



Area C: Developing Global Databases

16th UNCEEA Meeting, 15-17 June 2021

1. *Introduction*

The outbreak of the Covid-19 Pandemic in 2020 has affected the activities coordinated by the organisations in the Area C. While some adjustments had to be made to existing plans, new needs have emerged that require reviewing the objectives and priorities of the activities of Area C in the coming five years. The most relevant is the increasing request by policy makers to have more timely, frequent, and granular data in order to implement policies.

Some work, such as the OECD estimation method for emissions from air transport, had to undergo major revisions as a result of the direct impact of the pandemic. In some cases, other priorities took precedence in response to the crisis, such as measurement of impacts from the pandemic, but the pandemic also brought increased attention to the databases and to improving the timeliness for understanding links between rapidly changing economic situations and their relationships with the environment. Thus, in many cases there is increased pressure to provide information more quickly and with increased granularity for analyses in the context of the pandemic and subsequent recovery. Finally, some of the priorities assigned to Area C work streams, such as the development of common reporting templates, have been delayed.

This note reports on the activities of the AREA C over the last year. Building on accomplishments, pending tasks and emerging needs, it proposes an updated roadmap for the coming five years. The next section covers current activities and recent progress for the work programme of the Area C group, focussing on key developments. Section 3 introduces the priorities and objectives that could guide the work programme for the next five years. An overview of the status of work for each of the five priority accounts (air emissions, energy, material flows, land and water) is given in Annex 1, and an updated and expanded road map developed for the Area C group in 2018, is provided in Annex 2. The note concludes with questions for discussion by the UNCEEA.

2. *Progress on Current Programme of Work*

The objective of Area C is to establish a set of global SEEA core databases to provide users with SEEA compliant data sets for integrated policy development and analysis, including the SDGs. This is done by coordinating and supporting the development of such databases at international level, by facilitating the exchange of related data among international organisations, and by providing direct access to existing SEEA databases through the websites of the author IOs and through the UNSD SEEA portal. The databases under development focus on the five priority accounts (air emissions, energy, material flows, land and water) identified at the Eleventh Meeting of UNCEEA in 2016. They build as much as possible on national data, complemented with estimates when national data are not (yet) available, so as to achieve a global coverage.

The procedures for developing global SEEA databases are designed to support efficient compilation, processing and exchange of the relevant data by national and international organisations, building on the principles agreed upon by the UNCEEA.¹ Responsibilities are distributed across the Area C group members.

Continuous improvements to the existing databases are a part of the ongoing regular work of the responsible organisations. Recent activities have focused on a) the quality of the data, b) the Automation of the procedures for an efficient exchange of the data, and c) their dissemination.

Data quality

Improvements to international compilations of SEEA statistics build on agreed **quality criteria**, such as:

- Policy relevance
- Timeliness
- Frequency
- Granularity
- Availability of long and coherent time series
- Alignment (to SEEA standards)
- Reliability
- Credibility

In 2016, policy relevance (for monitoring progress towards commonly agreed goals and objectives) was identified as one of the criteria for selecting the AREA C priority accounts.² Timeliness is one key element that makes the data relevant for policy makers. The outbreak of the COVID pandemic reinforced the demand for timely data to enable governments and policy makers to respond effectively. As a result, several initiatives have been taken in countries and at international level to respond to this demand. Looking at the five priority accounts of AREA C (see Annex 1), timeliness is a limitation to their wider use as the most recent annual data available from international databases are for 2019 and even 2018 or 2017, and do not cover the COVID crisis period. Such a limitation requires action in the coming years and a discussion on the quality criteria to be given priority.

One initiative in that direction is the partnership established among international organisations (IMF, OECD, IEA, Eurostat, UNSD) to develop and publish **quarterly air emission accounts** (AEAs), with the aim to increase the frequency and timeliness of air emission data in international SEEA databases. This initiative is also expected to generate early annual emission estimates. The partnership developed a ToR for the project and the work to design an internationally agreed methodology for temporal disaggregation and filling gaps in time series for AEAs. The project builds upon existing compilations from Eurostat and the OECD and on the OECD methodology for estimating AEAs (annual accounts).

International transport plays a key role in development of AEAs, both as a major source of emissions, and for compiling bridging items between the residence and the territory basis. Detailed statistics on emissions from transport thus can serve as useful resource for national statistical systems, whether currently producing official AEAs or not. The OECD Air Transport CO₂ Emissions database³ was established for this purpose, with monthly, quarterly, and annual figures available. A new project is underway to develop similar estimates for maritime transport.

¹ See, for example, [Area C Cover Note from the 15th UNCEEA](#)

² https://seea.un.org/sites/seea.un.org/files/cover_note_data_compilation_and_dissemination.pdf

³ https://stats.oecd.org/Index.aspx?DataSetCode=AIRTRANS_CO2

Eurostat is improving the quality of the three SEEA priority accounts, which are currently mandatory in the European Union (namely: material flow accounts, energy accounts, air emission accounts) as regards further improving timeliness and keeping code lists updated to maintain relevance. These changes will take place in January 2022. Eurostat is also working to make two other SEEA priority accounts mandatory in the European Union (namely: land accounts –as part of ecosystem extent accounts- and water accounts). If this initiative is successful, it would create an obligation to produce those accounts in the European Union starting from circa 2025.

Eurostat has also initiated plans for the potential future collection of **water accounts** from European countries (including a proposal to develop an SDMX compatible excel spreadsheet). This will be coordinated with ongoing efforts to improve the OECD/Eurostat questionnaire on inland waters so as to use country replies for water-related SDG indicators and for populating simple SEEA core water accounts. This joint OECD/Eurostat work was initiated in 2017-18 and benefits from regular discussions among IOs (OECD, Eurostat, UNSD, FAO, UN-Habitat, WHO). It has resulted in proposals for further aligning the terms and definitions used in international questionnaires. A review of the questionnaire variables and their comparison with the variables in SEEA core water tables is underway. Pilot tests with individual countries have been initiated. The ARIES programme is developing water balances (from global data sources) later in 2021 that could be used to help expand coverage of compilations towards SEEA-water databases.

Concerning material flow accounts, the **Global Manual on Economy Wide Material Flow Accounting** prepared by UNEP and the International Resource Panel, jointly with Eurostat and in cooperation with the OECD has been published.⁴ The OECD, together with Eurostat, UNEP and the International Resource Panel, also continues to work on an internationally agreed upon **method for estimating demand-based material flows** using an input-output approach and the OECD Intercountry Input Output (ICIO) database coordinated with the Eurostat FIGARO project. Progress in this area has been slow in the past two years due to insufficient funding. An updated roadmap for further developments is being prepared together with a summary document on the proposed calculation method. Among the issues to be further reviewed are the differences between international estimates and national data, and ways to overcome them.

Obviously, availability, timeliness, frequency and other data quality aspects should all be progressively enhanced. There are two prerequisites for increasing the usefulness of SEEA accounts and encouraging their wide use in policy development and analysis. The first one is to expand the geographical scope of the data so as to reach a global or quasi-global coverage and encourage SEEA implementation in all world regions. The second one is to improve the quality of existing data.

To this end, a two-pronged strategy is deployed to (a) support countries to implement the priority accounts and (b) develop and implement estimation methodologies for filling the gaps and improving timeliness. An example of such methodologies is the OECD methodology to estimate Air Emission Accounts (AEAs) for carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O), in line with the SEEA. The proposed methodology has been validated by comparing the estimates with the official emission accounts of countries that have already implemented this SEEA module. It has been endorsed by the OECD Working Party on Environmental Information (WPEI) in December 2017, and by the SEEA Technical Committee and the UNCEEA in June 2018.

⁴ <https://wedocs.unep.org/bitstream/handle/20.500.11822/36253/UNRE.pdf>

Data exchange

Over the last five years, progress has been made towards a fully automatic exchange of SEEA data. The development of Global data structure definitions (DSDs) for each of the five priority accounts was followed by exchanges via SDMX between international organisations, and a gradual transition towards SDMX exchange with countries, where feasible. Energy accounts and air emission accounts can now be automatically transferred from Eurostat and OECD to UNSD. UNSD also worked with Eurostat for a transfer of Eurostat's energy physical supply and use tables (PSUTs). UNEP has automated the data exchange of Material Flow Accounts with UNSD for the update of the SDG Global Database and it can also be used to update the SEEA database in the future.

A pending item that has not been completed from the Area C work roadmap 2016-2021 is the development of global standard templates for the five priority accounts, building on the core tables proposed in the SEEA technical notes and existing Eurostat templates. Standard templates not only demonstrate the information to be collected and disseminated but also work as tools for validation of the accounts. The Eurostat questionnaires serve as proven examples for the accounts where questionnaires are used by Eurostat. Standard templates can be derived directly from (and indeed, must be consistent with) the already existing SEEA data structure definitions for SDMX data exchanges. Step 2 of the general strategy⁵ presented to the UNCEEEA at its 15th Meeting was to investigate introducing a tiered system within templates. A tiered system within templates could make the templates relevant for a broader spectrum of users (i.e. national statistical systems at various stages of development of the accounts). However, further discussion is still needed on tiered systems for the templates as there are multiple dimensions to consider when creating tiers and these decisions depend on how the templates are used in practice by different stakeholders such as users and collectors.

UNEP Global Environment Monitoring System for freshwater (GEMS/Water) provides the data on fresh water quality and supports the Sustainable Development Goal for Water (SDG 6) with methodology support, data management, quality assurance, indicator calculation and capacity development. The data for 6.3.2 and 6.5.1 is updated every 3 years and the first data drive was carried in 2017 and the second in 2020. The data is automated using SDMX and was shared with UNSD in the 2021 data reporting. The data for SDG Indicator 6.6.1 is now disaggregated by fresh water ecosystem type and can contribute as one part of the data input to SEEA-EA, under the first of the five components of the new framework listed as 'accounting for ecosystem extent'. The data is available from 2000 to 2020. The automated data exchange for the 3 indicators is already set and is used when reporting to UNSD to the SDG Global Database and can be used for the data exchange with the SEEA Database.

Finally, Eurostat continues improving its data transmission and validation procedures for better reliability and timeliness.

Dissemination

To improve the dissemination of SEEA accounts and facilitate users' access, UNSD will disseminate SEEA CF accounts using the **ARIES platform**, whose main functionalities for ecosystem accounts are elaborated later in this section and that will provide a dissemination platform for all SEEA accounts. Both Area C and the Technical Committee of the SEEA Central Framework have reviewed and provided feedback on the dissemination plans, which will first focus on air emission and energy accounts from Eurostat and the OECD. In addition to the main tables, combined presentations and indicators will also

⁵ https://seea.un.org/sites/seea.un.org/files/annex_d_templates_final2.pdf

be made available. Unlike the SEEA EA, the mode of presentation of the SEEA CF will not be spatially explicit, though there may be benefits in integrating the dissemination in the future.

To proceed with dissemination using the ARIES platform, UNSD has constructed a dissemination data structure definition (DSD) for both energy and air emissions, and the data will be made available for users in SDMX format through API. UNSD will work with the Basque Centre for Climate Change in the coming months to make the data available.

UNSD is focusing efforts on disseminating existing **physical energy flow accounts** on the platform. Once this is completed, UNSD will develop standard data collection templates. Already, discussion has been started at the Technical Committee of the SEEA Central Framework on the appropriate data items to be collected, given existing data collection at the European level. In particular, Eurostat data collection uses an energy product classification which does not align 1:1 with the energy product classes recommended in the SEEA-Energy Technical Note (SIEC one-digit level). In an effort to ensure the same information is disseminated for all countries, the development of UNSD energy data collection templates will need to take into consideration existing European data collection as well as data availability from non-European countries.

The current Eurostat energy product classifications are a potential candidate to be used for all countries, though further investigation on the data availability of these data items from non-European countries is necessary. Eurostat has also created a crosswalk between the Eurostat categories, CPC and SIEC which can also assist with this exercise.

As for **ecosystem accounts**, in April 2021, UNSD (in collaboration with the Basque Centre for Climate Change and UNEP) released the ARIES for SEEA Explorer⁶ providing a tool for rapid, standardised, scalable and customisable ecosystem accounts for anywhere in the world. The application can generate ecosystem accounts for any user-specified terrestrial area in the world (such as a country, administrative region, watershed, etc.), by using freely available global remote-sensing derived data and models, and rapidly computes these accounts online, using a web browser. The current Explorer functionalities are restricted to assessing ecosystem (i) extent, (ii) condition (for forest ecosystem types), and (iii) selected ecosystem services in physical and monetary units using basic models as a starting point. The outcomes can be analysed and downloaded to further explore the results (through either a spreadsheet or GIS software). The Explorer automatically generates a comprehensive ecosystem accounts report, fully documenting the data, models, coefficients and methods used.

Future functionalities will be added to improve the scope of ecosystem accounts available. For instance, plans are in place to add additional ecosystem types to the extent accounts; expand the condition accounts; and include additional ecosystem services, such as water supply and flood regulation. In addition, by the end of the year, users will also be able to add their own datasets through a simple drag-and-drop function of the interface, which will allow improving the quality of the accounts by making local/national data easier to incorporate into the Explorer. Users will also be able to decide who accesses their additional datasets: they can keep their dataset confidential or give access to selected users or make it broadly available for further reuse.

⁶ <https://seea.un.org/content/aries-for-seea>

3. *Setting Objectives and Priorities for 2021-2025*

A major priority for the next five years is to **improve the relevance of SEEA priority accounts** under Area C, by meeting policy needs, such as alignment with current sustainability priorities, appropriate granularity of information, and **timeliness**. As mentioned, the context of the global pandemic has increased the premium for minimising the time lag for environmental-economic information. The AEAs are an example where new activities and priorities for addressing timeliness have been initiated with the launch of the quarterly AEAs partnership. This initiative combines the subsidiarity principle with the prioritisation of improvements to relevance and use of the databases. Ultimately, the aim for AEAs as well as for other priority accounts, should be to have annual data released within two quarters after the end of reference year and quarterly data released within two months after the end of the reference quarter (and two weeks for the monthly data, for the time being lonely available for air transport).

Another priority for the Area C Group is to **expand geographic coverage** so that a greater number of countries can be included in the analyses using SEEA databases. Gaps in coverage of the current databases are addressed using the subsidiarity principle and there is a need to develop more UNCEEA-endorsed estimation methodologies where official accounts are unavailable or reinterpolation and extrapolation are required to cover missing observations. Each of the priority accounts should have a reviewed methodology for applying the subsidiary principle and filling gaps in the current databases.

It is also proposed to extend the activities of the Area C to also include the dissemination of indicators, policy-relevant analyses and the implementation of interactive tools for users (to be coordinated with activities under other Areas).

The overall strategy and the core objectives for Area C remain relevant. But the group also reviewed additional SEEA related activities that have the potential to become part of future global SEEA databases. These include Environmentally related tax revenue (ERTR) accounts, Environmental Protection Expenditure Accounts (EPEA), Environmental Goods and Services Sector (EGSS) Accounts, Waste accounts, and Forest accounts. These accounts benefit from continued efforts by Eurostat and the OECD and respond to policy demands in several areas. The UNCEEA could work towards making them become future priority accounts, and set an agenda for advancing their development. Advancing together on monetary accounts would be an important step towards establishing integrated SEEA-related databases on the environment and the economy.

Prioritisation of basic quality criteria or objectives can vary across the priority accounts depending on the current context or because of differences in basic data sources. Therefore, it is a useful exercise for the Area C group to periodically discuss and define more precisely the future priorities and activities under each of the accounts, as done in the Area C Road Map (Annex 2). Goals are defined, for example, for improving timeliness and, more broadly, policy relevance of available compilations.

Area C Coordination

Smooth communication is key to the success of the activities of the group. A collective understanding of the terms that qualify the various stages and intermediate products that precede the dissemination of SEEA databases may be required. For instances, the terms compilation or estimation might be interpreted differently depending on the context. It is thus proposed to develop a short and focussed glossary for global SEEA databases, which would be designed to complement the existing glossaries available from the SEEA Central Framework and other references from the international organisations.

Questions for UNCEEA

The committee is requested to comment on:

1. The progress and road map for the five priority accounts.
2. The proposed timeline for the timely release of data
3. The possible future extension of the set of priority accounts.
4. The proposed expansion of the mandate for AREA C to include the dissemination of indicators for policy evaluations.
5. The proposal to develop a common glossary of terms to enhance internal communication.
6. The proposal to set priorities for each account based on different quality criteria.

Annex 1: SEEA Global Databases, Status as for June 2021

Table 1 Priority Accounts

Accounts	Agencies involved	Country coverage	Time coverage	Classifications used	Data sources	Available databases/datasets	Status of methodology (compilation, estimation)
Air emissions	Eurostat, OECD	Reported data: EU, CHE, COL, NOR, KOR, SRB, TUR, UKR (AUS, CAN) Estimated by IO: CAN, ISL, JPN, KAZ, NZL, RUS, USA	Reported: 2000-2019* Estimated: 2008-2019* (CO ₂ , CH ₄ , N ₂ O) *Annual updates: 2020 update expected by Dec.2021	ISIC Rev4 Households	Country reporting and OECD methodology to estimate accounts using UNFCCC data	Eurostat: http://ec.europa.eu/eurostat/data/database , tables env_ac_ainah_r2, env_ac_aibrid_r2, env_ac_aeint_r2, env_ac_io10 OECD: https://doi.org/10.1787/data-00735-en	Mature Based on Eurostat Manual and OECD Methodology (endorsed by SEEA-CF TC)
Energy	Eurostat, IEA, UNSD	EU, AUS, BHU, BWA, CAN, COL, CRI, FJI, GEO, JAM, KEN, MYS, MUS MEX, FSM, PLW, PRY, RSA, TUR	2008-2018	ISIC Rev4 Households	Country reporting, IEA estimates and UNSD methodology to estimate accounts	Eurostat: http://ec.europa.eu/eurostat/data/database , tables env_ac_pegfasu, env_ac_pegfa04, env_ac_pegfa05	Mature Based on Eurostat and IEA manuals, and UNSD conversion methodology (to be submitted to SEEA-CF TC)
Economy-wide material flows	Eurostat, OECD, UN Env. (and IRP)	Global	1970-2019 Annual updates	Material groups (no ISIC breakdown)	Country reporting and international databases from Eurostat, UN Environment, (and OECD*)	UN Environment/IRP: http://uneplive.unep.org/material OECD: https://doi.org/10.1787/data-00695-en Eurostat: http://ec.europa.eu/eurostat/data/database , tables env_ac_mfa, env_ac_mfadpo, env_ac_mfabi, env_ac_mfain, env_ac_rme, env_ac_rmefd & others for derived indicators	Production-based: Mature Based on Eurostat manual, OECD guide, and UN Environment global manual (released in June 2021) Demand-based: Refined methodology under development (OECD with Eurostat and UN Environment-IRP)
Land (cover)	FAO, OECD UNSD ARIES (EEA, JRC)	Global (countries, macro-regions, metropolitan areas)	1992-2019	Land cover classes (SEEA-CF)	ESA and Université Catholique de Louvain Geomatics – Climate Change Initiative - Land Cover (via FAO and OECD)	FAO: http://www.fao.org/faostat/en/#home :Land Cover Domain: http://www.fao.org/faostat/en/#data/LC OECD: http://stats.oecd.org/Index.aspx?DataSetCode=LAND_COVER https://doi.org/10.1787/72a9e331-en	Completed, not (yet) endorsed by UNCEEA http://fenixservices.fao.org/faostat/static/documents/LC/LC_e_2020.pdf
Water (resources, use)	Eurostat, OECD, UNSD, UN Env., FAO	Selected countries depending on data availability (EU, OECD, other)	1970-2019 (limited availability for some variables and years)	ISIC industries (limited availability)	Country reporting: OECD/Eurostat coordinated with UNSD/ UN Environment (+ FAO Aquastat **, +UN-Habitat, WHO (wastewater))	..	(cf SEEA water, SEEA CF, and SEEA water Technical note)

Table 2 other accounts

Accounts	Agencies involved	Country coverage	Time coverage	Classifications used	Data sources	Available databases/datasets	Status of methodology (compilation, estimation)
Mineral & Energy resources - asset accounts	OECD	Currently covering 9 countries	1960-2019 (availability varies)	14 resources prioritized (same as World Bank)	Country reporting	OECD : https://stats.oecd.org/Index.aspx?DataSetCode=NAT_RES	OECD Green Growth Working paper (2018)
Environmentally-related tax revenue (ERTR)	OECD, Eurostat	Selected countries depending on data availability (EU, OECD, other)	1994-2018	ISIC Rev4, Households Tax bases: energy, transport, pollution, resources. Domains: Total, air pollution, biodiversity, climate change, ocean, etc.	Country reporting: OECD/Eurostat	Eurostat: https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=en_v_ac_taxind2&lang=en OECD: http://stats.oecd.org/Index.aspx?DataSetCode=ERTR_ACC	Based on Eurostat manual and OECD methodological guidelines
Environmental Goods and Services	Eurostat	EU countries	2009-2017	Total, Ancillary, Market, non-market, own final-use ISIC CEPA and CReMA	Country reporting, Eurostat	Eurostat: http://ec.europa.eu/eurostat/data/database , tables env_ac_egss1 env_ac_egss2 env_ac_egss3	SEEA Central Framework Eurostat manual Eurostat compilation guide
Environmental protection expenditure accounts (EPEA)	Eurostat	EU countries	2006-2018	Final and intermediate consumption, GFCF, imports, output, others. Institutional sector ISIC for some variables CEPA and CReMA	Country reporting, Eurostat	Eurostat: http://ec.europa.eu/eurostat/data/database , tables env_ac_apea and sub tables	SEEA Central Framework Eurostat manual
Environmental subsidies and similar transfers	Eurostat	EU countries	No data published yet	Institutional sector ISIC CEPA and CReMA	Country reporting, Eurostat	No data published yet (pilot data collection)	SEEA Central Framework Eurostat manual
Forest accounts	Eurostat	EU countries	2012-2017 (some countries back to 1986)		Country reporting, Eurostat	Eurostat: http://ec.europa.eu/eurostat/data/database , table for_eaf	SEEA Central Framework
Ecosystem accounts (extent, condition (for forest), and select services currently available)	UNSD	Global	1992-2019	ISIC Rev4 Households SEEA CF Land cover interim classification IUCN Global Ecosystem Typology	Global datasets and models	https://seea.un.org/content/aries-for-seea	SEEA Ecosystem Accounting

Annex 2 Roadmap for 2021-2025

Work elements/ topics	Lead agencies (partner agencies)	Objectives for 2021-2025	Steps toward the 2025 target	Timelines	Links to work in other areas
PRIORITY ACCOUNTS					
Air emissions (GHG, air pollutants)	OECD (with Eurostat)	<p>Improve timeliness & frequency: <i>Develop a methodology for quarterly estimation to meet the demand from policy makers.</i></p> <p>Expand geographical coverage: <i>Ensure that (i) all official AEAs are included in the OECD's database / global database; (ii) all AEA related national data are compiled or estimated.</i></p> <p>Improve coverage of emission sources</p> <p>Maintain global OECD database Carry out further research</p>	<p>Develop a methodology for quarterly AEAs (aiming ultimately at t-2 months' time lag after the end of the reference quarter), which would also lead to early annual emission estimates. (collaboration between IMF, OECD, Eurostat, IEA, UNSD)</p> <ul style="list-style-type: none"> Develop a methodology for estimating annual AEAs for non-Annex I countries of UNFCCC. Develop a tiered template illustrating a minimum set of information to be compiled by countries not reporting official AEAs where SDMX transmissions are not in place. <p>Develop a methodology for estimating emissions from international maritime transport, residence basis.</p> <p>Maintain the annual updates of global compilation and estimation. Potential further research areas: Road Transport and LULUCF</p>	<p>2021</p> <p>2022-23</p> <p>2021-22</p> <p>2021?</p> <p>Ongoing 2023-24(?)</p>	Area A: climate indicators
Energy	UNSD (with Eurostat and in collaboration with IEA) All involved		<p><u>Estimation methodology:</u></p> <ul style="list-style-type: none"> Review by SEEA-CF TC Endorsement by UNCEEA <p><u>SEEA database</u> - estimated accounts (selected countries)</p> <p><u>Next steps:</u></p> <ul style="list-style-type: none"> Testing of excel based tool by countries Synthesising testing results (UNSD) and discussion by SEEA CF TC UNCEEA to consider the excel based tool 	TBD	Area A: climate indicators

Work elements/ topics	Lead agencies (partner agencies)	Objectives for 2021-2025	Steps toward the 2025 target	Timelines	Links to work in other areas
Economy-wide material flows (EW-MFA)	UN Environment (with Eurostat and OECD)	<p>Maintain and further develop the global database</p> <p>Refine the methodology for demand-based material flows (input-output based approach for use in international work)</p> <p>Implement an automatic data transfer among IOs</p> <p>Carry out further research and development and improve relevance for circular economy policies</p>	<p>UNEP/IRP <u>global material flow database</u> (to be updated in Jun. 2021, frequency of further updates to be discussed)</p> <ul style="list-style-type: none"> Progressively integrate national data (possibly using SDMX) and reconcile with international estimates (UN Environment-IRP) Continue capacity building in countries (tbc) Work towards an annual or biennial updating of the database <p><u>Material footprints</u></p> <ul style="list-style-type: none"> Further develop and test the harmonised estimation method for demand-based material flows (OECD with Eurostat & UN Environment-IRP) Update the roadmap for required developments & research (OECD with Eurostat & UN Environment-IRP) <p>Put in place an automatic data transfer and exchange mechanism (using SDMX) between UN Environment and other IOs (UNSD, OECD, Eurostat)</p> <ul style="list-style-type: none"> Develop ways to integrate material flow data and accounts with waste statistics and accounts. Explore links with product statistics and accounts on EGGS and tax revenue. 	<p>TBD</p> <p>2021-22</p> <p>2021 (tbc)</p> <p>TBD (as of 2021)</p>	<p>Area A: CE indicators</p> <p>Area D1: capacity building</p> <p>Area B1: indicators from I-O analysis</p> <p>Area A: CE indicators</p> <p>Area B1: classifications</p>
Land (cover)	FAO (with OECD and UNSD) <i>(involved IOs = Eurostat, OECD, UNSD, UN Environment, FAO, UNCCD)</i>	<p>Develop international consensus on estimation methodology to use</p> <p>Maintain global database with regular updates, agree on practical co-operation arrangements among IOs, and implement an automatic data exchange between IOs</p>	<p><u>Estimation methodology:</u> Detailed methodological note compliant with SEEA CF Land Cover Classes is available on line in FAOSTAT at: http://fenixservices.fao.org/faostat/static/documents/LC/LC_e_2020.pdf Detailed mapping with ARIES not yet performed.</p> <p><u>SEEA database(s):</u></p> <ul style="list-style-type: none"> FAOSTAT Land Cover Domain ARIES <p>+ <i>(OECD land cover database)</i></p> <p><u>Next steps:</u></p> <ul style="list-style-type: none"> FAO updates for 2019 will be soon available on line Coherence between the three databases to be reviewed <u>Coordination, joint work and data transfers: To be discussed</u> 	<p>??</p> <p>TBD</p>	<p>Area B2: ecosystem accounts</p>
Water (resources; use)		<p>Populate simple SEEA core water accounts</p>	<ul style="list-style-type: none"> Develop and agree on standard reporting templates for core water accounts (tiered approach) building on the SEEA Technical Note (OECD, Eurostat) 	<p>2021-22</p>	

Work elements/ topics	Lead agencies (partner agencies)	Objectives for 2021-2025	Steps toward the 2025 target	Timelines	Links to work in other areas
	OECD (with Eurostat) <i>in cooperation with UNSD-UN Environment, FAO</i>		<ul style="list-style-type: none"> • Test the use of country replies to the OECD/Eurostat questionnaire on inland waters for populating the standard template (OECD, Eurostat) • Establish a database on SEEA water accounts (starting with EU countries and OECD member and partner countries) 	2021-22 tbd	Area B2: ecosystem accounts Area A: CE indicators
OTHER DEVELOPMENTS					
Additional priority accounts	All involved	Identify a small set of future priority accounts	<ul style="list-style-type: none"> • Discuss the potential of other accounts to become priority accounts at UNCEEA meeting • Review the status of the selected accounts, identify the developments required and related arrangements among IOs • Decide upon future priority accounts and roadmap at UNCEEA meeting 	June 2021 2021-22 2022 (?)	
Integrated database	OECD, Eurostat (tbc)	Work towards combining SEEA accounts in support of cross-cutting, integrated policies	<i>To be discussed (could start with air emissions, energy and tax revenue (not yet a priority account))</i>		Area A: climate indicators, CE indicators, etc.
Overall coordination and governance (pending tasks) Responsibilities for quality assurance and validation	OECD (and all involved)	Reach a consensus and agreement on the sharing of responsibilities for data collection from national sources, and for data quality assurance and validation (subsidiarity principle)	<i>To be discussed; arrangements will differ depending on the account considered</i>	TBD	
Dissemination of priority accounts Data ownership and copyright	UNSD (and all involved)	Establish a SEEA dissemination portal Clarify and agree on data ownership and copyrights	Establish a portal on the ARIES platform providing access to SEEA databases and links to accounts hosted by lead (and partner) agencies. <i>To be discussed</i>	2021-22? TBD	