

**Response to the Outcome of the Global Consultation on the
Consolidated List of Recommendations for the Update of the 2008 SNA**

Update of the 2008 SNA

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Section 1. Introduction

1 This document provides a concise response to the outcome of the global consultation of the consolidated list of recommendations for the update of the 2008 SNA. This consultation, which took place during August and September 2023, attracted 100 responses from countries and international organizations. The results were subsequently discussed in the October meeting of the Advisory Expert Group (AEG) on National Accounts.

2 The analysis of the responses in this document does not address every comment and suggestion in detail. After focussing, in more general terms, on further requests for clarifications and individual concerns about some conceptual changes to the 2008 SNA, attention is then paid to those issues which generated concerns from a relatively more substantial number of countries. In respect of the latter, it is important to emphasize that in all cases a large majority of countries agreed with, or at least did not explicitly express concerns about, the relevant recommendations.

3 It is also important to acknowledge upfront that the consolidated list of recommendations, which was subject to the global consultation, is a reflection of the recommendations put forward in guidance notes, issue notes, and recommendations agreed by the AEG in past meetings, some of which were published in SNA News and Notes. In all cases going beyond the provision of further clarifications, the recommendations went through a fully transparent process of producing the recommendations for new or updated guidance, endorsement by the AEG, and in relevant cases also the IMF Balance of Payments Statistics Committee (BOPCOM), and a global consultation process, during which countries generally endorsed the recommendations with a very large majority. These latter global consultations were very successful. 176 countries participated in at least one consultation, with many guidance notes receiving feedback from more than 75 countries.

4 Only a very limited number of recommendations did not receive support from a significant majority of countries. An example relates to the recording, as non-produced non-financial assets, of crypto-assets without a corresponding liability designed to act as a general medium of exchange (CAWLM), and those designed to act as a medium of exchange within a platform only (i.e., payment tokens without a corresponding liability) (CAWLP)), which was supported only by a small majority of countries. However, also in these cases where the emergence of a new phenomenon required the development of specific new guidance, the majority view has been respected, after extensive discussions and deliberations at the AEG (and BOPCOM).

5 This document is organised as follows. Section 2 provides a general overview of the result of the global consultation on the consolidated list of recommendations. Section 3 gives a concise overview of the requests for clarifications, as well as an overview of some of the concerns on conceptual choices expressed by one country, or a very limited number of countries. Section 4 contains the substance of this document, by reflecting on the concerns expressed by a relatively more substantial number of countries. Section 5 summarizes the conclusions, and proposes a way forward.

6 It is possible that in the upcoming year additional issues may arise that need to be taken into account in the update of the 2008 SNA. It is expected that these issues will mainly consist of minor clarifications that do not change the substance of the SNA. They will be addressed according to standard procedures and communicated in a clear and transparent way.

Section 2. General overview of the outcome of the global consultation

7 As noted above, the global consultation on the consolidated list of recommendations attracted 100 responses from countries and international organizations. Table 1 below shows that the worldwide representation was excellent, with each region providing multiple responses. This is an important point to take into consideration when assessing the outcome of the global consultation. A serious mismatch of regional representation could potentially put the responses to the consultation into question.

Table 1. Regional representation of the responses

Region	Number of responses
Africa	17
Asia and Pacific	24
Europe and North America	37
Latin America	10
Middle East	8
International organizations	4
Total	100

8 The global consultation contained two general questions, and a third open question providing an opportunity for countries to raise any possible concerns. Table 2 shows the outcome for the general questions. A very large majority of more than 80% of those who responded to the first two questions confirmed that the recommendations are clear, straightforward and unambiguous, and also confirmed that the recommendations are consistent.

Table 2. General overview of the outcome of the global consultation

Question	Yes	No	No response	Total
Are the recommendations clear, straightforward, and unambiguous?	80	17	3	100
Are the recommendations consistent?	83	14	3	100
Do you have any other concerns about the recommendations	59	40	1	100

9 Regarding the open question, 59 respondents used the opportunity to provide specific feedback, ranging from minor requests for clarification and individual concerns about a certain recommendation to more substantial issues about some of the recommendations. To be expected, the more substantial concerns raised often coincided with a negative response to the first two questions. Sections 3 and 4 provide further details.

Section 3. Concise overview of requests for further clarifications and individual concerns

Requests for further clarifications

10 Several requests were made for further clarifications. In some cases, these requests could be addressed by improving the wording in the updated list of recommendations which is now put forward to the UN Statistical Commission. In some other cases, the requests were related to the fact that a consolidated list of recommendations needs to be concise, and therefore has its limitations in reflecting all the details of the updated guidance.

11 To get a better appreciation of the requests for clarification, the most important ones are described below, in a very concise way. It should be emphasized, however, that the list is a non-exhaustive one, and that it should not be interpreted as a list of requests that will be addressed while the other requests are ignored. All requests will be considered in a conscious way while drafting the chapters for the 2025 SNA.

12 The first request for clarification was raised in relation to the treatment of transferable leases when applying the split-asset approach. Here, it will be made clear that in the case of transferable rights to exploit resources, double-counting, which would occur if both the value of the rights and the value according to the split-asset approach were allocated to the balance sheet of the extractor, should be avoided. In addition, it will be acknowledged that in such cases information on the value of the rights may actually provide an excellent indicator of the value of the relevant assets for the extractor at the time a transaction takes place.

13 There was also a request for clarifying the recording of depletion and its possible impact on the measurement of government output and consumption. Here, it will be clarified that depletion is recorded as a cost of production in the accounts of the extractor of the natural resources, part of which is subsequently allocated to the government, as an adjustment to the receipts of rent, in line with the appropriation of the resource rent (using the residual value method) by the extractor and the legal owner (i.e., in this case the government). As such, the depletion costs ultimately borne by the government will not feature as a cost in the measurement of government output, when applying the sum-of-costs method. From a less technical perspective, it would be difficult to see how this depletion would add to the production of government services.

14 In relation to the recording of losses of military assets, it was noted that the updated guidance recommends to reflect expected losses of military assets in the service lives of these assets, but that this may lead to uncertainty on when to record losses as other changes in volume. As was noted by the relevant respondent, only losses beyond what is being expected in normal circumstances are to be treated as other changes in volume, while expected losses would be part of consumption of fixed capital, or depreciation.

15 Regarding the treatment of terminal costs, it is recommended to apply the way of recording recommended in IFRS/IPSAS; for further details, reference is made to [Guidance Note WS.9](#) on the Recording of Provisions. Two respondents each raised one issue. First, it was stated that this treatment would lead to “*an elementary problem of reconciling the acquisition value (counter-parted with a payable as well as in the producer’s accounts) with the balance sheet value*”. Secondly, it was argued that this would lead to a recording of provisions as production costs (i.e., intermediate consumption), which is inconsistent with the general principles of the SNA to not recognise opportunity costs for a

possible future obligation. Here, it can be noted that the intention of the updated guidance is to avoid having negative values for assets with high terminal costs, which would result as a consequence of capturing future terminal costs in consumption of fixed capital, while the relevant expenditures are only capitalised once expended at the end of the service life of the asset. Instead of recognizing the investment at the time of spending, the future investment in terminal costs is already recognised in the asset value at the start, via other changes in the volume of assets (with a concomitant recognition of provisions); see Tables 3a and 3b of the Guidance Note.

16 The treatment of domestic Special Purposes Entities (SPEs) was raised a couple of times. Here, it can be noted that the guidance on the treatment of SPEs as such has not changed. In the updated guidance, the definition of SPEs has only been changed, by strictly limiting SPEs to those that are, directly or indirectly, controlled by a non-resident parent. However, this does not affect the treatment of similar types of units with domestic parents. To reflect the requests for clarification, less ambiguous wording will be used on the treatment of these units with domestic parents. Such units are typically consolidated with their parents, unless they have autonomy of decision. In the latter case, they will not be referred to as being part of SPEs.

17 For head offices, it was indicated that it would be useful to provide clarifications on whether the subsidiaries over which the control is carried out must be located in the same country/jurisdiction. It was also noted that corporate services are only described in more general terms, and that these services may also relate to financial services. All of this is probably related to the question on how to classify head offices, which would typically be recorded in the sector of their subsidiaries. If all subsidiaries are located in another country, guidance may need to be added on the classification, either in the non-financial corporations sector or in the financial corporations sector.

18 Questions were also raised about the classification of funds with one or more beneficiaries where the fund manager is also a beneficiary. Here, it can be noted that the general rule of consolidation of the fund with its beneficiary in the case of one beneficiary, and the establishment of a separate unit in the case of multiple beneficiaries, would still be applicable.

19 One respondent also raised the question of how to classify producers of crypto-assets without a corresponding liability, as either producers of financial services or as producers of non-financial services. Here, it is noted that crypto-assets as such are not produced. The “producers” of such assets are looked upon as providing validation type of services. As these latter services mainly consist of miners using software to solve cryptographic puzzles (proof-of-work), a recording as non-financial services, more particularly IT-related services, seems the obvious classification. Similarly, one would not classify the printing of banknotes, or the production of coins, as financial services, simply because they relate to the “production” of financial assets, or assets that in some respects have the characteristics of a financial asset. Having said that, the point is taken, and further discussions with those responsible for the CPC- and ISIC-classifications may indeed be justified.

20 A question was also raised regarding the guidance on super dividends, in particular the limitation of such dividends to those which are related to the “sales of assets” in the case of foreign direct investment. Here, it will be clarified that this could relate to any kind of asset, although in most cases it probably would relate to non-financial assets.

21 One respondent explicitly supported the identification of sustainable finance. However, the respondent also noted that *“the current recommendation would be difficult to implement with any*

consistency without a definition of green or international agreement to ensure some minimum standards in green taxonomies". This point is well taken. An issues note with recommendations on sustainable finance definitions and guidance has recently been prepared. This note will be discussed by the AEG and BOPCOM in early 2024.

22 One respondent also raised concerns about the impact of, for example, changing to cloud services on the measurement of productivity, because the replacement of investments in software and the like would be replaced by intermediate consumption of cloud services, thus lowering value added. This is considered a more generic issue which happens all the time when production processes change. It is not restricted to the conceptual guidance provided for the treatment of cloud services. This impact on productivity can only be solved, by not looking exclusively at labour productivity, but also at broader measures of productivity, such as multifactor productivity. The latter advice could probably be explicitly reflected in the relevant section of the 2025 SNA.

23 Finally, there was a request to not only show the impact of the proposed changes on gross domestic product (GDP), net domestic product (NDP), government deficit and net worth, but also the impact on net saving. In this respect, one could add that the impact on net saving is mainly affected by the extension of the asset boundary (data and marketing assets), and the accounting for depletion as a cost of production. More minor impacts on net saving may come from the change in the sum-of-costs method for measuring own-account production of fixed assets by non-market producers (please note, not in the case of own-account production of government services for own final use), and the slightly changed accounting for biological resources.

24 More generally, as a final note regarding the requests for clarification, the update team would like to thank the countries for raising these issues. The requests for clarification are very much welcomed, as it will support the objective of providing clear and unambiguous guidance in the 2025 SNA. As much as possible, all requests will be considered in a comprehensive way, and taken into account when drafting the chapters of the 2025 SNA. If some of the updated guidance is still considered to be unclear, the global consultation of the chapters provides another opportunity to request further clarifications of the guidance and to signal possible ambiguities. Relevant countries are therefore invited to keep a close eye on the relevant parts of the 2025 SNA when they are posted for global consultation.

Individual concerns

25 Several countries used the opportunity to express concerns about certain recommendations. Such concerns were often expressed by individual countries, or occasionally two or three countries. The most important ones are listed below.

26 The treatment of crypto assets without a corresponding liability designed to act as a general medium of exchange (CAWLM) and those designed to act as a medium of exchange within a platform only (i.e., payment tokens without a corresponding liability)(CAWLP) as non-produced non-financial assets, continues to raise concerns, for a variety of reasons. Some respondents argued against the inclusion of these assets, noting that *"it is not a good practice to include items for which the economic value and long-term applications are still in question and the value of which is highly speculative in nature"*, or saying that *"crypto assets without (a) counterpart are highly speculative in nature and can cause more confusion than provide benefit. Having such highly volatile components in the GDP would require additional data breakdowns which would exclude them"*. Others favoured a treatment as

financial assets, because of an inconsistency with the currently recommended treatment of emission permits as financial assets, or because of its possible impact on the behaviour of governments using the recommended recording of these assets as an opportunity to manipulate government deficit.

27 Already from the start of the discussion, the treatment of crypto assets without a counterpart liability showed to be highly controversial. However, it was also clear that recommendations had to be provided on how to record this new phenomenon. It is not possible to simply ignore the existence of (transactions in) these assets. After lengthy discussions, including an additional user consultation, it was agreed, in line with a slight majority of respondents to the global consultation and the user consultation, to account for these assets as non-produced non-financial assets, also keeping the door open for a reconsideration in the case of new developments in the market.

28 A limited number of countries also expressed discontent about the recommended treatment of emission permits, as financial assets (other accounts receivable/payable), with taxes on production recorded at surrender, valued at issuance prices. Here, it can be noted that the final decision on the recording of emission permits is still pending. A workshop will be organized to discuss the preferable recording based on conceptual grounds as well as issues related to the feasibility of the recording. Having said that, it should also be noted that it won't be possible to arrive at a recommendation that aligns to everyone's preference. A compromise solution will have to be found.

29 Another controversial issue, which is closely related to the treatment of emission permits, concerns the treatment of the atmosphere as an asset. A number of respondents were clearly against a recommendation to treat the atmosphere as an asset, while in the opinion of another respondent the treatment of the atmosphere was sufficiently important to be resolved in advance of the finalization of the 2025 SNA, even if this would lead to a postponement of the update with one year. This issue has been discussed quite extensively in past meetings of the AEG, and it showed not to be possible to arrive at an agreed solution, also because of the need to take account of the broader ramifications of the treatment of the atmosphere for environmental-economic accounting. For these reasons, it has been decided to keep the guidance as is (i.e., not treating the atmosphere as an asset), and to put the issue on the post 2025 SNA research agenda.

30 Two countries showed some discomfort with recommending the use of geometric depreciation as the default option for calculating capital stocks and consumption of fixed capital, either because it was recommended, in a European context, to use a convex cohort depreciation function, or because it appears to be an unnecessary level of detail and to impose a false equivalence on very different asset types. In respect of this issue, it can be noted that geometric depreciation is only recommended as a default option, which does not prohibit the use of other depreciation profiles which may be considered more suitable. However, it should also be clearly stated that linear depreciation is not considered as a suitable method in most circumstances. In the updated list of recommendations, the relevant wording has been slightly adjusted, to avoid possible misinterpretations.

31 One respondent was opposed to the change in the treatment of gold bullion (and securities) under reverse transactions, which leads to a de-monetization of the gold bullion, and thus to a reduction in the value of monetary gold. The relevant country requested for a more in-depth review of the treatment of non-monetary gold. However, the outcome of such a review could have a significant impact on macro-economic statistics if a change in the treatment of non-monetary gold would be agreed. This would be difficult to manage at this stage of the update process, also recognizing that the

issue was not included on the agreed list of research issues for the update of the 2008 SNA. All in all, it is recommended to put this issue on the post 2025 SNA research agenda.

32 Other individual respondents expressed concerns about: (i) treating SPEs as owners of intellectual property products; (ii) the more restricted recording for concessional loans in the sequence of economic accounts; (iii) opening the door in the future for the use of invoice values for imports and exports; (iv) the valuation of non-negotiable debt at nominal value; and (v) possible changes in terminology. The first three issues have been discussed at great length, with a clear consensus at the AEG and BOPCOM on the way forward. The fourth point would lead to a major departure from the current guidance, by valuing non-negotiable debt at market-equivalent prices. Regarding the last point, i.e., changes in terminology, it can be noted that the relevant changes in terminology will be restricted to a relatively small number of well-defined cases.

33 Most of the arguments that were put forward in favour of alternative recommendations had already been taken into account during the process of arriving at the proposed recommendations. In most cases, the process resulted in a clear majority in favour of the proposed guidance. In a few cases, the issue was more controversial. The latter in particular concerns the treatment of crypto assets without a counterpart liability, emission permits, and the treatment of the atmosphere. For the first issue, the majority view has been respected, after extensive consultations and discussions. The final decision regarding the second issue is still pending the outcome of a workshop, and the subsequent reflections in the AEG and BOPCOM, while the possible treatment of the atmosphere as an asset has been put on the post 2025 SNA research agenda.

Section 4. More substantial concerns

34 This section discusses the recommendations where a more substantial number of countries expressed concerns. Rather similar concerns were raised by a group of 6 – 8 countries, almost exclusively from the European region. The issues can be grouped into the following: (i) the accounting for natural resources; (ii) the extension of the production and asset boundary with data and marketing assets; and (iii) consistency in the application of the sum-of-costs method. Each of them is discussed in more detail below. For the first two items, a distinction is made between concerns regarding the applied concepts versus concerns about the feasibility of implementing the updated guidance, in line with the feedback from the relevant countries. However, no specific attention is paid to some more far-reaching arguments regarding the accounting for natural resources, which essentially questioned the current guidance of the 2008 SNA. In this sense, the 2008 SNA is taken as a starting point for the analysis.

Accounting for natural resources

35 There are four main changes proposed to the 2008 SNA treatment of natural resources:

- explicit recognition of renewable energy resources;
- change in the delineation between cultivated and non-cultivated biological resources yielding once-only products (timber, fish and the like);
- the application of the split-asset approach; and
- accounting for depletion as a cost of production.

36 From a conceptual perspective, the recognition of renewable energy resources was questioned for three reasons: (i) renewable energy (wind, sun, etc.) is not scarce and does not have an economic

owner; (ii) the profitability of wind and solar extraction is in many countries highly influenced by taxes and subsidies; and (iii) explicitly accounting for these resources may potentially lead to double-counting, as it is already captured in the value of land.

37 Regarding the first issue, while wind, sun, etc. are generally not scarce, the exploitation of these resources may be restricted to certain economic agents, for example by needing permissions to put wind turbines on land, or having ownership of particular pieces of land which are highly favourable for exploiting renewable resources. The issue of profitability being affected by taxes and subsidies is well recognised, and should be taken into account when estimating resource rents derived from these resources. Finally, the possibility of double-counting will be acknowledged in the preparation of relevant guidance. However, this double-counting problem is assumed to be relatively negligible, because the relevant land is often not valued, or no land is involved (e.g., wind turbines on open seas); in this respect, an exception may need to be made for privately owned land, the value of which is based on actual transaction values. Whatever the case, these issues will be adequately explained and clarified in the updated guidance of the 2025 SNA, including the compilation guidance on the measurement of natural capital which is currently being developed.

38 Regarding the accounting for biological resources, nothing has changed regarding the treatment of biological resources yielding repeat products, which in most countries probably is the most substantial category of biological resources. The conceptual changes in the treatment of biological resources are restricted to those yielding once-only products, such as timber and fish.¹ The recommendations do not affect the total value of these resources. Only the distinction between cultivated and non-cultivated resources has been amended, with non-migrating resources, predominantly consisting of the growth of trees for timber production to be now always considered as cultivated. Migrating biological resources, like fish in open waters, remain to be recorded as non-cultivated.² Treating all growth of trees intended for timber as production, instead of applying a somewhat subjective discretionary choice between cultivated and non-cultivated resources based on the management regime, is considered preferable, also from a feasibility point of view. In this case, any future benefits from the growth of trees which are not intended for timber production would not be accounted for; only the felling of the relevant trees would be recorded as output.

39 The other “change” in the recording of non-migrating resources yielding once-only products is to be considered as a clarification. The guidance of the 2008 SNA now states, in paragraph 13.41, that work-in-progress for standing single-use crops should be valued by discounting “*the future proceeds of selling the timber at current prices after deducting the expenses of bringing the timber to maturity, felling, etc.*”. Here, the issue is that this valuation may lead to an overestimation of work-in-progress if the capital services of the underlying assets (i.e., forest land) are not adequately accounted for. In the 2025 SNA, a clear distinction will be made between the accrual accounting of the growth of trees as work-in-progress versus the present value of future resource rents accruing to the underlying asset.

40 From a conceptual perspective, individual respondents raised four concerns in relation to the recording of biological resources. First of all, it was noted that animals and plants should not be

¹ This issue does not concern livestock being raised for slaughter, which are always considered, also in the 2008 SNA, as being cultivated.

² The 2008 SNA is somewhat ambiguous regarding the treatment of biological resources under quota regimes, implicitly suggesting that these resources should be looked upon as being cultivated. However, this interpretation is considered as a matter of unfortunate wording, which goes against the general considerations of only treating actively managed resources as cultivated.

considered as producers of output. Secondly, it was noted that eliminating the distinction between cultivated and non-cultivated resources leads to gross fixed capital formation for resources that are not actively managed. Thirdly, it was stated that the recording of regeneration as gross fixed capital formation would imply an exclusion of the recording of work-in-progress. Finally, in the opinion of another respondent, the distinction between work-in-progress and the underlying asset was not clear.

41 The first two points are very much linked. In response, it is noted that human involvement is always the starting point for considering something as being produced, or not. However, as noted before, it is not that easy to make a clear distinction between the degree of human involvement, which in the updated guidance is basically determined by the actual growth of all trees intended for timber harvesting, instead of making a discretionary choice between cultivated and non-cultivated forest land. The third concern mentioned above is a misinterpretation, probably due to the way in which the recommendation has been phrased. A distinction should be made between the underlying asset, whose regenerative capabilities to produce timber in a sustainable way may grow (referred to as “regeneration”) or decline (referred to as “depletion”). The growth of trees is always to be treated as work-in-progress. Regarding the last concern, the phrasing of the accounting for biological resources yielding once-only production will be given special attention during the drafting process, to avoid any confusion. Countries are invited to reflect on the result during the global consultation of the relevant chapters.

42 Regarding the split-asset approach, some have argued that the value of, for example, non-renewable mineral and energy resources is restricted to the present value of actually received rents received by the legal owner of these resources, usually government. This may hold in the cases that the rents actually received in one way or another are very close to the resource rent derived from these resources when applying the residual value method (i.e., the output of minerals and energy minus the costs of extracting them). However, there is overwhelming evidence that this is not the case in many countries, and the split-asset approach is an elegant way of presenting the value of the assets related to the accrual of future benefits derived from them by the legal owner and by the extractor.

43 In respect of the split-asset approach, some have also argued that the 2008 SNA prescribes a valuation using the present value of rents actually received by the legal owner, and that estimating natural resources using the residual value method would lead to a significant change in the valuation of the relevant resources. In this respect, one could say that the 2008 SNA may not be that clearcut, but that all available guidance points in the direction of the 2008 SNA recommending the present value of benefits using the residual value method. This is quite clear in the case of biological resources (see above), but also, for example, paragraph 13.50 of the 2008 SNA states the following in relation to the valuation of mineral and energy resources: *“Because there is no wholly satisfactory way in which to show the value of the asset split between the legal owner and the extractor, the whole of the resource is shown on the balance sheet of the legal owner and the payments by the extractor to the owner shown as rent. (This is therefore an extension of the concept of a resource rent applied in this case to a depletable asset.)”*. The same holds for paragraph 7.53 of the European System of Accounts (ESA) 2012: *“Reserves of mineral deposits located on or below the earth’s surface, that are economically exploitable given current technology and relative prices, are valued at the present value of expected net returns resulting from their commercial exploitation of the assets”*.

44 In related discussions around the split-asset approach, some have argued in favour of applying the “right-to-use” method. Here, this method is interpreted as the extractor having an intangible asset, representing the value of the right to extract, instead of allocating this value to natural resources,

similar to the examples presented on page 29 of the [Guidance Note WS.6](#) on Accounting for the Economic Ownership and Depletion of Natural Resources. However, disregarding the issue around the valuation of the relevant natural resources, such a recording would only result in a different labelling of the asset, with the additional complication that the part of the depletion affecting the value of the asset in the books of the extractor would relate to a decrease in value of an intangible asset, instead of a decrease in the value of natural resources.

45 When it comes to the recording of depletion as a cost of production, hardly any conceptual concerns were expressed. Apart from the potential impact on the measurement of government output (see paragraph 13 above), two respondents expressed concerns, one noting that *“the recording of ... depletion are not in line with the concept of current actual costs. Depletion is a kind of opportunity cost, the loss of future opportunity to make money”*, and the other one stating that the *“recording of depletion of natural resources as a cost of production is not compatible with the non-produced nature of these resources”*, thus impacting *“on the soundness in the presentation of net values in national accounts”*. The latter line of reasoning is not entirely clear. In relation to the first argument, one could argue that the concept of depletion is actually not that different from the concept of consumption of fixed capital. Moreover, the depletion due to extraction actually leads to a decline in net worth, which is directly related to the production process of exploiting the resources.

46 Finally, a more generic concern about the accounting for natural resources, i.e., the scope of non-renewable mineral and energy resources to be included as assets in the national accounts, has been addressed in the updated consolidated list of recommendations for the update of the 2008 SNA. In the updated version, it has been made clear that *“the measurement of monetary estimates will be restricted to the first class (i.e., commercially recoverable resources), which in practice could be approximated by those resources for which permissions to exploit have been granted, and/or those for which the existence is explicitly recognised by (past) monetary transactions”*, thus explicitly excluding potential resources regarding which it is not foreseen that they will be exploited in the near future.

47 The majority of issues expressed by countries who provided feedback on the recommendations for the accounting of natural resources related to feasibility and practical concerns. They had worries about the modelling and assumptions needed to estimate (the changes in) the value of the relevant assets, particularly the estimation of depletion which directly affects the compilation of NDP, and therefore may add to the volatility of important macro-economic indicators. Here, it can be noted that the methodologies recommended for the valuation of natural resources are not new; they are well-established. It is acknowledged though that the application of these methodologies indeed requires the use of a number of assumptions. However, some of these assumptions are already quite frequently applied in valuing other types of assets (e.g., discount rates, rate of return on capital), while other assumptions such as the resource rent can be largely derived from observations on actual transactions.

48 In relation to the feasibility concerns, it can be noted that various countries, especially resource-rich countries such as Australia and Canada, have ample practical experience in compiling estimates of natural resources. Moreover, a dedicated task team has started its work on putting together compilation guidance, with the goal of arriving at internationally comparable estimates. This guidance will become available in early 2025, well in advance of the actual implementation of the 2025 SNA. Countries not participating in the task team will be given the opportunity to reflect on the appropriateness of the compilation guidance via global consultation. Not only this consultation, but also later practical experience from early implementation exercises by countries, including those not directly involved in the task team, could be used as inputs for further refining the guidance.

49 Finally, although not directly addressing any conceptual and practical concerns, it is also important to note that not accounting for natural resources, or – as some have argued – only in extended accounts, would give a very poor signal to users, potentially decreasing the relevance of national accounts. Only including estimates in extended accounts may also not be that well understood by users, and would also give rise to questions on which part is to be recorded in the extended accounts, and which part would still feature in the sequence of economic accounts, as actual transactions must be recorded in the latter accounts.

Data and marketing assets

50 Regarding data and marketing assets, of those expressing more substantial concerns a clear majority explicitly agreed with the conceptual soundness of the recommendations to treat especially data and also marketing assets as produced assets. Trying to measure these assets is considered highly relevant, especially when looking at the role of data in the present economy. However, notwithstanding the conceptual soundness and relevance, one respondent seems to question the extension of the asset boundary with data, because the asset value is related to its use rather than the dataset itself. Two other respondents wondered about the extension of the asset boundary with marketing assets, one having doubts whether capitalised marketing expenditure could truly reflect the brand value/marketing assets of a company, and another suggesting that these assets are not used to increase the volume of output, only the value of output.

51 It is not entirely clear whether the first concern has been interpreted correctly. It looks as if it is related to feasibility issues, but it could also be interpreted as a conceptual concern. In respect of the latter, one can only say that the value of data being related to its use is in line with the definition of an asset. The second argument against the concept of marketing assets is probably very much linked to the question of whether brand and reputation can really be “produced” and actively created, or that these assets are to be considered as the result of, for example, longstanding practices of providing goods and services of high quality and/or demand. In the latter case, an asset is being created, but not (actively) produced. In this respect, enterprises do actually incur expenses with the goal of improving their reputation and future sales. The only question is how much of these expenses actually add to the build-up of an asset from which future benefits can be derived. Regarding the third conceptual concern, and this relates to the first point, it does not matter whether the future benefits are related to an increase in the volume of output, or an increase in output due to an increase in prices. The SNA simply defines an asset as “*a store of value representing a benefit or series of benefits accruing to the economic owner by holding or using the entity over a period of time*” (paragraph 3.5 of the 2008 SNA), without making the distinction regarding the source of these benefits. Furthermore, most marketing expenditure leads to an increase in the volume of sales, and not just the value.

52 If the feedback from the larger group of respondents expressing more substantial concerns is interpreted correctly, the main concerns are actually related to issues of feasibility and practical implementation. Respondents especially refer to the issue that estimates may rely heavily on assumptions, for example regarding the delineation of expenditures (e.g., labour costs based on certain occupations) which add to the build-up of the relevant assets, service lives, etc. This is considered quite problematic, especially in view of such estimates directly affecting the measurement of GDP.

53 In view of these feasibility issues, it has already been decided to establish two teams with the objective of compiling implementation guidance for data and for marketing assets, with the goal of

arriving at internationally comparable methodologies and estimates. Similar to the task team on natural capital, both task teams have the objective of producing compilation guidance by early 2025, with opportunities to provide feedback by way of global consultations, and sharing of practical experiences later on, well before the actual implementation of the 2025 SNA.

54 As a final note, in some cases one will have to rely on the application of simplified assumptions, which do not always have a strong basis in targeted research via directly observable information, an example being the service lives of the relevant assets. However, it is also clear that this is not something new to the practice of compiling national accounts. Similar issues have to be resolved in accounting for a large part of fixed assets, including those which are primarily produced in-house instead of being purchased. Relevance is perhaps the key word here: the main objective should be ensuring the relevance of future national accounts by properly describing all economic activity, thereby taking into account possible complexities in their measurement.

Consistency in the application of the sum-of-costs approach

55 In relation to the sum-of-costs approach, a number of recommendations have been discussed and agreed upon, as follows: (i) to include a return to capital in all cases, including output of non-market producers; (ii) to expand the scope of assets for which a return to capital should be recognised, thus including work-in-progress, other inventories (where significant) and non-produced non-financial assets that are used in production; (iii) to exclude a return to capital for city parks and historical monuments on pragmatic grounds; (iv) to add, where relevant, depletion of natural resources as a cost³; and (v) to add, where relevant, payments of rent as a cost.

56 In respect of these recommendations, no major concerns regarding feasibility were expressed, which is not that strange given the ample practical experience of countries in applying the sum-of-costs approach. Furthermore, four out of the five above recommendations did not raise any conceptual concerns. Here, the main issue is that a number of countries had reservations about including a return to capital for non-market producers, affecting the value of output for non-market services produced by government and NPISHs as well as the value of output of own-account capital formation for these producers.

57 As arguments against including a rate of return for non-market producers, similar to what is done for market producers, it was stated that market producers and non-market producers are fundamentally different from each other: *“while market producers set their supply and prices in order to maximize profits, non-market producers base them on political and social considerations ... and may be required to provide services to areas of the economy that would not be covered otherwise”*. As a consequence, a difference in the treatment of market producers and non-market producers is not to be considered as an inconsistency but as a reflection of reality. One respondent also argued that opportunity costs should not feature in the system of national accounts, and that only actual costs should be recorded. Finally, it was noted that the change may possibly have an impact on government deficit.

58 In response, the sum-of-costs is a method to approximate a market-equivalent price, in the absence of observed market prices, by summing up all costs involved in the production of the relevant

³ As explained in paragraph 13 of this note, this does not concern depletion attributed to government as a legal owner of natural resources.

goods or services. The costs of using capital in production do not only concern consumption of fixed capital, but also the cost of borrowing funds to invest in the capital used in the production of relevant goods and services. As such, it is not about making profits, but about recovering all costs involved. Regarding the issue of opportunity costs, one can add that the concept of opportunity costs (return on capital) is already applied to market production, and as such is a notion that is regularly applied, either explicitly or implicitly, in the system of national accounts.

59 Finally, although not a conceptual concern per se, the change in the measurement of government output, by adding a return on capital, does not directly change government deficit. However, there may be a possible indirect impact on government deficit, as in the case of applying the 50% rule for distinguishing between market producers and non-market producers, the additional costs may result in a shift from market producers to non-market producers for some units. Having said that, the impact of these potential shifts are expected to be relatively small.

Section 5. Concluding remarks and way forward

60 When looking at the feedback in a broader perspective, one can conclude that a large majority of respondents endorses the consolidated list of recommendations for the update of the 2008 SNA. As noted above, in the opinion of more than 80% of respondents, the recommendations are clear, straightforward, unambiguous, and consistent.

61 Quite a number of countries used the opportunity to provide specific feedback on the recommendations, ranging from requests for clarification, or for a few respondents, expressing disagreement on certain issues, to more substantial concerns expressed by a number of countries on a limited number of recommendations. The update team would like to thank all countries that responded to the global consultation. This show of involvement with the update of the 2008 SNA is highly appreciated.

62 When it comes to the response to the feedback which has been provided, the update team has tried to address, to the extent possible, the requests for clarifications in the updated version of the consolidated list of recommendations, which is now being put forward to the UNSC. In cases that this was not possible, respondents can be assured that the update team will deal with the requests in a very conscious way, taking them into account while drafting the chapters of the 2025 SNA. Disagreements with recommendations, as expressed by individual, or a few, countries could not be fully addressed, with the exception of providing further clarifications in some cases, as changing the recommendations would go against the views of a majority of countries. Here, it is noted again that all relevant issues have gone through a fully transparent process of discussion and consultation and in most cases the recommendations were supported by a strong majority of countries. In a few cases, global consultations showed divergent opinions across countries. In those cases where the provision of guidance was necessary, because of the need to take a (provisional) decision on the recording of relevant new transactions and positions, the majority opinion has been followed. In other cases where there was no strong agreement on recommendation for change, the treatment in the 2008 SNA will be retained.

63 More substantial concerns were expressed by a larger group of countries, although still limited to approximately 6 – 8 countries, mainly from Europe. The concerns related to the accounting for natural resources, the extension of the asset boundary with data and marketing assets, and the improvement of consistency in the application of the sum-of-costs approach. Without ignoring the

conceptual concerns, as a more general conclusion, one could say that the concerns are predominantly related to the feasibility of implementing the relevant recommendations in a way to arrive at internationally comparable data which appropriately reflect the targeted concepts. The concerns around the recommendation regarding the consistency of the application of the sum-of-costs method for market producers and non-market producers are an exception to this general conclusion; here, the conceptual concerns are dominant.

64 In relation to the above concerns about the practical implementation, it can be noted that the feasibility of the recommendation has always been on the radar, right from the start of the update process. This included initial work on assessing the practical feasibility of implementation as part of the development of certain guidance notes, including those that are the subject of the more substantial concerns. Furthermore, in a number of cases, which coincide nicely with the above-mentioned more substantial concerns, it had already been decided that it would be important to develop more elaborated implementation guidance in the course of 2024. Three task team have started with the development of such guidance, for the following areas: (i) data; (ii) marketing assets; and (iii) natural resources. In due time, countries will be consulted on these guides. Further information on plans for developing implementation guidance can be found [here](#).

65 The update of the 2008 SNA is critically important to keep the guidance on the compilation of national accounts up-to-date and relevant for users. In this respect, three priority areas were identified for the update: (i) digitalization, (ii) globalisation, and (iii) well-being and sustainability. In the opinion of the update team, the consolidated list of recommendations gives an excellent response to these challenges, and with the work underway on developing implementation guidance, it is expected that when the 2025 SNA is actually implemented the prospects of producing high quality, internationally comparable estimates will be strong. On the other hand, if there were only limited changes to the 2008 SNA, it might be questioned whether the national accounting community has taken sufficient note of concerns that have been expressed about the SNA since the last update more than 15 years ago.

66 In closing, it is important to thank a very large group of people from countries and international organisations that have been involved in the update process. The update team would like to thank everyone who has contributed to the recommendations, not only the ones who have contributed directly, via the participation in the task teams doing research on a variety of topics, but also the people who have participated in other ways, not the least via the global consultations on the guidance notes and issue notes. The continued involvement of countries, via the participation in the global consultations of draft chapters in the coming period is highly appreciated.