between the nature and the economy is defined by the harvest of the finished crops, felling of trees and uptake of plants by animals through grazing (“harvest approach”). The produced inputs of seed, fertilizers and pesticides and irrigation water for cultivating the crops and trees, which in reality are at least partly incorporated into the plants, are fully regarded as dissipative output to the environment in order to avoid double counting. No eco-system inputs (e.g. water) to animal or crop production are accounted for in the EW-MFA.

Above all, that approach was followed for the pragmatic reasons of data availability. Accurate data on the ecosystem inputs and the proportions of the produced inputs that are incorporated by the plants are hardly to obtain and if those figures could be estimated, they would be only of very limited practical use. An exception in terms of data availability and usefulness may be carbon-binding by growth of trees, as that information has to be included into the inventories of the international green house gas reporting process. That requirement has lead or will lead to an improvement of the statistical basis for calculating those figures.

Due to the big problems of obtaining or calculating reliable data on eco-system inputs it should seriously be considered to adopt the “production approach”, i.e. the simplified EW-MFAcc approach for cultivated crops and trees - but including change in inventories of non harvested crops and trees - for the SEEA-MFA in general, i.e. for EW-MFAcc as well as for the PSUT and PIOT.

Following the “production approach” the deviation from the SNA production boundary seems not to be necessarily critical. With regard to the SNA concept the different treatment of ecosystem-inputs does not matter, but only the treatment of inputs and outputs with a market value. Although there are differences of nature and the cultivated plants are also heavily dependent on the ecosystem inputs, the harvest of cultivated crops and trees are then regarded in analogy to the extraction process of

other raw materials, like minerals or water. The use of produced inputs (intermediary products) is then assigned to that process.

However, It is fundamental in the SNA to regard the biomass growth already as production and not only the harvest or felling. The part of the biomass growth that is not harvested or felled during the period is then regarded as inventory build up. [2]

Abandoning the “eco-system inputs approach” and instead following the “production approach” would then mean that the monetary and physical output consists of harvested/felled products plus the change in inventories (net biomass growth). This approach allows for a consistent comparison of the monetary and physical accounts. The “production approach” shows the total supply and use by the economy of domestically extracted cultivated plants and trees including the use category build-up of inventories.

The production of non harvested crops and trees creates already a substantial amount of pressures to the environment. In so far one could argue that it is very useful for the interpretation of the EW-MFA to include that flow. To enhance the analytical potential of those figures the flows could additionally be split into harvested and non harvested materials. That approach is also used in the Eurostat guide for specific forest accounts. There even the forestry branch is split into forestry proper (growing the trees) and a wood harvesting branch, as that institutional setting appears in practice quite frequently. If it is distinguished between harvested and non harvested crops and trees one has all options open for deriving indicators..

As the shift to the “production approach” is a major change for the general SEEA-MFAcc as well as for EW-MFAcc it could be considered to put that matter on the revision-issue list in order to explore the consequences in more detail.

Further, for meeting the requirements of mass balancing – which is a constitutive principle for material flow accounting – it is necessary to regard the uptake of grass by cultivated animals as a material input into the economy. However, as already mentioned, the national accounts do not recognize the uptake of grass by cultivated animals as part of the production value as the production of that grass is considered as an auxiliary activity. So no monetary reference figure is provided by the standard system. A solution could be, to disaggregate the monetary accounts for the agricultural sector within the SEEA satellite into more detailed production processes. By that approach among others the production of grass taken up directly by the animals can be shown as a separate production process. That type of disaggregation is very useful for various types of agricultural analysis and has for example already been carried out within the German environmental-economic accounting system in monetary and physical terms.

The “harvest approach”(including the changes in inventories) is also applied in the Eurostat standard tables for environmental-economic forest accounting.

[2] Information on the changes in inventories should be available at least in monetary terms from the national accounts. Most probably the monetary calculations in that area are even based on physical information.

Recommendation

It is recommended that the "production approach" (harvested biomass plus change in inventories) is adopted for both, the general SEEA-MFAcc as well as for the EW-MFAcc. The uptake of grass by cultivated animals should be included.

However, the shift to the "production approach" is a major change for the general SEEA-MFAcc as well as for EW-MFAcc. In the further research process the consequences and solutions should be explored in more detail. Thus alternative PSUT and PIOT need to be worked out and the consequences for the description and classification of eco-system inputs need to be analysed. Since a full clarification of the issue is important for the completion of the OECD manual it is suggested that the issue is given high priority, so that a recommendation as far as possible can be given within the timeframe for completion of the OECD manual.

c. Waste

The main principle of SEEA 2003 is that the deposition of waste at controlled landfills is regarded as a flow are within the economy (destined to the capital category)[3]. Waste disposed in controlled landfills does not cross the border to the environment. However emissions from controlled landfill to the environment have to be taken into account.

The OECD guide uses the same approach for the EW-MFAcc in accordance with the recommendation of Eurostat Task force on Material Flow accounting.[4] This is a change in relation to how waste flows to controlled land fills earlier on was treated in EW-MFAcc.

This means following the OECD approach that there is now a full consistency between the principles of waste flows and controlled land fills in the EW-MFA and the SEEA.

Recommendation

The disposal of waste to controlled landfills should as standard be treated as a flow within the economic system and not as a residual flow. However, the waste flows should – as also indicated in the OECD guide - be shown as a separate category and not as a net addition to stock.

In addition it is suggested to add the principal waste flows (waste generation, treatment and recycling) as memorandum item to the EW-MFAcc.

[3] However, SEEA 2003 leaves also the option for treating the waste disposed on controlled landfills as a residual to the environment.

[4] On page 82 this is said explicitly: "*The flow of waste to controlled landfills is in principle considered as an internal flow of the socio-economic system, exactly as in the accounts of Chapter 3"* (i.e. in the PSUT, PIOT).

4. Restructuring the OECD manual

One important lack that was expressed at the last London group meeting is the type of presentation in part II of the OECD manual. It was suggested that the OECD MFA manual part II be structured using the SEEA as the basic building block and adding blocks, which are not part of the SEEA-2003, when needed rather than starting from describing the MFA system as a new system and then establish the links with the SEEA.

The OECD manual with its parts I and II covers a much broader range of analytical and accounting approaches than the material flow accounts of the SEEA (SEEA-MFAcc). It starts with a general frame that includes various approaches of material flow accounting at the macro, meso and micro level that are based on the accounting principle of mass balancing. Within that system the SEEA-MFAcc and PSUT are described as an important special case characterised by specific system boundaries and accounting rules that closely link that system to the SNA.

The major part of the OECD manual part II is devoted to describing SEEA-MFAcc. Only chapter 1 presents a general material flow accounting framework valid for accounting of material flows of any kind of entity and at all aggregation levels. The presentation of the SEEA-MFAcc is divided into two parts: the national material flow accounts (NMFAcc) and the economy wide material flow accounts (EW-MFAcc). The description of the NMFAcc in the manual is fully in line with the SEEA 2003, except for some terminological issues that were discussed above. For the EW-MFAcc some deviating demarcations are proposed, which mainly follow the present Eurostat MFA manual. With relation to the SEEA-MFAcc the paper presents a very logical and rich approach which goes far beyond the existing SEEA 2003 in theoretical stringency, detail and coverage.

However the special role of the SEEA-MFAcc as an international statistical standard should be recognised more in the OECD manual. At the same time the special importance and usefulness of the SEEA as the only approach that consistently links the material flows to the economic driving forces should be pointed out more clearly.

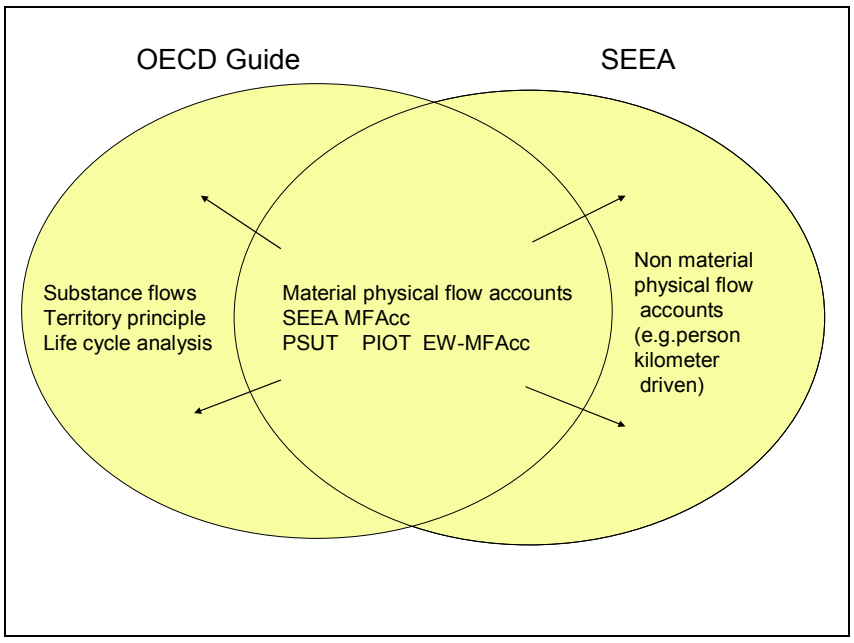
To support that goal it is suggested here to consider a slight change of the structure of the OECD guide. It is proposed to move the order of presentation. Instead of presenting the SEEA-MFAcc as a special case it is proposed to start with the systematic description of the SEEA-MFAcc.

The general MFA approach which makes use of the accounting principle of mass balancing and of the SNA tool of supply and use tables for describing interrelationships within a system should then be explained subsequently. However, in the manual it should also be made clear that the SEEA/SNA concept in fact primarily is a macro/meso approach. But the concept allows for deeper disaggregation of all dimensions included (region, type of material and type of activity). As far as the detailed accounts follow the principal concept of the SEEA-MFAcc they can be classified as belonging to that family of accounts. Establishing those accounts, i.e. building on further disaggregation of the IOT has enormous advantages, as the results are consistently embedded into the whole accounting framework.

The relations and the overlap between the SEEA and the OECD manual can be illustrated by figure 1, where the arrows indicate that the core principles from use of PSUT can be extended to use in other areas than for (monetary and) material flows. In the case of SEEA the extension to non-material physical flows are further described in the section on terminology above.

Figure 1:

Overlap between the SEEA physical flow accounts and the MFAcc of the OECD nanual



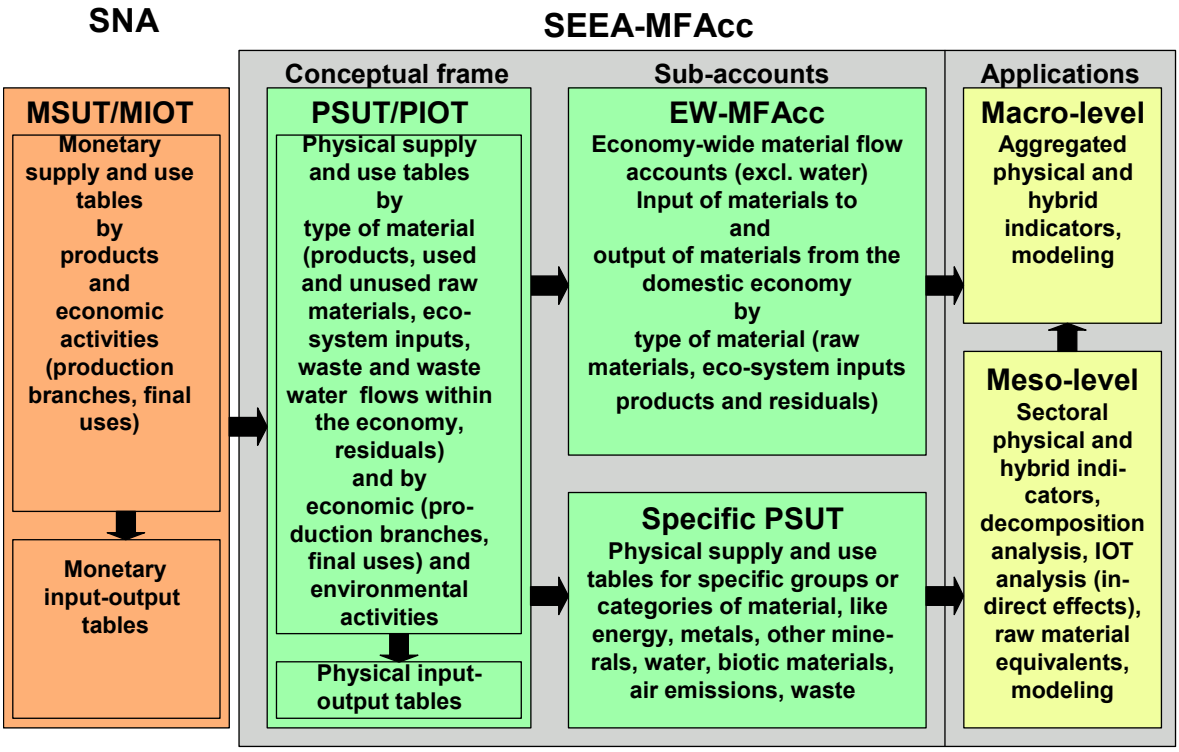
As far as the presentation of the SEEA-MFAcc itself is concerned it is proposed to take the close relationship between the SNA and the SEEA-MFAcc as a starting point. The system character of the SEEA type material flow accounts should be emphasized. For that purpose it seems useful to introduce the SEEA-MFAcc with the following diagram as it is presented in figure 2. That chart should guide the further description of the module in the manual.

The diagram shows in the first hand the relationship between the SNA and the SEEA-MFAcc. Those parts of the monetary accounts that are of particular relevance for the material flow accounts are the monetary supply and use tables (MSUT) and the monetary input-output tables (MIOT) which can be calculated on basis of the MSUT. The tables show the supply and use of all products by economic production (branches) and final use activities, like private consumption, capital formation and exports. Those tables are normally published in a standard break down at a meso-level of aggregation by about 60-100 product groups and branches. However the published material usually is based on very detailed tables. For example for Germany and Denmark the MSUT are disaggregated internally down to a level of 1500 and 2300 products, respectively.

The principal approach of the SEEA material flow accounts satellite system is to establish physical supply and use tables (PSUT). The PSUT firstly mirror the monetary product flows in physical terms. Secondly they supplement the depiction of products flows within the economy and with the rest of the world (ROW) with physical flows from the environment to the economy (raw materials and ecosystem inputs) and from the economy to the environment (residuals). Those tables can also be converted into physical input-output tables (PIOT). It has to be noted that the standard breakdown by products is a starting point for the physical description, but the degree of detail of the standard disaggregation may not be sufficient for addressing certain specific environmental problems

Figure 2:

Linking the material flows of the SEEA to the economic flows of the SNA



What is labelled in the diagram as the conceptual frame has so far been put into practice by rather few countries and not at a regular basis. The main reasons are that the compilation of the full physical tables is rather data demanding and resource consuming. Compared to that the value added of compiling the full tables would also be rather limited as most important environmental issues can be covered very well by a number of sub-accounts and some analytical approaches like hybrid input-output tables, which are based on the sub-accounts.

The conceptual frame of complete PSUT/PIOT usually is mainly needed in practice to organize a number of sub-accounts, which are fully consistent to the monetary reference figures. The sub-accounts typically are often calculated at an annual basis.

There are two principal types of SEEA-MFAcc sub-accounts, the economy wide material flow accounts (EW-MFAcc) and the specific PSUT. The EW-MFAcc are an aggregation of the total PSUT or the PIOT which shows the input of materials into the domestic economy from the environment and from the ROW and the output of materials from the economy to the environment and the ROW by type of material, but typically without any breakdown by economic activities.

The special PSUT tables cover a material or a group of materials, like energy carriers, water and agricultural products. Those tables use the standard breakdown or an expanded break down by economic activity.

In a last module the analytical applications that are based on the SEEA-MFAcc and especially the combination of the physical and the monetary accounts (hybrid accounts) are addressed. It is of special importance to demonstrate the approaches and the usefulness of hybrid (physical/monetary) analysis.

The above proposals for changing the description of the SEEA-MFAcc in the OECD manual primarily refer to the manual as an OECD document in order to stress the special importance of the SEEA approach. Further considerations on restructuring the manual are not possible at this point of time, as the exact role of the OECD manual in relationship to the new SEEA-MFAcc reporting system (standard, operational manuals, compilation guides) has to be clarified before.

5. Questions for discussion

1. Does the UNCEEA support the general proposal of striving for full harmonization of the SEEA and the OECD manual in terms of terminology and demarcation?
2. Does the UNCEEA support the general proposal of striving for full harmonization of the general SEEA-MFAcc and the EW-MFAcc?
3. What is the view of the UNCEEA regarding the proposal for restructuring the OECD manual part II
4. Does the UNCEEA support the suggestion to put the questions raised by the recommendations for harmonization on the revision issue list for further exploration by using the concrete proposals as a starting point?
5. What is the view of the UNCEEA on the time frame (quick e-mail discussion or discussion at one of the next London Group meetings) for solving those issues?
6. What is the view of UNCEEA members on the concrete proposals?