

**NATIONAL STATISTICIAN'S COMMITTEE FOR ADVICE ON STANDARDS FOR
ECONOMIC STATISTICS**

22 April 2024

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2025 SNA Chapter 34: Measuring Well-Being

Advice Paper

NSCASE(24)07

Executive Summary

1. Chapter 34 is a new chapter included in the 2025 SNA. This chapter explains how aspects of well-being can be measured using national account concepts in the form of thematic or extended accounts.
2. Chapter 34 was published on 8th December 2023. The UK submitted a response on 16th January 2024 which is provided in [Annex 1](#).
3. This paper identifies areas of concern to ONS in the current draft of Chapter 34.
4. ONS asks NSCASE Committee members to review the content of this paper. Members are also invited to identify any areas of concern to them which are not mentioned in this paper.
5. Specifically, the ONS would like the Committee's views on:
 - a. **Whether the ONS should deviate from SNA2025 in the areas highlighted in the paper.**
 - b. **Whether there are any other areas in the Chapter where ONS should deviate from SNA2025.**
6. As with previous 2025 SNA Chapters brought before the Committee, the official consultation deadline for this chapter has passed and therefore the opportunity to feed back to the paper editors is not possible at this stage.

Introduction

7. This paper sets out the ONS position in relation to the draft version of the 2025 System for National Accounts (SNA) Chapter 34: National accounts and measures of wellbeing and sustainability (United Nations, 2023).

Background

8. Chapter 34 forms one part of the SNA's content on sustainability and wellbeing, and overall final judgements on how the SNA approaches these subjects should be reserved until all parts are available, those being Chapters 2, 34, and 35, the last of which is not available at time of writing.
9. ONS consulted on the draft 2025 version System for National Accounts (SNA) Chapter 34 in late 2023 and found overall that the chapter had a lot of merit, but also several substantial areas of concern.
10. In Annex 1 the ONS provides specific comments on paragraphs within the chapter. These were submitted to the UN as part of the international consultation on the 9th of October 2023. Annex 2 supplies a series of global responses from international economists.
11. The development of the SNA 2025 and its drafting discussion was set out within a paper "SNA 2025 Background & SNA Drafting Principles" presented to NSCASE in January 2024, and revised considering the discussion that took place.
12. Below ONS provides a brief background of the chapter for colleagues who have not had the opportunity to read it. If you have read the chapter skip forward to the ONS concerns section.

ONS Considerations

13. There are three main considerations ONS has for how the SNA tackles wellbeing and sustainability; the accuracy and usefulness of the content itself and the effect of the content on the scope, consistency, and coherency of the national accounts.
14. The chapter makes a good step forward around introducing new tables to the national accounts which will help inform international work around measurement of well-being. It is weaker when discussing well-being itself, and how the measures in the SNA tie to well-being. The topic is much more complex and diverse and extends so far beyond the SNA in its current state that it may mislead the reader by

presenting a limited scope. An example of this is given in paragraph 34.1, with its reference to ‘the needs of current generations’, when the Brundtland Report ([Keeble, 1988](#)) and many other commentators in this space have referenced the sustainability of wellbeing for future generations.

15. Given limited time for additional research, the chapter might benefit from being rescoped to focus only on highlighting the additional tables, which are all highly relevant to well-being, and leaving discussion of the ways in which they relate to well-being to other texts which focus on the wider topic of well-being. This is reminiscent of how the SNA does not currently comment on various economic theories about how its tables may be used for the wider purposes of economic management or analysis.
16. It is also a shame there are no direct recommendations on which elements countries should focus on delivering, or in fact on delivering measures on any of the components of well-being to be under a more formal mandatory recommendation. This dilutes the value in capturing such measures in this chapter, like unpaid household service work, human capital education and training, health accounts and others. If formal recommendations were avoided, a suggested path to delivery and/or sequencing of the various components would be helpful.
17. ONS intends to continue being a pioneering steer within the wellbeing and sustainability space globally engaging in its own research and attending international workshops.

ONS Concerns

18. ONS found the accuracy of the content present in the chapter to be high, but with some notable exceptions. These are detailed in our specific responses as part of the consultation (see Annex 1), but there is one common theme among many of the inaccuracies worth highlighting which is exemplified by Figure 34.1 of the draft chapter (Figure 1). This diagram portrays different aspects of wellbeing grouped up different concentric circles, moving from a core to a periphery. The measures included within the core are those found within the SNA, while those further out from the core are less related to the SNA. The impression this leaves on the reader is that the measures included in the SNA are the most important measures of well-being, while those less related to SNA are less important.

Figure 1: Diagram outlining the aspects of well-being position in respect to the SNA. The centre ring represents the scope of the 2025 SNA SSEA, the second ring represents the scope of the extended accounts, and the third ring is outside the scope of the SNA SSEA.

19. Several other areas are misleading in this same manner, giving the impression that measures from the SNA are the most important well-being measures, or make up a major part of well-being measurement. In general, we find that the chapter does not properly inform the reader of the full diversity and complexity of well-being measurement.
20. While the chapter is very useful in putting forward key frameworks which would enable the collection of comparable data in important areas for wellbeing analysis, ONS are concerned that the narrowness of the scope may limit its usefulness to the UK and other countries with more advanced well-being statistics, where the limited scope of the SNA update could constrain the ambition of statistical development.
21. For example, while accounting is proposed for the measurement of human capital stocks, this sits completely separately to the sequence of accounts and does not consider how the core sequence of accounts would need to be adapted to construct an extended account that thoroughly capitalised human capital within the system of national accounts. This more thorough consideration of the capitalisation of human capital is where research on human capital is progressing to in ONS and is yielding valuable insights into the comparability of national accounts and human capital statistics. We are concerned that a concentration globally on further elaborating existing separate human capital accounts as per the SNA update, rather than encouraging more ambitious development and integration of human capital statistics, could stifle development in this area.
22. When considering the effect of this Chapter on the scope, consistency, and coherency of the national accounts, the most important point to note is that much of the “new” content will be in a series of thematic accounts i.e., outside of the “core” sequence of accounts. Given the experimental nature of much of the new proposed tables (e.g., household accounts by income quantiles, unpaid household production, human capital), this will preserve the status of the sequence of accounts as the home of rigorous, well-tested, established concepts and methods. However, we know there is a wish from some users for more radical innovation in national accounts and the main national accounts aggregates (e.g., GDP, Household Disposable Income) which this will preclude.

23. Additionally, there is the potential that adhering rigidly to the development of separate tables in different topic areas, in which each table deviates from or elaborates upon the sequence's accounts only in its own domain, could hinder the development of a more complete picture of well-being. For example, there might be merit in incorporating unpaid household production and human capital in distributional household accounts. There is therefore a tension in this respect between the development of tables which primarily aim to speak to the national accounts, and the development of tables which primarily speak to well-being.

Annex 1 – Specific Paragraph comments

34.1 - As noted above, the reference to 'the needs of current generations' is problematic due to setting a very limiting scope, which omits the sustainability of future generations, as addressed in para 34.5. This is also true for the definition in general, which only captures the 'economic' drivers of wellbeing. As per our comments below, this chapter should start with a wide definition and then go on to explain where and why the SNA does not cover this wider scope and highlight what it does focus on.

Table 34.1 implies a whole host of metrics within current SNA framework may be used for economic well-being, but the communication around the table zooms in on essentially a version of NNDI per capita, so would suggest reconsidering if the table adds any value for producers considering economic well-being measures.

34.2 - The third sentence may benefit from a slight edit to read: *'As introduced in Chapter 2, the 2025 SNA provides a ~~broadened and enhanced framing for the measurement of~~ **macro-economic measures, which contribute towards a broader understanding of well-being in which macro-economic measures, such as GDP, are complements ed by other measures such as GDP**, while still recognising the relevance of accounting approaches in providing robust and comparable data to support policy development and assessment.'*

34.3 – To simplify the text, one could delete the first seven words and commence at 'Chapter 2...'. Equally, the word 'Further' suggests distributional presentations are the second of the two avenues suggested, whereas reading further makes it clear that para 34.4 contains the second avenue. This may wish to be amended to improve clarity.

34.5 - The second sentence, "Three aspects are of most relevance", it's not clear what these aspects are of most relevance to (to the discussion of wellbeing in general? To the intersection between wellbeing and the SNA?) Equally, this para seems to have been drafted without reference to 34.3, which references as a 'primary avenue' matters of the distribution of consumption, which surely is as important as the terms referenced in this para? Maybe paras 34.3-5 (or 34.7-11) can be condensed to highlight a single list of key factors which the chapter will discuss.

34.6 – The term ‘economic well-being’ may be better termed as ‘economic aspects of well-being’. The final sentence contains the phrase ‘...the measures included in the middle circle and described in this chapter are those that have been most developed in statistical and accounting terms...’ which appears quite a strong statement which underplays the statistical manuals and methods underpinning the measures in the outer circle (see the work of the Praia city group on governance statistics, the WHO on health outcomes etc.)

34.7 - This is very clear, but perhaps the penultimate sentence could read ‘*This chapter focuses on the organisation of data using accounting approaches to support objective measures of **economic aspects of well-being.***’

Figure 34.1 - This diagram, particularly given its title “Aspects of well-being” gives the impression that NNI, HDI, etc are the *core* of well-being, i.e. that they’re the most important aspects of well-being. My understanding is that the diagram is meant to demonstrate the areas that the SNA can comprehensively speak to, those it can partially speak to, and those it cannot speak to. That is not currently the impression that the diagram gives, so it would be good to see it redesigned or relabelled to make it clear that the diagram is not intended to show a hierarchy of measures for measuring wellbeing.

34.12 - The paragraph mentions that this chapter bridges between micro and macro perspectives on wellbeing, but I didn’t find that it does this.

34.13 - The paragraph states that “*it is not possible [to] identify some extensions as ‘mandatory’ in contrast to others that are optional.*” It goes on to say that which extensions are adopted are up to countries depending on their own circumstances – this essentially sounds like it is optional, or certainly not mandatory. It would be good for this to be made clear.

Header B – Given wellbeing is not a concept which aligns only to the economy, this title appears poorly phrased. Well-being isn’t typically interpreted as something which would be delimited by a term like “economy wide” - it seems to imply that well-being is something which exists within the economy, or that “the economy” is the subject of well-being rather than people/environment. I understand that the purpose is to make clear that this isn’t, for example, income of just one institutional sector, and is instead income from all institutional sectors. However, “economy wide” measures of well-being are of interest because they cover all people in a country, rather than because they cover all institutional sectors. We would advocate ‘Measuring objective economic drivers of wellbeing’ as a more appropriate alternative.

34.23-26 – could this section be simplified through reference to benefits and social transfers in kind?

Section C – This references households, but would a bridging paragraph to other methods (particularly a reference to individual-based analyses) be of merit? Although 34.42 does this, but this may benefit from being brought earlier in the section.

34.28 - Given this paragraph references the importance of considering the joint relationships between income, consumption and wealth, should the computation of multivariate indicators be further referenced in the chapter?

34.39 - More discussion on the implications of equivalisation and its interpretation for wellbeing analysis would be useful. Some of the most prominent equivalisation factors are based on need – so using equivalisation factors in a well-being measure implicitly assumes that need is something which needs to be taken into account for this measure, and has assumptions about how those needs are traded off. For example, some wellbeing analysis may wish to separately analyse resource availability and needs (to, for example, study disparities between the two) – in which case un-equivalised measures would be more appropriate. Given the challenges in the coverage of existing scales, an acknowledgement of the need to review the equivalence scales recommended for use would be helpful.

34.41 Footnote 3 – The inclusion of this footnote is appreciated, and while the UK goes beyond the binaries of male/female, we appreciate that trying to expand the footnote would likely make the wording long and unduly complicated. We may suggest that data collectors are encouraged to contact the UN for more specific guidance on approaches to sex and gender data.

34.48 - In this discussion of consumer durables, a cross-reference to the section on the household satellite accounts may also be beneficial, as these are also considered there.

34.50 - The final sentence states “*The discussion of household consumption here recognises that a focus only on those goods and services within the scope of the SNA production boundary is necessary but not sufficient*”. We struggle to see the justification to say that a focus on all goods and services within the production boundary of the SNA is *necessary* for well-being. Some goods and services within the production boundary may be detrimental to well-being, and some may be reasonably argued to be inconsequential to well-being. The goods and services in the SNA production boundary are important for an analysis of consumption-as-wellbeing, but not (all) necessary.

34.58 – The digitalisation chapter circulated concluded with a discussion of how to consider the consumption of free digital services and their treatment as intermediate consumption (in the form of capital services) in the production of own-account goods and services in the household. The digitalisation chapter suggests this be looked at separately as an additional analysis, but as the drafting team of the relevant guidance note, our expectation was that if accepted this additional analysis would be best considered within the household satellite account, as it merely represents a new input

into the household production process. We would strongly encourage this matter be given further consideration as the current separation creates additional workload for NSIs for little material gain to users, whereas combining them allows a single reflection of the issues in play here.

34.65 The UK's Inclusive Income programme, which publishes routine statistics essentially in line with this paragraph (as Gross Inclusive Income - <https://www.ons.gov.uk/economy/economicoutputandproductivity/output/articles/ukinclusiveincome/2005to2019>) also publishes Net Inclusive Income which incorporates depreciation of all assets which support the delivery of all goods and services within the general production boundary. If one is willing to outline this approach in this chapter, which we roundly applaud, a consideration of the equivalent net measures appears the obvious concluding point, particularly where these are already published as routine statistics.

Table 34.4 & 34.7 - recommending a different demographic breakdown here to within the labour chapter, as well as for other social statistics is not helpful for producers considering their viability. It may be more useful if instead of education status, educational attainment would be clearer when comparing against other labour market statistics including in the labour account and coherence with human capital and other social well-being statistics.

34.76 - A physical time accounting approach is not necessarily 'better' for capturing household expenditure, it gives further insight is for different use cases.

Table 34.5 – Information and communications services are one area our previous point around free digital services is particularly valid.

34.91 – Recent UK efforts to develop a six monthly online and low-cost time use survey demonstrates this is now within cost-effective reach. The issues considered within 34.92 are less intractable using online methods which allows the recording of primary and secondary activities.

Para 34.92 - generally feels outdated and could be removed.

34.93 – Given many studies indicate that for many developed countries human capital stocks dwarf all other types of capital in aggregate, 'suggest' in the penultimate line may understate the issue to a misleading extent.

Figure 34.2 - ignores other key components feeding into human capital, including other components in this same chapter. Namely, health & informal learning in the form of unpaid work are both important to recognise as contributing to human capital, and their recognition ties in why it is important to consider the different elements holistically. One

could then also recognise that human capital underpins other forms of production like unpaid work, as well as underpinning subjective well-being, health outcomes, social cohesion and other of the widest circle components in figure 34.1, which lead to production outside the SNA boundary.

34.100 - On the cost-based approach, there are other considerations that need to be accounted for, including on investment of health and developmental unpaid work (as referenced above), as well as considerations for what the products and hence price indices are for any real measures. Good mention on service lives and depreciation though.

34.102 - reference to asset lives is good but needs to also reference that the different types of human capital, so-called products of human capital (whether that be individual skills and knowledge, whether it be educational attainment categories) may also have differing asset lives. For example, the asset life for learning to read vs for learning to use the latest technology.

34.102 - It's valuable to capture some of the spillover effects but there are also the well recognised spillover effects of non-monetary benefits of human capital, as they impact society such as crime and justice, political participation, governance among others that are worth also capturing.

34.102 - generally these are good things to recognise but they are pitched so high up compared with how the accounts can practically be set up with use of the UNECE guidelines on both income based and cost-based measures, that producers may be put off, so I would recommend moving such caveats to lower down the chapter – e.g. leading more with the messaging in 34.106.

34.106 – The UNECE manual already proposes suitable treatments of these issues.

34.111 Despite the active research identified, there is an argument for why something like the income-based approach to human capital measurement allows for some of those to come through implicitly; at least in the effect they have on people's current earnings, so less direct consideration is needed in deriving those to account for some of those effects. I think that is worth stating as an argument for countries to focus on deriving the income-based approach, as a basis for building upon.

34.120 - in fact here it is worth capturing a few more caveats or considerations for producers to be aware of. In particular, the compilation guide focuses on nominal measures, so producers may need to consider which products and price indices are appropriate to get to real estimates in a way more consistent with SNA measures. It is worth tying back to the previous sub-section which alludes to there being more components of human capital development, at least health given that is also in SNA

production boundary in the main, so even though the compilation guide does not provide detailed guidance on it, one could follow a similar set of principles to deconstruct health expenditure. Unpaid household service work at least in relation to developmental care for children and adults could also make such a mention given its compilation is discussed earlier on in the chapter.

Section F – This section should more directly reference how it is also fundamental to human capital, given it has just been discussed in the previous section, so understanding such expenditure could help inform analysis on human capital development too, in combination with the references made earlier on education and training, and on unpaid household service work. This could all be tied together more explicitly in the human capital section.

Annex 2 – Global Responses

<p>Bureau of Economic Analysis</p>	<p>It seems as if the purpose of this chapter is to provide a summary of well-being measures presented earlier. It would seem that a better use would be to provide a preview of well-being measures discussed and to position this chapter after Chapter 2.</p> <p>Omission of welfare may cause confusion as ‘welfare’ is often used as a synonym to well-being in academic literature. 2008 SNA clarifies the distinction and if this is not covered in Chapter 1, it would make sense to explain it here, even if to explain that it is outside of the scope of the 2025 SNA.</p> <p>‘Paragraph 34.6. The SNA does not have agency—one can say that the SNA framework is flexible and can allow extensions.’</p> <p>‘ Paragraph 34.11. It should be mentioned that the production viewpoint means that health care is measured by the output of providers. This means that the more intuitive measure of health care by treatments—the bundling of the output of health care providers is not undertaken. This would recognize the fact that well-being is achieved by treatment of conditions and not by purchasing unintegrated health care services—who buys hospital services in isolation? This is mentioned in Ch. 2 (Draft 7, para 2.39): “First, in keeping with the SNA production boundary, material wellbeing is measured in relation to the outputs produced and consumed by households rather than in relation to the outcomes arising from their consumption. Thus, for example, a</p>
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	<p>distinction can be made between the expenditure on outputs of doctors' services and medicines and the outcome of improved length and quality of life that is expected from consumption of these outputs. While the measurement of outcomes is important, outputs are instrumental in securing outcomes and are the focus of production by economic units, including for example, in the health care and education industries. Consequently, a focus on measuring outputs in a comprehensive manner is a relevant focus in the measurement of wellbeing." Paragraph 34.11 cites Ch. 18, but it may be more fitting to also summarize this point or refer back to this distinction in Ch. 2 to make it clearer for the reader.'</p> <p>Table 34.2 and preceding discussion – effectively no guidance on what countries are expected to do and what is optional. Discussion needs some guidance. ' The absence of guidance can undermine international comparability, which is highly important in this area. The table suggests that a household distribution in deciles of many national totals that do not touch households –depreciation, depletion, value added GDP is possible without discussing allocation methods. Would it not be better to simply focus on a few narrower concepts of income? Compliance would likely be much higher.'</p> <p>Paragraphs 34.57 through 34.66. Many of these paragraphs discuss the compilation of physical unit tables without showing a single example of how they can be informative in a national account system whose entries are almost entirely in monetary values. Granted that physical unit data are useful in imputing monetary values when none exist but that does not imply that physical unit tables should be part of the SNA. Moreover, some of the physical tables mentioned are already compiled outside the SNA framework and so why should the SNA discuss compiling complementary tables? Similar comments apply to the paragraphs on ecosystem services. It is difficult to measure aggregate ecosystem services so how can national totals in physical units be allocated to deciles of households as in table 34.3? Even if they could, how is that informative since physical unit allocations do not allow the expression of trade-offs among different ecosystem services?</p>
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	<p>Human capital - Paragraph 34.105 and surrounding paragraphs. Firms invest in the training of their employees and these expenditures are regarded as investment in human capital by the firm for their economic benefit. This raises the possibility of a split asset approach. What should be done about firm investment in human capital is absent from the discussion. Given the framework of the SNA and its inclusion of intangible firm assets, this is a big omission. The discussion in paragraph 34.11 is insufficient.</p>
<p>Statistics Canada</p>	<p>Table 34.4 – I am not sure what the point of the ‘of which’ columns are since own-use production and volunteer are already in the first few columns.</p> <p>Table 34.6 – I am not sure this type of detail is possible. I suppose it says more guidance on unpaid household service work to be finalized. But using replacement cost approach how are we to estimate the breakdown of remuneration, taxes less subsidies, CFC and surplus for own account household production?</p>
<p>Germany FSO</p>	<p>- As we have had now the possibility to review draft chapters 2 and 34 (and Annotated outline of chapter 35), we would recommend to place (& combine) chapters 2, 34 and 35 together to avoid repetitions and keeping the text clear. The first (basic) info on well-being and sustainability then would remain in chapter 1 (could be an extension to what is already there in 2008 SNA, in chapter 1 Introduction - in section H).</p> <p>- It should be clarified that this chapter does not provide a framework for measuring well-being in a comprehensive way. Instead it suggests a) ways in which SNA data can provide information on aspects of well-being and b) how it can support other accounting-based measurement systems (like SEEA) for the analysis of well-being</p> <p>Table 34.1 - this table should consistently include all aggregates or balancing items mentioned in par. 34.17 like “adjusted disposable income”, “net financial worth”, etc. to show where they are positioned in the sequence of accounts.</p> <p>In paragraph 34.98 could be better explained why human capital is not included in the sequence of economic accounts (e.g. due to</p>

	<p>conceptual and measurement challenges discussed in detail in the following paragraphs).</p> <p>Paragraph 34.103 says that challenges faced in accounting for human capital also exist for many assets within the scope of the SNA sequence of accounts. We assume that mainly natural resources are meant here, for which non-monetary inputs must be collected and assumptions made as well. However, the concepts of these other assets are clear(er), while for human capital there are still ongoing discussions on the concept.</p>
<p>Thailand Office of National Economic and Social Development Plan and Policy</p>	<p>The consideration of aspects in this paper, healthcare, unpaid work, ecosystem services, human capital, and education and training, normally contributes to measuring well-being. However, other relevant concepts and measurements, such as the Multidimensional Poverty Index (MPI) and the Human Development Index (HDI), can serve as guidelines to enhance understanding and frame calculations more comprehensively.</p> <p>There are still other indicators related to measuring well-being, for instance, the number of people living in a household (overcrowding index), housing costs, and basic equipment, which can gauge individual household well-being.</p>
<p>South Africa RB</p>	<p>Figure 34.1. The distinction between objective and subjective measures of well-being is not clear from figure 34.1. In figure 34.1 the outers circle is indicated as subjective measures of well-being, but the two inner circles are not indicated to be the objective measures of well-being as explained in the text below in paragraph 34.7. Suggestion - indicate in figure that the two inner circles is objective well-being.</p> <p>Paragraph 34.17 suggestion: It would also be good to, at a high level, indicate how these balancing items are derived at this stage, although reference is provided to the chapters where the definitions of measures are described. (For example, balancing item disposable income is balancing item primary income plus total current transfers received less total current transfers paid)</p>
<p>INDEC Argentina</p>	<p>Subjective aspects of well-being are outside the SNA and there should be a line to reference this.</p>

	<p>The cost-based human capital estimation method should consider the treatment of migration flows of skilled persons as mentioned in paragraphs 70 and 121 of UNECE (2016), which imply the development of country-specific statistics.</p> <p>It should also be considered that developing human abilities and skills requires more than just integrating education and training. It entails embracing a holistic perspective that acknowledges the interdependence of factors like health, nutrition, education and training among others (even in early childhood). This emphasizes the idea of the varied and interconnected dimensions of human development.</p>
No organisation	<p>Paragraph 34.20-adjusting for price changes may be important, but what is also important from the perspective of well-being is adjusting GDP per capita for hours worked as well. The Economist article on https://www.economist.com/graphic-detail/2023/12/15/the-worlds-richest-countries-in-2023 shows that the GDP per person of some economies is reduced when adjusted for hours worked.</p>
No organisation	<p>Human capital - This section presents in general terms the theoretical considerations that must be taken when measuring human capital; however, it is important to provide general information that shows how the theoretical has been balanced with the empirical. We suggest providing, in addition to the conceptualization, some general information on what the standard or generality in the experimental calculations of human capital that has been already developed.</p> <p>The measurement of human capital, and of the labour and education and training accounts require a significant effort to collect data and reconcile it within the framework of national accounts. In particular, the data limitation has led most experimental calculations of human capital to focus on the working-age population, formal employment, and the valorization of market activities. We suggest describing, maybe in an additional paragraph this important limitation.</p> <p>34.99 and 34.100à It is important to mention that the empirical evidence shows discrepancies between both methods of estimating human capital. Given that most of the empirical evidence has used the income-based method, this discussion remains weak, leaving a gap that calls for more research to contribute to this point.</p>

References

KEEBLE, B. R. (1988). The Brundtland Report: "Our Common Future." *Medicine and War*, 4(1)

SNA Chapter 38: Thematic accounts

Advice Paper

NSCASE(24)08

Executive Summary

1. Chapter 38 of the 2025 SNA is a replacement for Chapter 29 of the 2008 SNA. This chapter explains the role of thematic accounts and extended accounts in providing complementary information and provides guidelines for developing these accounts.
2. Chapter 38 was published on 11th January 2024. The UK submitted a response on 9th February 2024 which is provided in the annex.
3. This paper identifies areas of concern to ONS in the current draft of Chapter 38.
4. ONS asks NSCASE Committee members to review the content of this paper. Members are also invited to identify any areas of concern to them which are not mentioned in this paper.
5. Specifically, the ONS would like the Committee's views on:
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6. As with previous 2025 SNA Chapters brought before the Committee, the official consultation deadline for this chapter has passed and therefore the opportunity to feed back to the paper editors is not possible at this stage.

Introduction

7. The purpose of thematic and extended accounts is to provide National statistical institutes (NSI's) the facility to provide insight into a key activity or aspect of the economy that lacks visibility in the sequence of accounts (SOA). Thematic and extended accounts have different relationships to the SOA. Thematic accounts disaggregate and rearrange items from the SOA, whilst extended accounts expand beyond the traditional boundaries of the SOA to provide new perspectives on phenomenon.
8. These accounts inherit the rigour of the SNA including its definitions for concepts such as production, consumption, income and assets and its framework for ensuring the consistency of the estimates with each other and with higher level aggregates. Such consistency could include producing a balanced supply and use of the products in the key activity of interest. These links to the SOA allow the accounts to show the economic significant of the items covered through comparisons with meaningful aggregates including Gross domestic product (GDP) / Net domestic product (NDP), Gross value added (GVA) and trade in services (TiS).
9. The SNA encourages the use of thematic or extended account to fill important information gaps on aspects of topic like wellbeing and sustainability including: the labour account discussed in chapter 16), the thematic account on the digital economy (discussed in chapter 22), and the extended accounts on household unpaid service work, health, and education and human capital (discussed in chapter 34). In addition, tables analysing inequality by disaggregating household income, consumption, and wealth (discussed in chapter 32) are part of the recommended data dissemination on the household sector.
10. In Annex 1 the ONS provides specific comments on paragraphs within the chapter. These were submitted to the UN as part of the international consultation. Annex 2 supplies a series of global responses from international economists.
11. The development of the SNA 2025 and its drafting discussion was set out within a paper "SNA 2025 Background & SNA Drafting Principles" presented to NSCASE in January 2024, and revised considering the discussion that took place.

Background

Thematic Accounts

12. By focusing on key economic activities that are within broader aggregates in the SOA, thematic accounts can focus on analytically important items often overlooked or are implicit components of higher aggregated transactions. Thematic accounts play a crucial role in understanding economic activities or phenomena by revealing analytically important items that are often obscured in standard economic accounts. The invisibility of these items is typically due to their incorporation into broader aggregates or implicit inclusion in transactions at higher levels of aggregation. Thematic accounts enhance visibility by providing more detailed breakdowns and alternative aggregations, thus shedding light on nuanced aspects of the data. (38.6)
13. Thematic accounts bring attention to otherwise overlooked elements in economic activities by offering granular decompositions and alternative aggregations. These accounts may introduce alternative treatments of ancillary activities, rearranging elements within the standard sequence of economic accounts without altering the underlying System of National Accounts (SNA) concepts. (38.6/38.7)
14. Thematic accounts typically centre around a key economic activity or phenomenon, often of high economic importance or special interest for policymaking. The definition of these key activities is broad, encompassing segments from various industries within the standard industrial classification system. Thematic accounts go beyond the standard economic accounts by providing additional breakdowns and alternative aggregations, offering a more comprehensive view of the key activity or phenomenon. (38.8)
15. The boundary of a key activity in thematic accounts may cut across detailed industries or segments from different sections and divisions of the standard classification system, effectively rearranging its structure. Thematic accounts may incorporate information on related activities to demonstrate the broader impact or context of the key activity or phenomenon. For example, an account on the digital economy might include information on producers using digital intermediation platforms for non-digital output. (38.8)
16. Tourism, health, education, agriculture, culture, sports and recreation, transport, and social protection are common subjects for thematic accounts. The growing impact of digitalisation has also led to an increased focus on thematic accounts related to the digital economy. Tourism accounts serve as a widely compiled example of thematic accounts, providing a model for the application of this analytical approach. The digital economy, influenced significantly by digitalisation, is a recurrent focus in the development of thematic accounts,

reflecting the evolving economic landscape. (38.9)

17. In summary, thematic accounts contribute to a more nuanced understanding of economic activities and phenomena by unpacking hidden details, offering alternative perspectives, and encompassing interdisciplinary boundaries. Examples such as tourism, health, education, and the digital economy highlight the diverse range of topics covered by thematic accounts.

Extended Accounts

18. Extended accounts offer a different or more comprehensive perspective than standard System of National Accounts (SNA) indicators. They cover aspects like well-being, sustainability, production, income, and wealth that go beyond the usual economic accounts. These accounts introduce concepts that expand and modify the standard boundaries of economic indicators and can also test new methodologies for potential inclusion in the standard sequence of economic accounts. (38.10)
19. Extended accounts involve imputed values for indicators, whether in monetary or non-monetary units. Expanding the SNA boundaries may require estimating values for goods, services, or assets not traded in markets, such as externalities. This estimation can be based on production costs, market prices of related products, expected future returns, or the impact on health or the environment caused by external factors. (38.11)
20. Key areas where extended accounts fill information gaps include unpaid household services, education, human capital, health, and free digital services. For example, extended accounts can incorporate unpaid household service work, expand the production boundary for education to include household production of educational services, and impute the direct household consumption of free digital platform services. (38.12)
21. Addressing sustainability concerns requires additional data, and the System of Environmental Economic Accounting (SEEA) provides standards for collecting and presenting environmental data complementary to SNA. SEEA includes the Central Framework for environmental-economic accounts and Ecosystem Accounting, which extends SNA boundaries to recognise ecosystem assets and services in physical and monetary terms. A close relationship between the SEEA and the SNA will be discussed in Chapter 35: Sustainability. (38.13)
22. When extended accounts modify SNA boundaries, it's crucial to maintain internal consistency. This means ensuring that expanded definitions of production,

income, and expenditures uphold the conceptual identity between production and income and the identity between total supply and total use of a product. The terminology used in extended accounts should clearly differentiate alternative and expanded concepts from standard SNA concepts. (38.14)

ONS Considerations

23. The difference between this chapter and its counterpart in 2008 SNA is quite noticeable. After considering the research done since 2008, it feels like there's more that could be said here. The ONS suggests either reworking the chapter extensively to match the core accounts or incorporating it into chapters 34 and 35. These latter chapters have more content, but they could benefit from the addition of the current chapter's material. Additionally, it would be helpful if the example provided focused on a recognised account, like tourism. Either way, the best course of action for this chapter in its current state might be to merge the content with the relevant chapters or provide unique examples, using the core accounts, within this one.

ONS Concerns

24. ONS has no concerns outside of those noted above and within the specific paragraph comments in Annex 1 as the chapter as is contains nothing particularly controversial.

Annex 1 – Specific Paragraph comments

Para 38.1: Is 'The standard sequence of economic accounts of the SNA' a standardised phrase we are now using? We have heard variants and consistency would be beneficial. Paragraph 38.3 uses 'standard system of accounts' for example.

Para 38.8: The final example appears hypothetical, could you use a solid example from the wider SNA chapter drafts?

Para 38.11: Would this benefit from a link to the chapter covering prices and volumes?

Para 38.13: It isn't clear what the purpose of this paragraph is. Is it saying the SEEA is an extended account or that it is a source of data for an extended account? The current wording could be interpreted both ways. It may be beneficial to have a solid text explaining how SEEA and SNA work together or can be used together to deepen this. Equally the entire chapter omits reference to bridging tables, which surely are a key component in aiding explanation of these outputs.

Para 38.14: ‘must maintain the conceptual identity between’ or ‘is most beneficial from an analytical perspective when it maintains the conceptual identity’?

Para 38.17: Might benefit from referencing expanded and digital SUTs, as well as chapter 15.

Para 38.22: This paragraph may benefit from giving some rationale for such an aggregation, for example. Fast moving and rapidly changing parts of the economy often see new business models forming in new value chains which cross older concepts such as industry or product. Being able to aggregate these presents a nimble solution to meet user needs without needing to redesign data collections and existing presentations.

Para 38.38: Accounting for externalities is not just as easy as applying a price adjustment. In many instances existing market prices may have changed in reaction to these – for example through the imposition of taxes and subsidies. This section feels incredibly light to try and address such a massive topic and may be open to the misinterpretation that the SNA does not take this issue seriously. You may wish to consider whether this should be given a more substantive treatment either here or in Chapter 35.

Para 38.4: “Nevertheless, the compilation of certain thematic or extended accounts is encouraged to fill important information gaps on aspects of well-being and sustainability. These include the labour account (discussed in chapter 16), the thematic account on the digital economy (discussed in chapter 22)...” This paragraph reads that the thematic account on digital economy fills an important gap on the on aspects of well-being and sustainability. Chapter 22 does not mention wellbeing and sustainability.

Annex 2 – Global Responses

<p>Germany FSO</p>	<p>Raised structural issues, suggested this chapter should be placed before new chapters such as chapter 34 to better understand what the broader framework means and how it supports the standard system.</p> <p>Suggested the chapter should be named ‘thematic and extended accounts’ – quite a few countries agreed with this (Argentina, Sweden, Mexico, Israel) and thought that this better aligned with the scope of the chapter.</p> <p>Referenced StatsCanada’s “In-depth review of satellite accounting” and suggests including a similar figure to figures 1 and 2 in the review.</p>
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	<p>Should be made clear in 38.13 that SEEA accounts are themselves not extended SNA accounts. 'SEEA accounts are not necessarily conceptually consistent with the SNA. Due to the different focus and perspective of the SEEA, such deviations are necessary.</p> <p>However, extended SNA accounts may draw on the guidelines and data from the SEEA frameworks and account'</p>
<p>Mexico INEGI</p>	<p>Suggested linking to chapters 2 and 34 because topics related to the environment and household unpaid service work are thematic accounts (and/or extended).</p> <p>Called for a detailed text about the topic of characteristic and connected activities (as included in SNA2008 29.59-60). This functional classification may be relevant for countries to compile some thematic and extended accounts and would be useful to resume the criterion of no additive different thematic accounts (SNA08 29.50)</p>
<p>Eurostat:</p>	<p>The last sentence of paragraph 38.23 reads: <i>“For example, the SNA functional classifications identify expenditures on education incurred by households, government, non-profit institutions and producers, which might be used to derive a measure of human capital based on past expenditures on education, or the goods identified as durables in the Classification of Individual Consumption by Purpose (COICOP) might be reclassified as gross capital formation.”</i> It is hard to understand as it combines two quite different things in one long sentence: the capitalisation of human capital using education in functional classifications and the capitalisation of durable goods purchased by households. Also, ‘and producers’ seems to suggest that government, non-profit institutions are not producers in national accounts. Perhaps ‘market producers’ could be used. More importantly, as both COFOG and Coicop cover formal education only, deriving a capitalisation of human capital based on those functional classifications seems rather doubtful.</p> <p>In paragraph 38.35 we read: <i>“For example, a transport account could include complementary indicators on the emissions</i></p>

	<p><i>generated by transport activities of enterprises and households</i>". We wonder how this splitting of activities by enterprises and households would work. Is a person taking the airplane for holidays an 'activity' of S.14 or of the airliner (S.11)? And what about if he travels for work?</p> <p>In paragraph 38.36 we read: "<i>extension is to include relevant goods and services produced and consumed within the same enterprise in expanded measures of the output and intermediate consumption of the key activity</i>". Would this be targeting creating establishments (local kind of activity units) for this enterprise (i.e. 2008 SNA paragraph 5.15 is applied)? If this is meant, it might be written down as such. Or is meant that the enterprise is not split into different establishments but rather that ancillary production that is internally consumed is to be recognised (as we understand table 38.2)? If this is meant, it might be written down as such. When it comes to transport activities, it might make a reference to ancillary activities as discussed in the 2025 SNA (see 2008 SNA paragraph 5.35 mentioning "<i>transporting goods or persons inside or outside the producer unit</i>" as a typical ancillary activity).</p> <p>Paragraph 38.38 discusses negative externalities with the example of pollution. It proposes to record these as <i>negative</i> transfers from the polluter to households matched by <i>negative</i> production of the polluter and consumption of households. Although it makes semantic sense to regard <i>negative</i> externalities as a <i>negative</i> transaction it is intuitively strange to have negative production and consumption, also in the extended accounts. This would mean that we recognise a negative good ('bad'). This approach could be seen, as a first impression, as consistent with recognising a negative asset for 'terminal costs' for nuclear sites/ oil rigs towards the end of the exploitation as the 2008 SNA does in the core accounts (2008 SNA paragraph 10.161 and the pragmatic recommendation of paragraph 10.162). This negative asset was a welcomed innovation of the 2008 SNA. The situation has also much in common with Emission Trading Systems (ETS), which is a way to internalise (price) these externalities via taxation. The recording of negative production/consumption would then seem in conflict with the recording ETS. If recording the</p>
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	<p>negative externality in the extended account only in case of ETS provided for free could then be envisaged, Eurostat-GFS proposes instead to record a subsidy (for the market value ETS given for free) together with a tax (when those permits return to government upon surrendering). This leads to doubling the tax flow (to close to 100 billion euro in tax and 50 billion in subsidy in 2023, up from 50 billion in tax in the EU)</p> <p>Paragraph 38.43 discusses the (im)possibility of allocating financial flows of an enterprise (institutional unit) to an economic activity of an establishment (LKAU) within the enterprise when the enterprise has many different establishments. This paragraph seems best suited in the chapter on '<i>Enterprises, establishments and industries</i>' (2008 SNA chapter 5, for example after paragraph 5.19)</p>
<p>INSEE (France)</p>	<p>Switch in terminology from 'central framework' to 'standard sequence of economic accounts' is problematic because it may be assumed that the institutional sector accounts are at stake but this is not relevant to this chapter. This is a poor representation of the content of the former central framework.</p> <p>Too simple to summarise the purpose of the 'so-called central framework' 'as a view of the major macroeconomic aggregates' but it is not necessary to promote the thematic and extended accounts.</p> <p>'38.14 There is no conceptual identity between production and income. There may instead be a conceptual consistency'</p> <p>'38.17 It would be better, at this point, to avoid to shift from « key activity » to « key sector ». An ordinary reader, especially if not a native-english speaker, will actually be prone to expect that institutional sectors are now at stake. It seems however that the author is aware of this ambiguity since a remark is introduced, in brackets, about this issue in § 38.21, that is a bit too late !'</p> <p>'38.19 it should be specified that it is the final consumption <u>expenditure</u> that is broken out by institutional sector.'</p>

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2025 SNA Chapter 22: Digitalisation foreword

Advice Paper

NSCASE(24)09

Executive summary

1. Chapter 22 of the 2025 SNA summarises the conceptual and measurement issues that have arisen because of digitalisation. The digitalisation chapter is split into 5 chapters: Digital products, digital platforms, digitalisation and the financial system, challenges presented by digital products for the measurement of prices and volumes and analytical tools to increase the visibility of digitalisation.
2. Chapter 22 was published on 21st December 2023. The UK submitted a response on 26th January 2024 which is provided in the annex.
3. This paper identifies areas of concern to ONS in the current draft of Chapter 38.
4. ONS asks NSCASE Committee members to review the content of this paper. Members are also invited to identify any areas of concern to them which are not mentioned in this paper.
5. Specifically, the ONS would like the Committee's views on:
 - a. **Whether the ONS should deviate from SNA2025 in the areas highlighted in the paper.**
 - b. **Whether there are any other areas in the Chapter where ONS should deviate from SNA2025.**
6. As with previous 2025 SNA Chapters brought before the Committee, the official consultation deadline for this chapter has passed and therefore the opportunity to feed back to the paper editors is not possible at this stage.

Introduction

7. This chapter elaborates on issues arising from digitalisation that are touched upon throughout the manuals and provide a consolidated view of these issues, including definitions, explanations, and, where relevant, concise measurement guidance for the products and business models that have emerged in the digital economy.
8. The 2025 SNA defines digitalisation and note that its impact on production, consumption, trade, and other aspects has created needs to enhance the visibility of digital products and activities in macroeconomic accounts. This is to bring data assets inside the asset and production boundaries, and to provide information on the value of free digital services without changing the definition of GDP.
9. Provided in this chapter are updates to classification systems including; showing computer and information services as a first-level services category in the current account, and additional “of which” breakdowns in the balance of payments. The compilation of new thematic accounts, digital SUTs, are also addressed to further improve the visibility of digital products.
10. The development of the SNA 2025 and its drafting discussion was set out within a paper “SNA 2025 Background & SNA Drafting Principles” presented to NSCASE in January 2024, and revised considering the discussion that took place.
11. Below ONS provides a brief background of the chapter for colleagues who have not had the opportunity to read it. If you have read the chapter skip forward to the ONS considerations section.

Background

12. Chapter 22 breaks down various digital products and their impacts on the accounts. Below is a summary of what is covered within each section.

Digital Products

13. The first section of the chapter defines and summarises the measurement challenges of new digital products such as cloud computing, data as an asset, artificial intelligence (AI) and nonfungible tokens (NFTS) that have arisen over the recent years. (22.4/22.5)

Cloud Computing

14. Cloud computing services, comprising computing, data storage, software, and related IT services accessed remotely, are integral to producing and consuming digital services. They primarily serve as inputs for the production of other goods and services, categorised into infrastructure-as-a-service (IaaS), platform-as-a-service (PaaS), and software-as-a-service (SaaS). (22.6-22.8)
15. Cloud computing and similar services often cross borders, with multinational enterprises operating domestic and foreign computing establishments linked by cross-border networks. Consumption of these services occurs where they are used in production. Hosting and co-location services involve exporting when foreign-owned servers and software are hosted domestically and importing when locally owned IT assets are hosted abroad. (22.14/22.15)

Data assets

16. The 2025 SNA defines data as an asset as information content obtained by accessing, observing, and storing digitalised information from various observable phenomena, providing economic benefits when utilised in productive activities. (22.17)
17. The chapter provides guidance on capturing gross and net investment in data assets and explains that purchasing data can constitute fixed capital formation or intermediate consumption depending on usage duration and limitations on use. Non-exclusive rights to access data are typically treated as a service, while shorter-term data usage resembles an operating lease. Cross-border data transactions are recorded in the services account. (22.19/22.20)
18. The last part of this section explains the difficulties in estimating the cost of producing long-lived data separately from short-lived data though states that, typically, a combined estimate is made, then split into short and long-lived components based on assumed ratios. (22.23-22.25)

Artificial Intelligence

19. The 2025 SNA defines Artificial intelligence (AI) as a product that “encompasses computer program capabilities that emulate human recognition, reasoning, communication, and prediction”. Many digitalisation innovations rely on AI technologies, such as text mining, computer vision, speech recognition, and personalised recommendations. (22.26/22.27)
20. AI systems are categorised as a special type of software within intellectual property products, with separate reporting encouraged. The value of data used to

train AI or aid its output should be recorded separately, as it may have multiple uses. However, databases created solely for AI production and are not re-usable may be included in AI program production costs. (22.28)

21. Unlike traditional fixed assets that deteriorate over time, AI software with learning capabilities may improve with use. Learning from experience can extend the service life of AI programs. (22.30)

Nonfungible tokens (NFTs)

22. Nonfungible tokens (NFTs) are unique digital records hosted on a blockchain, certifying ownership and authenticity of associated digital or physical assets. Unlike fungible crypto assets, NFTs cannot be exchanged for identical items. Payments for NFTs are typically made in the native fungible crypto asset of the blockchain hosting the NFT. NFTs are categorised into three classes based on ownership rights conveyed: (22.31/22.32)

- a. Personal use only;
- b. Limited ownership rights, including commercial use;
- c. Full ownership rights, similar to property titles.

23. NFTs in the first category are treated as consumption, representing the production of a service in cross-border transactions. Those in the second category are considered non-produced, nonfinancial assets and may affect the value of the underlying asset. NFTs granting full ownership rights function as digital records of ownership, with transactions treated based on the nature of the underlying asset, digital or physical, in national accounts. (22.33-22.35)

Digital Platforms

24. Operators of digital platforms use digital technology to supply services that facilitate interactions via the internet between two or more distinct but interdependent sets of users (either firms or individuals). Digital (or online) platforms are conceptually distinct from e-commerce firms because e-commerce firms take possession of the goods they sell or directly produce the services they sell. (22.36-22.38)

Nonfinancial digital intermediation platforms (DIPs)

25. Nonfinancial digital intermediation platforms (DIPs) facilitate transactions between buyers and sellers of goods and services, including ordering, payment, and delivery. The output of a DIP consists of digital intermediation services, recompensed through fees, distinct from the goods and services being

transacted. (22.39/222.40)

26. To accurately represent these transactions, the producer approach reroutes payment flows to reflect direct sales from producers to buyers via the platform, along with purchases of intermediation services by producers. However, compiling data for DIP transactions poses challenges, as distinguishing platform transactions from other activities can be complex. Additionally, measuring intermediation services sold for a fee or commission may require assumptions due to data limitations, especially for cross-border transactions involving DIPs without a local presence. (22.40/22.45))

Free online platforms and free digital products

27. Free products provided by market producers contribute to GDP as part of the price of other products they help sell or with which they are bundled, whether directly or indirectly. This applies to both platform and non-platform firms. (22.48)
28. In non-platform scenarios, free products are used to promote sales of priced products to the same set of customers. Digital products often utilise a "freemium" pricing strategy, where a free basic version promotes sales of premium upgrades. The price of the promoted output includes a mark-up covering the cost of supplying the free product. While most free online platforms are commercial enterprises, nonprofit ones may have modest production costs. (22.49-22.51)
29. Users of free platforms create content for leisure or commercial purposes, such as receiving advertising revenue. Content creators should be treated as purchasers of platform services when fees are deducted from advertiser payments. If the purchaser is non-resident, the service is considered an export. Content creators may also publish on platforms collecting subscription fees for a share of the revenue. Content with economic benefits for over a year is classified as long-lived intellectual property. (22.52-22.59)

Free software

30. Free software products, available for download with additional services often chargeable, serve both household and production needs. Open-source software, publicly accessible for copying and modification, is widely used in production globally. Though it doesn't generate licensing fees, it's considered an asset for its developers, often supported by sales of complementary services or products. While unpaid production of open-source software by volunteers is outside the SNA production boundary, independent developers are seen as unincorporated household enterprises investing in their own software. (22.60/22.61)

31. The value of open-source software may be included in the price of products it complements or is bundled with, often software or services for intermediate consumption. If users switch to open-source alternatives funded by mark-ups on other items, total output is accurately measured, but software investment may be overlooked. Similarly, if users opt for government or nonprofit-provided open-source software, measured software investment may decline. The SNA values nonmarket producer outputs based on production costs, not user willingness-to-pay from substitute product prices. (22.62-22.66)

Digitalisation and the Financial System

32. New digital financial services and assets fit into existing product and asset categories but should be separately reported when significant and identifiable. Major suppliers include financial digital intermediation platforms, InsurTech companies, online-only neobanks, e-money issuers, and digital foreign exchange bureaus. Key payment mechanisms include e-money (including mobile money), fungible crypto assets, and central bank digital currencies (CBDCs). (22.69)

33. There are three types of financial digital intermediation platforms:

- a. peer-to-peer and other online lending platforms,
- b. equity-based crowdfunding platforms, and
- c. philanthropic crowdfunding platforms.

34. Crypto asset exchanges and trading platforms enable users to trade, buy, sell, and stake crypto assets for a fee. Assets with corresponding liabilities, such as asset-backed stable coins, debt, and equity security crypto assets, are classified as financial assets. These exchanges are categorised as financial auxiliaries since financial assets are commonly traded on them. Crypto asset brokers serve as intermediaries, embedding their fees into buying and selling prices. (22.73-22.78)

Summary Report: Public Consultation on UK's adoption of industrial classification of economic activity

Briefing Paper

NSCASE(24)10

Executive Summary

1. Following EU (European Union) exit and the revision of key international industrial classifications of economic activity, International Standard Industrial Classification of All Economic Activities (ISIC) and the Statistical Classification of Economic Activities in the European Community (NACE), the UK ran a public consultation to look at the UK's options for adopting a classification of industrial economic activity. This paper summarises the responses and introduces the full report that will be provided to NSCASE.

Introduction

2. This paper provides an update on the future alignment of the UK Standard Industry Classification (SIC) following EU exit. The options for UK adoption of either the International Standard Industrial Classification of All Economic Activities (ISIC) or the Statistical Classification of Economic Activities in the European Community (NACE) were initially brought to the National Statistician's Committee for Advice on Standards for Economic Statistics (NSCASE) in June 2022 ([NSCASE\(22\)02](#)), with subsequent updates in October 2022 ([NSCASE\(22\)03](#)) and October 2023 ([NSCASE\(23\)31](#)).
3. The Office for National Statistics (ONS) prepared a consultation process to gather feedback from UK SIC users on the impacts of any potential classification changes. The public consultation would be primarily aimed at statistical users but also other classification users from across the UK. The consultation would aim to understand the impact on users from a revision of the classification system.
4. This consultation ran for a total of 12 weeks, opening on the 31st of October 2023 and closing on the 23rd of January 2024. Responses were received from 51 external and 10 internal stakeholders with a diverse set of user needs. Users were categorised into OGD/Councils, Private Companies, Private Individuals and Trade Bodies, Associations and Organisations (TBAO). This was done to identify whether there may have been any response patterns that could otherwise have been missed.
5. Alongside this note a full report will be provided to NSCASE including a detailed look at the consultations responses and what they mean for ONS.

The full report outlines the detailed responses from both internal and external respondents, along with their perceived advantages and disadvantages for each of the available options. It includes all internal responses and details the ESEG (Economic, Social and Environment Group) preferred option. **We ask NSCASE to read and discuss the results from the consultation within the report provided in the additional reading.** A further options paper will be submitted to the July 2024 meeting of NSCASE with ONS's recommendations for discussion and onward submission to the National Statistician for approval.

6. In addition, a consultation closure report will be published within 12 weeks of closure (mid-April 2024). This report will provide a response summary advising that these findings will help the ONS to reach a decision on next steps for UK SIC, in consultation with NSCASE, prior to approval from the National Statistician.

Update - Emissions Permits NSCASE April 2024

Update Paper

NSCASE(24)11

Background and Reason for coming to NSCASE

1. This update paper provides more information on the ONS position on the recording of emissions permits within the national accounts. **We ask NSCASE to note the contents of this paper.**
2. Greenhouse gas (GHG) emissions, originating from production and consumption activities are having far reaching and long-term impacts on the climate. To reduce GHG emissions or eliminate them altogether, countries around the world have introduced, or are introducing, various policies. One such policy is applying a price to a broad set of emission sources that are aimed at encouraging businesses and individuals to innovate and change their behaviour and therefore reduce the level of GHG emissions. This is usually through an emission trading scheme or carbon tax.
3. As countries adopt emission trading schemes, it is important that the associated transactions (non-financial and financial) across all sectors are properly accounted for and transparently presented in the System of National Accounts (SNA). Extensive discussions regarding the recording of such schemes had taken place when the 2008 SNA was drafted, as reflected in section Q of chapter 17, when emissions trading schemes were in their infancy. The guidance explicitly stated that the atmosphere was not an asset, but this is at odds with the treatment of the radio spectrum at that time. This guidance note proposes recommended updates to the SNA to clarify the treatment of emissions trading schemes.
4. Currently, under 2008 SNA guidance, it is recommended to record all emissions trading schemes (ETS) as taxes on production, in part because the SNA notes that these permits do not involve the use of a natural asset. Payments for permits relating to emissions into the atmosphere should be recorded as taxes because “These permits do not involve the use of a natural asset (there is no value placed on the atmosphere so it cannot be considered to be an economic asset) and are therefore classified as taxes even though the permitted “activity” is one of creating an externality. It is inherent in the concept that the permits will be tradable and that there will be an active market in them. The permits therefore constitute assets and should be valued at the market price for which they can be sold.” (Paragraph 17.363).
5. In preparing for the 2025 edition of the SNA, consultation with experts from various countries presented the following options to re-evaluate the recording

of emission permits these are:

- a. Option 1: Emission Permits as non-produced non-financial assets (contracts, leases and licenses right to use)
- b. Option 2: Emission Permits recorded as a resource lease (financial asset), with resource rent recorded at surrender.
- c. Option 3: Emissions Permits recorded as Contracts, Leases, Licenses with taxes on Production recorded at Auction
- d. Option 4a: Emissions Permits recorded as Financial Assets with taxes on production recorded at surrender (issuance value)
- e. Option 4b: Emissions Permits recorded as Financial Assets with taxes on production recorded at surrender (market value)
- f. Option 5: Emissions Permits recorded as split assets, with taxes on production recorded at surrender.

What has been done since the last update?

6. The ONS, having consulted with other interested parties, has decided that of the options above it would support option 1 as opposed to the AEG's preferred option of 4a. On balance, ONS does not believe that it should be recorded as a tax, rather it should be recorded in the same ways as permits and leases. Based on initial research, the ONS understands that moving from the present treatment to either the option 1 treatment or the option 4a treatment would have limited impact on headline statistical aggregates. This is because receipts from the UK Emissions Trading Scheme are relatively small¹. However, there would be a relatively small but notable impact on other important statistics, including total tax and the tax burden. The ONS believes that:
 - a. There would be a relatively small impact on government liabilities which is not significant to the UK economy.
 - b. The biggest data challenge lies in following permit trades between companies as there are no obvious or clean data sources, and this is common to both options.

¹ UK Emissions Trading Scheme auction receipts were £5.8 billion for the 2022/23 financial year, which is about 0.6% all public sector current receipts in that financial year, Source: ONS public sector finances statistics Appendix D, identifier codes (FUQ3 and JW20).

- c. There is a question of whether the UK should deviate from the SNA guidance for impacts not significant to the UK economy.

7. The Emissions Permits group met on the 23rd of January 2024. The meeting consisted of country and international organisation presentations and the IMF will provide the results of the data sources questionnaire. This meeting focused on the practical implications of the options rather than their theoretical merits. Overall, the discussion highlighted that the options presented are complicated for many countries and there is no 'one size fits all' approach. The IMF and UNSD considered the options presented and subsequently recommended 4a based on country presentations.

Surveying of AEG/BOPCOM members views

8. During surveying done on AEG/ BOPCOM members views option 1 was the most popular option, with option 4a being second most popular as shown in Figure 1.

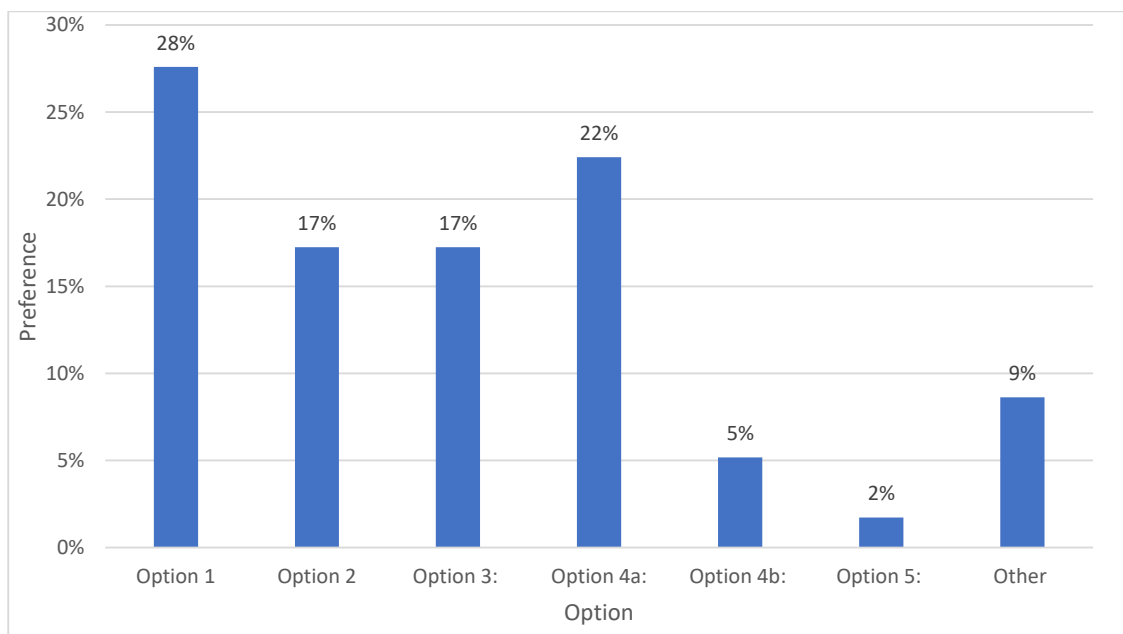


Figure 1: Responses of AEG / BOPCOM Members.

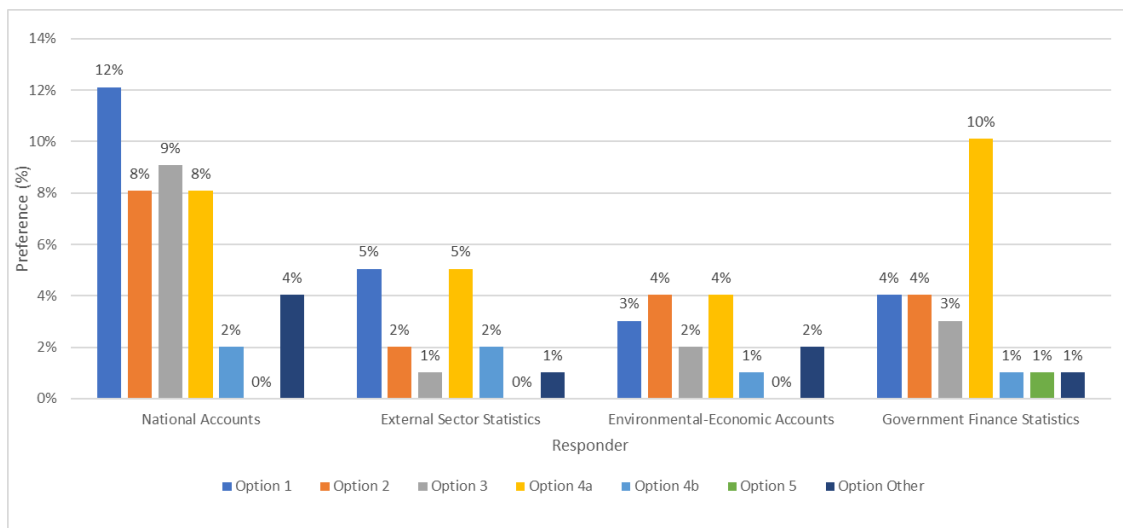


Figure 2: Responses of AEG / BOPCOM Members broken down by expertise.

9. Most AEG members agreed on Option 4a; the classification for Emission Permits as accounts receivable (pre-paid taxes) / accounts payable and that the taxes on production should be valued at the issuance price recorded at surrender.
10. The IMF Committee on Balance of Payments Committee (BOPCOM) was also consulted via written procedure. The outcome of this latter consultation confirmed the preference of the AEG, although two members showed a clear preference for option 1. The impression given is that there is a strong preference amongst the authors of the 2025 SNA for 4a.

What are the future timelines for the work?

11. The ONS will continue to engage with workshops and advocate for option 1 but understands there will be limited opportunities to do so.
12. Given the estimated small impact, the ONS has allocated the topic as low priority for a time. The ONS awaits the release of the 2025 SNA draft chapter (chapter 27) featuring emission permits and will return to NSCASE with an options paper when timetabling allows.