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Completing the Statistical Architecture:

Developing the System of Population and Social Statistics and the Framework for Inclusive and Sustainable Wellbeing - A Roadmap

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Prepared by the United Nations Network of Economic Statisticians

Table of Contents

Executive Summary	3
Introduction	4
Making the Case for the SPSS and FISW	4
Key challenges and Next Steps	7
A proposed scope and structure for the SPSS	9
Refining the Scope Proposition	11
Identifying the key components of the SPSS and producing guidance for domain owners	14
Identifying potential data sources and the main components of the SPSS	16
A proposed scope and structure for the FISW	17
Wellbeing in the here and now	20
Inclusion and Sustainability	25
The role of GDP, or other purely economic data within the FISW	30
A proposed structure for the FISW	32
A Delivery Strategy for the SPSS and FISW	35
Utilizing existing activity and working in partnership	35
Bringing together expertise within a clear structure	36
Developing a timeline to delivery	38
Conclusions	39
Annex A: Weighting Methods	43
Bibliography	47
Endnotes	50

Executive Summary

The <u>United Nations Network of Economic Statisticians</u> (Network) was formed in 2021 and in 2022, delivered a 'sprint' on the topic of 'Beyond GDP'. This sequence of online meetings resulted in the submission of a background document to the Network's report to the 54th session of the Statistical Commission for discussion. Labelled "<u>A research prospectus for an integrated statistical framework for inclusive and sustainable wellbeing</u>", the Network explored the feasibility of a research agenda for a new integrated *Framework for Measuring Inclusive and Sustainable Wellbeing (precise name subject to confirmation)*. The Prospectus also took stock of the evolution of social and demographic statistics, from measuring living conditions to measuring inclusive and sustainable economic and social development, based on a review of the UN Statistical Commission's decisions since its inception in 1947. This assessment was an opportunity to re-address the question of the need for a *System of Population and Social Statistics (precise name subject to confirmation)* and present its potential scope and purpose.

Following a second UK ONS-led Beyond GDP sprint in 2023, this background document sets a proposed research agenda, an indicative schedule of resource requirements and a structure for each document to launch a multi-disciplinary expert group of interested countries and agencies who can work towards the completion of the *Framework for Measuring Inclusive and Sustainable Wellbeing* and the *System of Population and Social Statistics*.

With thanks to the task team who led the compilation of this report: Richard Heys, Ivo Havinga, Cliodhna Taylor, Eleanor Rees, Jacqueline Chan, Benson Sim, Rutger Hoesktra, Sonia Raizenne, Wafa Aboul-Hosn, Timothy Miller, Francesca Grum, and Yanchun Zhang. Thanks also to Robbie Fisher for UK data analysis.

Introduction

- 1. The <u>United Nations Network of Economic Statisticians</u> (Network) was formed in 2021 and in 2022 delivered a 'sprint' on the topic of 'Beyond GDP'. This sequence of online meetings resulted in the submission of a background document to the Network's report to the 54th session of the Statistical Commission for discussion. Labelled "<u>A research prospectus for an integrated statistical framework for inclusive and sustainable wellbeing</u>" (UNNES 2023, which will be referred to as the Prospectus), the Network explored the feasibility of a research agenda for a new integrated statistical *Framework for Measuring Inclusive and Sustainable Wellbeing* (FISW).
- 2. The Prospectus also took brief stock of the evolution of social and demographic statistics, from measuring living conditions to measuring inclusive and sustainable economic and social development, based on a review of the UN Statistical Commission's decisions since its inception in 1947. The sprint series also presented an opportunity to re-address the question of the need for a *System of Population and Social Statistics* (SPSS)ⁱ and present its potential scope and purpose.
- 3. Following a second UK ONS-led sprint in 2023, which explored the potential to move forward the agenda proposed in the Prospectus, this document sets a proposed research agenda and a structure for each account and framework. This centers on the launch of a Beyond GDP multi-disciplinary Working Party of interested countries and agencies. This document is structured as follows:
 - Making the case for the SPSS and FISW
 - A proposed scope and structure for the SPSS
 - A proposed scope and structure for the FISW
 - Key conclusions and next steps

Making the Case for the SPSS and FISW

4. Following a detailed review by the Network in 2022, which was reflected in the Prospectus and presented by UNSD in the first sprint of the 2023 series, the Network prepared an overview of over seventy years of the UN Statistical Commission's work on social and demographic statistics, and on measuring wellbeing as a multi-dimensional phenomenon. This pointed out remarkable consistency in the issues of focus, augmented by changes over time in **social concerns and wellbeing dimensions**: from basic needs like food and clothing in the 1950s to environmental issues, human rights, equality, good governance and the rule of law, among the many social concerns still impacting well-being and social policy today. The call for statistics focusing on the needs of **vulnerable population groups and their special topics** also reached the Commission at different times, following

political negotiations and outcome documents at world conferences and summits, such as: women in the 1970s; youth in the 1980s; ageing population, and persons with disabilities in late 1990s-early 2000s.

- 5. The overview also noted that the Commission has repeatedly returned to the question of whether there is a need to better structure, organize, or connect the many dimensions and components of social and demographic statistics and indicators through the development of a unifying system, akin to the System of National Accounts (SNA) ii, or whether promoting the production of social indicator dashboards focusing on the immediate needs of users is sufficient. Thus far the Commission has acknowledged the usefulness of a **Framework**iii for countries to organize their social and demographic statistics. Originally labelled the *System of Social and Demographic Statistics* (SSDS), the documents presented in the 1970s promoted the use of common classifications, definitions and concepts and stronger conceptual linkages when possible. However, designing and implementing an integrated System, equivalent to the SNA for economic statistics, was considered unattainable in the 1970siv.
- 6. The SSDS was proposed as a complement to the SNA, which one must recall began as a slimline model of accounts of the whole economy, which was developed in the 1940s and 1950s, reaching a culmination in the adoption of the 1968 SNA by the United Nations Statistical Commission. The design team, led by Richard Stone, deliberately omitted topics from the scope of the 1968 SNA on this basis not that they were of second-order importance, but rather that they were important enough to require their own presentation and governing documentation, in the form of the 1974 SSDS Framework. This pure economic focus for the SNA stood the test of time until 1993 when, in the absence of the SSDS, the SNA expanded its scope through developing elaborations oriented towards well-being issues, such as adjusted disposal household income concept and a set of 'satellite accounts'. Revised again in 2008vi, with a plan to update in 2025, the SNA now delivers a range of wellbeing metrics, all broadly related to the economic accounts, albeit primarily from a monetized dimension but there is wide agreement across the national accounts community that it is not, and should not, attempt to be a wellbeing system. In parallel a further System of Environmental-Economic Accounting (SEEA), including a Central Framework (United Nations 2016) and an Ecosystem Accounting Manual (United Nations 2021) covers a range of additional topics including both the physical and monetary measurement of the environment, and its interaction with the economy. viii viii
- 7. This had two effects; the first is it brought a range of 'social statistics' into the scope of the 'economic' system (again more of this later), and secondly it delivered national statistical offices (NSOs) with a widened expectation of delivery. Whilst few NSOs have been able to deliver the full suite of SNA satellite (soon to be divided into thematic and enhanced) accounts and extended tables,

if an NSO decides it wishes to undertake a thematic account into, say, tourism or unpaid work, the SNA and other supporting documentation within its ambit provide the methods for doing so in an internationally comparable way.

- 8. However, this process was only partially implemented: The original SSDS covered ten domains of social concerns and living conditions (Population, Learning and the Educational Services, Earning Activities and the Employment Service, Distribution of Income, Consumption and Wealth, Health and Health Services, Housing, Public Order and Safety, the Allocation of Time and Leisure, Social Security and Welfare Services, and Social Stratification and Mobility), whereas only six (Learning and the Educational Services, Earning Activities and the Employment Service, Distribution of Income, Consumption and Wealth, Health and Health Services, Housing, and the Allocation of Time and Leisure) were taken in some form into the SNA. In reviewing the historical genesis of these manuals, the Network identified that to properly address 'Beyond GDP' a fuller consideration of the statistical frameworks supporting this 'Beyond' landscape was required. As such The Prospectus identified the gap in the existing architecture which the absence of a SPSS / SSDS style framework generates and flagged the merits of investigative work to explore whether the computational and data challenges of the 1970s and 1980s continued to present such insurmountable barriers, particularly in light of work in the 1993 and 2008 SNA rounds which proved the feasibility of (at least partially) meeting the ambition inherent in the SSDS, as demonstrated by the range of countries producing and using the SNA satellite accounts.
- 9. In particular, the Prospectus highlighted the advantages, and possibly necessity of such a system, in terms of providing a supporting infrastructure for a consistent approach to wellbeing measure in the form of the proposed statistical Framework of Inclusive and Sustainable Wellbeing (FISW), which goes beyond using GDP as a single summary statistics representing the 'state of the nation' and presents a range of metrics, drawn from existing data to better tell complex stories and understand competing pressures and trade-offs. The aim of such a document would be to deliver a coherent and internally consistent set of statistical guidance for the preparation of dashboards, tables, matrices, and accounts, similar to those used in the SNA, for the generation of relevant indicatorsix, relating to wellbeing in all its aspects. This would include those expressed in both monetary and nonmonetary terms, and composite indicators, with the aim of being able to connect domains through common standards, definitions, and techniques, to inform decisions. This would place the FISW at the heart of providing a unified statistical toolkit to the world's largest challenges, drawing from data produced under the aegis' of the SNA, SPSS and SEEA, each of which would be internally consistent with the others. This toolkit would enable a clear line of sight on the interaction between socialdemographic, economic and environmental phenomena concerns.

Key challenges and Next Steps

- 10. This document does not look to repeat the arguments made within the Prospectus, or further recount the history, but rather looks to deliver a practical statement of the steps required to deliver against the Statistical Commission's ambition to research and explore the potential to design and populate a skeleton SPSS framework and similar for the FISW suitable for consultation and wider discussion with users. As such this document recognizes the three core challenges facing such a process:
 - A history of under-performance: The SSDS was ultimately a process which, whilst a key milestone in the development of social statistics and agencies codification of methods, failed to deliver the type of systemic standardization and production of a comprehensive suite of statistics that was initially envisaged. The reasons for this were numerous. The SSDS was not considered equally policy-relevant for developed and developing countries as the SNA, or as implementable by countries with less developed statistical systems. Compared to the Statistical Commission's adoption of the System of National Accounts (SNA) in 1968, the domain of social and demographic statistics was considered as being in an earlier stage of development. Moreover, the SSDS was perceived as being too demanding for developing countries by forcing socio-economic statistics and indicators to be compiled using socio-demographic transition matrices and economic accounts for social services. Overcoming perceptions that this task remains beyond the statistical system requires a clear and feasible roadmap and strong buy-in from partners. This document hopes to provide a key step on that journey building on the methodological updates by numerous custodian agencies responsible for specific social concerns described in the SSDS.
 - A fast-moving policy landscape with rapid development of statistical responses: The FISW faces a rapidly moving and dynamic landscape where the UN is working at pace to identify the core set of indicators (around 10-20) which can serve as an initial successor to the Sustainable Development Goals following the 2030 target. The question of what additional value the FISW could deliver in light of this work has to be answered to justify the case being argued in this document. Whether one wishes to present data in the form of a dashboard or a composite indicator, the need for an underlying framework to justify inclusion or exclusion of particular metrics is a key requirement. The strength of the FISW is that it aims to deliver just such a wider framework within which to conceptualize and

bring together the chosen indicators. The current challenge is that whilst measures exist that focus on specific topics, a framework in which to understand the trade-offs between these does not exist. The FISW can act to provide the underpinning methods and reinforcement for the headline set of indicators, and can be produced at a pace which enables both rapid development of the indicator set alongside the longer timelines needed for detailed methods development and stakeholder engagement of the FISW.

- A threat of duplication with the SNA revision process: As stated above the SNA, whilst it contains Beyond GDP components, does not aspire to become a wellbeing manual. A the 2025 revision of the SNA will update and expand upon its existing Beyond GDP metrics and domains, particularly clarifying key links with the SEEA environmental data, but will not expand into new domains, nor can it be expected to develop linkages with data and metrics which are yet to be created or identified. As such the development of a universal landscape drawing together economic, environmental and social data which can underpin new headline wellbeing indicators is clearly a space which the FISW can occupy and make its own, on a longer timetable than the 2025 SNA deliverable, and indeed taking the 2025 SNA revision as a 'given' to work from.
- 11. To overcome these, a clear roadmap is required, which broadly falls into four workstreams:
 - Defining an overall scope, structure and research agenda for the SPSS and FISW, within
 which detailed work can populate the required data, alongside the proposed division of
 labour between the SPSS, SNA, SEEA, and the FISW.
 - Identifying resource requirements and owners for each domain who would have responsibility for:
 - Mapping existing international guidance and standards within their domain for the SPSS and the FISW,
 - Establishing an agreed draft set of chapter headings for both the SPSS and FISW to commission development work against, and
 - Developing and delivering against timelines for the development of detailed propositions in terms of draft SPSS and FISW chapters.
- 12. This document looks to provide an initial proposal under the first bullet, in terms of a basic model for the SPSS and the FISW, recognizing that the second strand is also moving forward.
- 13. The UNSC in 2020 requested a revision of the 'social pillar' of statistical guidance and in 2023 established at the 54th Session of the Statistical Commission, a Friends of the Chair (FoC) Group on

Social and Demographic Statistics^{xi} to review, among other tasks, national practices in conceptualizing, organizing and producing statistics in these important domains, and to provide related recommendations for more granular and timely data in support of SDGs and beyond. The FoC Group is therefore uniquely well placed to take forward the investigations required in relation to the need, purpose, scope and policy relevance of a document equivalent to the idea labelled the SPSS in this document. Whilst at an early stage we hope the Network and the FoC can act as the acorns from which mighty oak trees can grow.

A proposed scope and structure for the SPSS

- 14. In proposing a scope, structure, and design for the SPSS, one needs to be clear on the problem that one is attempting to solve. This document recognizes the potential scale of this proposal and that such a quantity of work requires a clear 'use-case' and justification.
- This is particularly the case in a world where social statistics operate within a decentralized model of governance to produce a wide variety of statistics. In the absence of a unifying System, statistical guidance is produced by various custodian agencies responsible for social demographic concerns such as the World Health Organization (WHO) for health statistics and the International Labor Organization (ILO) for labour statistics without the centrifugal force of a governing 'System', such as the SNA or SEEA, forcing coherency and over-arching alignment.
- 16. However, neither do social statistics start from a blank canvas. In the absence of such a system, in reviewing the methods applied across numerous statistics, there is a clear common intellectual heritage going back to Stone (1974). In short, without anything better, statisticians used the tools available to them even if they were not formally signed off at UNSC. Save in some isolated cases where definitional drift has occurred such as the lack of unified classifications of age structure for social concerns, there remains a remarkably clear methodological and intellectual coherency between the individual manuals on social concerns. In part, this coherence can be attributed to the individual manuals leaning and extending on the relevant social concerns sections of the SSDS, which were themselves internally coherent. Moreover, the policy recognition of the inter-relationships of socio-economic and environmental concerns warranted that the functional coherency was largely preserved to a remarkable degree. It is from this favorable vantage point of documentation and policy perspective that the System of Population and Social Statistics can be drafted.
- 17. This therefore suggests two key points: firstly, the scale of the challenge should not be overstated: sufficient methodological work by custodian agencies of specific areas of social concerns already exists that the development of an SPSS may not be as daunting as first conceived, but secondly, if the required consistency is already implicitly in place, what is the case for an explicit restatement?

- 18. This case comes in two parts. The first is from the perspective of the FISW, where internal consistency *within* the social statistics domains may not be sufficient as alignment *between* the SNA, SPSS and SEEA is also required for the FISW to function efficiently. Providing a simple structure whereby the underlying principles of the three systems can be compared and understood is the only route to ensuring the FISW can deliver an efficient and effective framework to deliver meaningful and valuable outputs.
- 19. The second is the need, following the publications of the 2025 SNA and social domain specific updated conceptual frameworks and classifications on such concerns as health, labor, and migration by the likes of the World Health Organization, International Labor Organization, and Department of Economic and Social Affairs to rationalize how and where a system of social statistics needs to take any changes within the SNA and other conceptual developments into account.
- 20. A single process to capture this comprehensively for the whole domain is clearly the simplest road to provide a clear landscape within which any further enhancements can be identified and delivered. For example, one of the strengths of the historic work in this field is that very few, if any of the domains considered central in the 1974 documentation would today be viewed as surplus to requirements, although, this is not to argue these should be set in aspic, for two reasons:
 - New social issues have continually emerged over time and require appropriate inclusion within the SPSS, and,
 - On a practical level it would not be appropriate to set aside work undertaken under the aegis of the SNA.
- 21. Recognizing that we start in a privileged position where substantive work has already been undertaken within the SNA and within the areas of specific social concerns by custodian agencies, we clearly need to look to benefit from this. However, we also cannot disregard that this work was delivered within a particular conceptual framework and against a scope and mandate for updating the SNA or the custodians' decision-making councils which may not always have matched the potential needs, requirements, or ambition of a system of social demographic statistics for the wider social statistics community, or their users. An example here is the analysis of distributions of income and wealth. Within the SNA community the focus has been on the *household*, whereas parallel work by social statisticians has focused on the *individual*, each addressing relevant policy perspectives. Whilst analysis focused on the individual level is delivered by the 2025 SNA process, there remains a need to address the different methods used in the different domains. This requires the SPSS to resolve a key question that is likely to be illustrative of a common challenge in this space, either that one approach

should have primacy, or that duplication is satisfactory because both approaches have merits for different policy purposes.

- 22. The debate on this point will no doubt be replicated in other areas, particularly as there is obviously an interest in identifying a headline indicator which can play a larger role in the FISW or SPSS, if only because NSOs with limited resources may be hard-pressed to produce one good estimate in each domain, let alone several. However, we cannot assume a 'one-size-fits-all' model will meet the diverse needs of an expanding user community who have already evidenced demand for alternative presentations, in this case in terms of household or individual-level data. To be clear, this document argues the SPSS should be a permissive document. It should not preclude the production of any particular type of data, its purpose is to ensure that data produced is done so in a consistent and coherent fashion, using common definitions, standards and methods to enable ease of comparability and use, so that when data from different domains (SNA, SPSS, and SEEA) are drawn together within the FISW there are no methodological barriers which either prevent or weaken the quality of the analysis. This obviously implies routine review periods and revision, as per the other Standards.
- 23. It is therefore clear that one of the guiding principles of the SPSS / FISW process has to be that different methods should be able to be fully conversant with each other and that one should be able to transition from one to the other with ease, thanks to consistent definitions, concepts and methods. This reconciliation will inevitably require compromise and suggests that upon completion of the SPSS, the relative sections of the SNA would merit from being brought back into line in a further revision, in the same process applied following the creation of the SEEA framework in 2012 that brought the two into alignment in the 2025 SNA revision. Equally, there may be areas where the different frameworks deliberately publish alternative data to meet different user needs as the SEEA and SNA currently do. This is entirely legitimate and is to be applauded, but equally where such decisions are taken it should be transparent to users either through the metadata, bridging tables or explanatory documentation.
- 24. How best to deliver this coherency, and whether there is a role the FISW could helpfully play to signpost identified inconsistencies between the three systems for consideration within their pre-existing revisions schedules is an issue which would require further consideration in the fullness of time.

Refining the Scope Proposition

- 25. Recognizing the crossover between the SNA and the SSDS definition of the 'social statistics domains' we can map this into a 2x2 matrix of domains, of which three of the four cells are populated. We also recognize that the SEEA exists and has played a role in this work too.
- 26. This clearly raises three questions, which we tackle in turn:

Which document, the SNA or the SPSS, in the fullness of time, should be the permanent home for the 'social statistics domains' currently addressed through the SNA? Whilst obviously a theoretical question today, and one which would not need to be addressed until the SPSS was in existence, it is clearly an anomalous situation to have a subset of 'social' 'Beyond GDP' data addressed in an economic system, particularly when that data is not forming a part of the core sequence of economic accounts. The SNA took on responsibility for this agenda in the absence of an alternative, but is not necessarily the best fit for non-economic data. In the fullness of time, a re-definition of scope which allowed the SNA to target more closely economic activity whilst placing responsibility for wider topics onto the SPSS appears a logical potential long-term outcome. The short-term implication of this is that the development of the SPSS can provide a forum to consider those components of a domain not currently captured within the SNA, but also to describe and detail the 'cross-walks' or bridging tables between the SNA domains and other domains, without duplicating any work undertaken currently under the SNA. Clearly this has little impact on the FISW, as wherever the components are described, compiling metric and indicators across the domains within the FISW can continue unaffected by this issue.

Figure 1: SPSS Domains and their relationship to the SNA and SEEA

	Those substantially treated within the SNA / SEEA, but where further development may be beneficial	Those not treated by the SNA
Domains already recognized	B. Learning, Skills, and Educational Services. C. Earning Activities and the Employment Service D. Distribution of Income, Consumptions and Wealth. F. Health and Health Services G. Housing I. The allocation of time and leisure	A. Population E. Social Security and Welfare Services H. Public Order and Safety J. Social Stratification and Mobility (including entrenched disadvantage)
New Domains	K. The social Impacts of environmental changeL. The social impacts of climate impacts	 N. Further topics to be outlined by the Friends of the Chair (FoC) Group on Social and Demographic Statistics. Candidate domains may include: O. Governance,

M. The social impact of	P. Gender and Identity
biodiversity loss.	Q. Rights
	R. Subjective Well-being
	S. Community, connections and social capital
	T. Place-based Circumstances and climate
	impacts

- Does the work on a particular domain delivered by the SNA meet the needs of all users? Could some domains end up being included in both Systems? Whilst SNA is primarily focused on monetized metrics, it does contain a wider variety of physical measures of volume alongside the monetized tablesxii. Nevertheless, there are undoubtedly areas where the full range of presentations of data of physical quantities in a variety of states are not universally covered by the work undertaken in the economic statistics community. It is likely, therefore, that additional guidance under the SPSS, alongside, as previously mentioned, bridging tables, may need to be developed and that a roadmap to then consolidate this work would be beneficial.xiii The domains which are addressed within the SNA should be built upon to capture the non-money components required by social statisticians. The domains which are outside the SNA should be reviewed to see if the computational, financial and data-driven challenges of the 1970s which stymied the implementation of Stone's work are now overcome by the extensive work undertaken by custodian agencies in specific areas of social concern. This should deliver a major advantage: a universal dataset produced on consistent and coherent terms such that one can see the trade-off between different policy outcomes without worrying about these being obscured by statistical practices in each of the domains. Within this, it is clear that each System will need to reflect a common picture of the agreed scope and context of their coverage, and the coverage of the other Systems, to aide users, and to remind them of the existence of alternative data under the different Systems which may better meet their needs. Co-ordination and collaboration within the statistical community are key to addressing these challenges.
- Do we operate on the presumption that new domains would automatically fall in the SPSS, or do we need to discuss ownership in greater depth? The question of whether new domains automatically fall under the SPSS or require in-depth discussions about ownership depends on the principles and agreements established within the statistical community. Whilst the statistical community will undoubtedly come back to review

individual decisions, the principle that economic matters should fall to the SNA, environmental issues should fall to the SEEA and social matters should fall to the SPSS appears ultimately to be a logical one, whilst noting that the SEEA, by focusing on the *environmental-economic* may exclude some purely environmental topics or perspectives where these do not dovetail with the scope of economic activity of the SNA. Obviously overlaps exist^{xiv}, but this appears to be an issue which could be resolved through the FISW, which has the explicit purpose of considering exactly such trade-offs, recognizing the FISW, as described below, is primarily going to offer a framework for *using* data, as opposed to the Systems (SNA, SPSS and SEEA) which are focused on the *creation* of data. Nevertheless, the SPSS may present an additional benefit if it can synthesize and provide an overarching narrative for users to aid navigation when closely related data may be addressed by both the SPSS and the SNA. This dual inclusion might require careful coordination and the development of bridging tables or other mechanisms to ensure consistency and coherence, and a new SPSS would appear a sensible vehicle for this.

Identifying the key components of the SPSS and producing guidance for domain owners

- 27. If we are seeking to bring domains into a common framework, we need to define what we expect here to help those who will deliver this work. It is in the articulation of the common framework of the SPSS where the Network should continue its research building on the emerged subsystems in such areas of social concern like demography, health, labor, inequality presented during the 2023 Beyond GDP Sprint sessions. This articulation is expected to further the FOC Group considerations of the benefits of a comprehensive system for socio-demographic statistics.
- 28. The argument in the SDSS, and indeed implicit in the SNA is that there should be a consistent and coherent relationship of key concepts of stocks and flows, either in physical or monetizable units utilizing statistical balancing techniques based on agreed tables, matrices, and accounts to impute missing data needed to connect the System's dimensions/components. These should be based on consistent definitions and concepts such that data can be compared across domains, either in the form of key indicators, brought together in composite indices, used in statistical modelling, or disaggregated to allow sub-groups and populations to be understood.
- 29. As such, there is a need to review the existing material to provide clear guidance for the development of the SPSS, which ideally would work sequentially through:
 - System-wide agreement of concepts, definitions, and structures of classifications for general application across all domains, as applicable, including social units, population states / groups^{xv} and their transitions, geographies of interest^{xvi} and accounting rules^{xvii}.

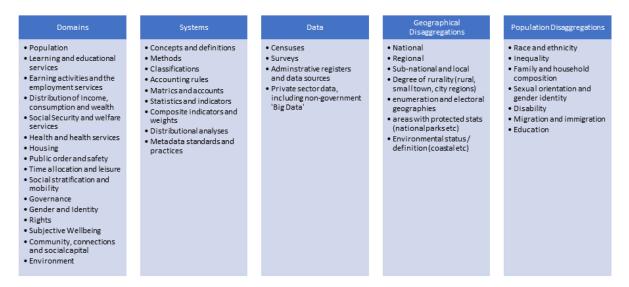
Central to this exercise will be a need to replicate the work seen within the 2025 SNA to compile a single agreed glossary of concepts. This requires primary attention to ensure all future work is undertaken on common bases and would form the fulcrum for essential work to bring together economic and social statisticians as they currently share responsibilities for these measures and may be using different (internationally agreed) definitions. In the case of some social statistics, these may not be consistent with the SNA and hence may require further consideration. Importantly, it would be for the SPSS and SNA communities as equals to agree where standards should conform and where differences to meet user needs are required. In such a case, bridging tables to explain differences may be the optimal way to ensure transparency and useability.

- A sequence of integrated stock and flow matrices and balanced concepts of physical and monetary (where applicable) volumes, which can be linked into longitudinal datasets
- How key indicators^{xviii} can be drawn from this sequence, alongside agreement on indicator-related methods such as data sources, types of indicators and methods of calculation, classification of indicators, and tables of indicators.
- How composite indices can be created from these indicators, either within a domain or
 across domains, such as multi-dimensional indices, including weighting approaches and
 their application which capture people's preferences and provide a dynamic perspective
 of the key drivers of change.
- How distributional analyses will be undertaken to capture the lived experiences of population groups of interest, and their intersectionality, relying on proper data disaggregation and data granularity.
- 30. Within this, clearly there is the need to ensure whatever is produced has clear policy-relevance and permits a sophisticated analysis of the joint dynamics of the metrics produced under the SPSS. The key components of common definitions and dimensions of analysis are as central to the SPSS as such common terms are to the SNA and the SEEA and form the underlying motor of analytical power within the System. A strong and commonly agreed glossary of terms and definitions should provide the cohesive framework to underpin the SPSS and its domains.
- 31. In the same way that the SNA contains some relevant data, SEEA covers particular aspects of the environment, but there may be social impacts of climate change and other factors which the drafting team of the SPSS may consider to be priorities for being addressed in their work. The same principles of close partnership and collaboration whilst adhering to consistent definitions and concepts should govern this activity.

Identifying potential data sources and the main components of the SPSS

- 32. Recognizing each country has its own data ecosystem and budget constraints, complementary guidance to the SPSS should bring together best practice guidance^{xix} to permit the use of the widest range of potential data sources, including:
 - Censuses
 - Surveys
 - Administrative registers and data sources
 - Private sector data, including non-government 'Big Data'
- 33. Central to the standard-setting role of the SPSS will be the identification of supplementary guidance on standard forms and use of meta-data driven statistical production processes to aid the identification of cost-efficient data collection and compilation methods based on best practices. Consideration should also be given to the exploitation of new data sources. Obviously, this should take into account the technical and financial capabilities of countries: the purpose is to ensure coherency and consistency, not to create additional burdens.
- 34. Obviously, every domain will tackle these concepts in light of their particular needs and capabilities, but within a similar set of basic designs, common concepts and terminology. Figure 2 provides a summary of the potential main components, but as referenced elsewhere, the Friends of the Chair of Social and Demographic Statistics are undertaking a more in-depth review of these topics to reach a firmer proposition in line with their work program. Whilst the Network believes there is a clear argument for such a System, we also recognize that the contribution of economic statisticians to this program of work, whilst in some areas will be very important, is secondary to the need for the social and demographics community to own this agenda and deliver a System which is internally coherent and helpful for their users, whilst noting that achieving consistency across the varied Systems is clearly an explicit requirement to enable inter-operability of data, irrespective of which System it is delivered under. Nevertheless, there is little more the Network can say on this topic, so this document now moves to an area where economic statisticians should have a greater, but again not the only voice; the measurement of wellbeing.

Figure 2: The proposed main components of the System of Population and Social Statistics



35. The SNA brings together various types of economic data and then presents aggregates, which can be considered composite indicators, and the development of such composite indicators are discussed below with reference to the FISW. There is, however, no reason, if the drafting team consider them appropriate, why the SPSS may not also develop relevant aggregates and composite indicators, although again, co-ordination and collaboration with other parts of the system, including the FISW would clearly be beneficial to agree common standards, definitions and scopes. Similarly, there is likely to be a role for bridging tables with environmental and economic outputs, in the same way such bridging tables and concepts have been considered between SEEA and SNA.

A proposed scope and structure for the FISW

- 36. Well-being is nothing more and nothing less than the multi-faceted and universal goal or ultimate good of humanity; to live a good and satisfied life, or at least the reality of the degree to which we have been able to manifest this subjective good, the quality of life as we experience it. It is the outcome of our many human pursuits: health, wealth, gainful and meaningful employment, justice, freedom, autonomy, self-determination, a safe environment in which to live, a secure home in which to lay one's head, sufficient food to fill one's belly, and everything beside, up to and including the laughter of a child.
- 37. Improving the wellbeing of society is, by definition, both complex, being subject to every factor which affects our day-to-day lives, and ultimately the objective of all policy, recognizing the complexity of the trade-offs inherent: to improve the well-being of some may require the surrendering of resources by others which may act to reduce their personal wellbeing even if there is an increase overall. Even at this level, the understanding of such trade-offs is at the heart of the FISW's mission.

Whilst research (Quick, 2018) has made a start on this issue, at least in some countries, the potential to bring together data to inform policy-decisions is clearly imperative.

- 38. As such, the identification and measurement of well-being is therefore inherently at the core of a wide range of the social sciences, from sociology, to anthropology, to philosophy, politics, and economics. For, at its heart, a complete, well-specified and appropriately weighted measure of well-being is nothing less than the recipe for human happiness and prosperity albeit one based on our own aspirations and relative to our state of progress in their delivery. To be able to deliver such an expression of knowledge, synthesized into its key components, would be the greatest of all the achievements of social science, indeed one may argue, all human endeavor.
- 39. Unfortunately, it is probably a fool's errand, not least because the driving factors of well-being whilst being universal, can also be subject to time, place, culture, and wider environmental attributes, including our level of aspirations and what we consider to be our baseline. Equally, they may be subject to the critique that once observed, the act of observation itself may change people's perspectives of a good life or their personal circumstances and hence their assessment of wellbeing.
- 40. But this is not an argument for giving up; even imperfect knowledge is of such value that it is universally recognized as desirable, along which substantive effort and noticeable achievements have already been delivered in this space, building on the following core tenets:
 - There is a clear time imperative: To meet the imperative inherent in 'leave no-one behind' and to meet the post-2030 agenda, if we wish to provide meaningful insights in sufficient time to play a meaningful part, we cannot wait.
 - design is recognizably not a wellbeing framework): Beyond GDP means we need to ask ourselves 'how far Beyond' and 'what data does that require'? As a minimum we clearly need to include environment, economic and social data. This section is predicated on the production of a consistent and universal dataset on consistent and coherent terms, utilizing the SEEA, SNA and SPSS as the fundamental building blocks for the provision of data, which the FISW can then re-use and confront across these three domains so one can see the trade-off between different policy outcomes without worrying about these being obscured by statistical practices. This confrontation may be through dashboards, indicators or new composites, based on user need and statistical understanding of the comparability and best use of the data available.
 - There is a clear political imperative and need: Work in this space is happening anyway.
 We need to ensure it is joined up and intellectually coherent / consistent. To do this, the

requirement for a worked-through **framework** which addresses key policy issues and allows an informed debate about the substantial trade-offs inherent in 21st Century policymaking is clear. In a world facing a recognized climate crisis, health pandemics and a range of other challenges, to be able to understand the key policy trade-offs across the full range of issues affecting human life and wellbeing is a necessity. Providing and communicating data to support this should be every statistician's priority.

- The Framework needs to be pragmatic and built from what already exists, whilst also recognizing political realities.
 - It needs to work for the Global South which means simplified methods and re-use
 of data alongside more complex models for those who can do more.
 - <u>Dashboards can be hard to interpret</u> even if they give a rounded picture many users want simple to use metrics, not complex landscape of alternative data.
 - There is a substantial body of work available to us, which should allow us to deliver at pace. We should do all we can to avoid duplication of efforts.
 - Composite indices are a proven winner with many users and increasingly demanded by policymakers, but to be of value they must be constructed in an intellectually defendable fashion, which relies on objective weights. A commitment to robust methodology and intellectual rigor is essential for the credibility and reliability of such indices.
- The Framework needs to unify around three themes and three policy spheres^{xx}: Wellbeing varies across time and place, and different groups can have vastly different experiences. As such, any framework needs to communicate across three dimensions:
 - wellbeing (here & now), capturing both people's subjective perception of wellbeing,
 as well as material / objective measures of the key drivers from the three policy
 spheres.
 - o sustainability (here & now v the future) and
 - inclusion (here & now v everywhere else domestic and international)

And capture the contribution and trade-offs inherent between three policy spheres:

- Environmental
- Economic
- Social
- 41. The purpose of the FISW therefore is not to replicate the three 'Standards' which should govern the methods and concepts used to derive quality statistics. The FISW presents instead an opportunity for the statistical community to come together and make its single clearest articulation

of how best to use our data to support tackling the largest questions before citizens, organizations and governments, whether these be climate change, pandemics, food insecurity, inequality, and consider these. In particular the FISW will focus on the inter-locking nature of these issues, and take its unique selling point to be a forum in which we can provide multi-disciplinary advice to allow users to deploy and consider data from across the social, economic and environmental spheres. As such it will i) identify the conceptual framework within which one can consider such trade-offs, ii) identify the strongest data, or the alternative data sources which can be used to inform such considerations, and iii) propose optimal ways to communicate and present this data to maximize user engagement, using the three spheres (environment, social and economic) and three measurement dimensions (wellbeing, inclusion and sustainability) as the guiding architecture underpinning this work.

- 42. The following section will take these policy spheres and measurement dimensions in greater depth, taking account of the extensive efforts which have been applied in recent years to tackle these, and how we can move forward to develop greater detail within this structure to help illustrate for producers the type of data under consideration and for users which data may best address their particular policy question.
- 43. This section refers predominantly to 'wellbeing' whereas our focus was designed to be on the topic of 'Beyond GDP'. We see two key reasons for moving beyond this terminology: firstly, defining a topic in terms of what is it not (Beyond GDP is by definition 'not GDP' without clearly articulating a positive statement of what it *is*), and secondly as the SNA makes greater reference to net measures this is a comparison which may become dated. As such the term wellbeing is used as a better positive description of the matter under discussion.
- 44. One noticeable feature of the landscape is that there is no shortage of activity. Leiden University has mapped literally hundreds of alternative metrics which have been developed by NSIs, international organizations and academics^{xxi}, new initiatives are being set up frequently^{xxii}, and we see increased investment by many institutions^{xxiii}. Whilst it is clear that this agenda may present challenges in terms of undertaking such activity in parallel to the implementation of the new SNA revision (and related revisions to classifications and the Balance of Payments Manual), and we need to reflect on this, the wider thrust of this agenda and the wider range of statistical disciplines and groups involved mean that this opportunity to reflect on how best to consolidate and present this range of information cannot be missed.

Wellbeing in the here and now.

45. As a statistical community we are at a pivotal moment with the ability to attempt to re-direct policy towards the use of broader measures of wellbeing which complement traditional economic

utility or welfare measures, which are normally cast in monetary terms. The key questions therefore do not appear to revolve around whether to measure wellbeing, but rather how.

- 46. There are two approaches which can be taken when one is considering the measurement of wellbeing. The first is to refer directly to the subjective views of their attitudes and perspectives of citizens concerning their own personal wellbeing, whilst the second is to measure objective quantities of the policy outcomes or states of being which are considered necessary to deliver wellbeing, using these metrics as proxy material measures of wellbeing. Both approaches obviously retain significant value, but at the apex of this debate is whether one should focus on material measures of wellbeing, which cover the breadth of the policy landscape, crossing the economic, the environmental and the social, or give relatively greater attention to more subjective measures of wellbeing, where these are derived from personally reported data. Mechanisms and instruments such as Cantrill's ladder have been developed to elicit survey responses to provide internationally comparable measures of subjective well-being (SWB), which can be tracked over time.
- 47. Layard and De Neve (2023) make a resounding case that the policy metric which should matter is the wellbeing of society and its citizens, and research into this topic can now reveal what matters to people and relatively how much, with a clear and growing consensus that the best measures focus on subjective perspectives of life-satisfaction. Setting aside issues of distribution of wellbeing for now wellbeing is self-evidently the ultimate outcome, but it is also increasingly seen as easy and reliable to measure. As noted by experts who have commented on drafts of this report have made clear: There is indeed a growing consensus that the well-known cross-country differences in replying to subjective well-being measures can be overcome, as evidenced in Van Look and Decancq (2021) and the MEqin project.
- 48. But is that enough? With the scientific progress in subjective wellbeing (SWB) measurement and best practices in policy applications, why then is it not enough to simply adopt life satisfaction as an internationally comparable and complementary measures to GDP?
- 49. This question raises three key points: firstly, wellbeing levels and changes in levels will be affected by a set of contextualizing background factors, secondly whilst policy can have the potential to influence change in people's individual preferences and expectations**xv*, so do many other factors, and thirdly, it is not certain that SWB taken as an objective function will immediately achieve global consensus given diversity of views around the role of the individual vis-à-vis collective or societal perspectives, alongside with methodological issues around the concept of bounded rationality inherent in wellbeing.

- 50. This reinforces the need to both have a wide understanding of the elements affecting people's SWB, but also signposts that whilst policy will not be the only factor in play, policy action remains how government can influence SWB, in all its myriad forms, either as a first order impact or via indirect transmission mechanisms^{xxvi}, and the trade-offs between these matter as they influence the range of factors which affect SWB.
- The element of expectations and relative baselines is particularly important when we look at variation across countries / geographies in the provision of the basic materials contributors towards wellbeing. Meeting a 'minimum standard' across levels of physical and mental health, social relationships, security, feelings of purpose, and the environment are likely to figure more highly in individual's assessments of SWB if they are near a threshold of viability: as such the drivers of SWB in one country may be very different to those in another. This implies the policy initiatives necessary to improve wellbeing may vary considerably. Informed by Layard and De Neve (2023), we can simplify the drivers of SWB as follows:

SWB = f(Public Policy Outcomes, Private Factors, Exterior Factors | Conditioning Baseline State)

- Data is used to inform decisions, and for the most part, those with the greatest impact over the most people are public policy decisions that affect public policy outcomes. A measure that can be affected by factors outside the control of public policy, such as the excitement of meeting a potential new romantic partner (private factors)^{xxviii}, or by the simple phenomenon of the sun shining^{xxix} (exterior or exogenous factors^{xxx}) can easily obscure the impact of policy decisions.^{xxxi}
- This reflection is of far greater importance as the pertinent policy question in almost all circumstances will be the optimal policy package to maximize wellbeing improvements The challenge of SWB measures in this context is in containing so much information, it can be perceived to contain little usable information at all. If one wishes to use a metric to help shape public policy decisions it needs to be focused on the policy actions affecting (un)employment, education, health, trust, safety, social support, etc., and the public policy outcomes they achieve, which themselves drive changes in SWB. Obviously, whilst such metrics may only act as *proxies* for SWB itself, there will be a continued need to monitor SWB measures themselves, but nevertheless, the informational content contained in data on such policy outcomes or actions would have the capacity to provide meaningful insights into the relationship between public policy and SWB, assuming other factors are held constant. As such, efforts to measure wellbeing in the here and now will likely require a two-part approach, firstly a nationally representative measure of subjective wellbeing, supported by, secondly, a panel of measures of material drivers of wellbeing trade-offs described above.

- 54. There are a number of statistical and presentational methods to allow for measuring trade-offs: 1) the assembly of a dashboard of indicators which can provide a multi-faceted view over a complex landscape, 2) the creation of composite indices which bring together varied metrics into an agreed and unbiased weighting methodology as a 'single-number' index which subsumes all the various aspects into a single estimate, and 3) accounts and accounting based frameworks where data are confronted within a domain and through the use of 3a) bridging tables across domains.
- 55. Taking dashboards first, one needs to consider the following in determining what differentiates a 'strong' dashboard' from a 'weak' dashboard. At the heart of this assessment is the concept of use; that is consumers of the data voting with their feet and using the dashboard to inform policy. This requires the dashboard to deliver a set of criteria which engage and empower users.
 - Size: A key weakness that can befall dashboard approaches is a lack of focus or selectivity. Whilst numerous measures have value, if so, many indicators are included that it is almost impossible to discern any coherent message, then this can act as a barrier to effective use. This, unfortunately, is the criticism normally directed at the Sustainable Development Goals. Whilst there are only 17 goals, each has myriad distinct measures related to it, leaving one facing a dashboard with substantially more than a hundred individual measures. The best place, they say, to hide a tree is in a forest, and the SDGs are the greatest of all statistical forests. This does not mean that a 'strong' dashboard has to be limited to a certain size, but when one has hundreds of priorities, the risk you run is none of them really are a priority at all.
 - Coherency: The SDGs were born of a political process that identified what users felt were priorities and was broadly successful in these terms, but if the issue is 'trade-offs', it is vital that the measures underlying the goals make such trade-offs visible, or at least makes clear how one goes about conceptualizing the impact one has on another conceptualizing the impact one has on another conceptualizing the impact one has on another conceptualizing one requires a set of measures which are driven by an underlying framework which represent the full scope of the domains of interest and are a coherent approach to each of these: if one uses flow data for four domains, it makes little sense to use stock data for the fifth, for example, or to omit a sixth domain when this may provide a better representation of coverage of key drivers of wellbeing and the key trade-offs between these. Such a framework needs to have elements which allow international comparison, but which are also tailored to domestic need.
 - Relevance: There is no reason a wide and diverse dashboard cannot be targeted at wider society, if a smaller set of policy-relevant set of indicators is provided in parallel, as per the practice in New Zealand. If there is clarity on its user base, their needs and how it can

efficiently meet these, then the dashboard can be effective. Obviously, a dashboard which fails to hit these criteria can be perceived as weaker, but it is important to remember that in many instances the NSO or other compiler has to 'manufacture' demand by showcasing the capability and value of the data being presented. It is important to bear in mind that policy audiences may require some degree of education to transition from familiar metrics to newer data items, and as such dashboard may benefit from the inclusion of 'traditional' or well recognized metrics, at least initially to encourage buy-in by users.

- 56. In comparison, life satisfaction and other 'single-number' composite indices attempt to solve the problem of understanding trade-offs not by displaying all the available data, but by subsuming it. This means one can again divide composites into 'strong' and 'weak'** in the same way as dashboards. A composite index that relies on arbitrary or 'subjective' perspectives to deliver its verdict is clearly one many users may dispute, to the detriment of its usage**xxxvi*. However, building on the wellbeing research, a composite that can provide an evidential basis for its results through an internally consistent methodology that can be explained and justified at least meets a scientific test of reproducibility and testing through sensitivity analysis**xxxvii.
- 57. Such weighting issues, explicitly or implicitly, affect both dashboards and composites, as the ultimate need is to allow users to weigh up different components and make decisions about the inherent trade-offs within their policy decisions. Strong dashboards and composites both require the statistics to be able to present an intelligible story which can be used in pressured decision-making fora and then communicated to the public.
- 58. Obviously, a key question which arises is which story do we therefore wish to tell. The SNA, for example focuses on the production of economic data, with the view that users may combine this with alternative data to generate composite indices such as monetized adjusted or augmented GDP type measures (see Nordhaus (2019) or ONS (2023), for example). The importance of the data presented in the FISW to be in terms which allow easy comparison with metrics users are used to using will be a vital element in easing acceptance, but is clearly dependent on high quality data to supplement the national accounts data which may often form a base for such analysis. This again is an area where there are alternative methodologies and efforts to understand which better meet user needs will be vital. For example, rather than measuring flows, it may be users wish to understand resilience (as a systems approach to the measurement of sustainability such as European Commission (2021), or stocks (ONS (2022).

Inclusion and Sustainability

59. To this point, this discussion of the FISW could be viewed as focusing on a human-centric perspective of wellbeing in the here and now, but it is important to remember the two other dimensions through which trade-offs can occur, namely with wellbeing elsewhere and wellbeing in the future. Any successive presentation of wellbeing progress cannot escape these dimensions which accord with the concepts of inclusion (we care about wellbeing wherever people are) and sustainability (we care about the welfare of future generations). The following sections consider each of these in turn.

Inclusion

- 60. Inclusion is multi-dimensional and can be considered through multiple lenses. These could be age, social status, geography, disability status, race or many other characteristics which may result in unequal distributions of wellbeing. Agreed approaches to disaggregating headline data are imperative to deliver a comprehensive picture.
- 61. Here the challenge is, as with wellbeing in the here and now, to select from a rich set of alternatives: We have three primary parallel systems that have been developed around income distributions (National Transfer Accounts (NTA), Distributional National Accounts (DNA) and Distribution of National Accounts (DINA)).
- 62. These are computationally rich structures which deliver complementary ways to analyze different questions relating to inequality and the distribution of consumption, income, saving and wealth. These make differing conceptual decisions on key factors, such as whether to take the household or the individual as the base unit and, secondly, presenting wider metrics on such a basis.
 - The National Transfer Accounts (NTA) integrate demography (age and gender) into National Accounts to analyze consumption, earnings, and redistribution at the individual level understand how demographic change affects the economy and public redistribution, how individuals at different ages are affected by economic change, and how the roles of men and women differ for public and private reallocations.
 - The Distributional National Accounts (DNA) (World Inequality Database), which provide income and wealth distributions for 140+ countries since the 1980s and 1990s as well as a longer time-series for large countries and regions since the 1820s, using all available sources: tax data, household surveys, national accounts, rich lists, etc. to evidence that wealth inequality is extreme everywhere and inequality after-tax is mostly due to inequality pre-tax.

- The Household Distributional Accounts (DINA), which produce distributions of income, consumption, and wealth for groups of households and are fully consistent with National Accounts. These simultaneously measure inequality across income, consumption, and wealth to understand how household groups have been affected by specific events (e.g., GFC, COVID), assess household vulnerability (e.g., inflationary pressures), and evaluate the impact of policies on specific household groups.
- 63. The potential here is significant. The combination of interconnectivity of topic and approach alongside the diversity of approaches taken suggest bringing these three systems together into a single measurement framework which provides a general and wide perspective of inclusion and inequality, deliberately building from SNA and social data is one the relevant bodies should actively encouraged to explore and identify a roadmap to integration which delivers clear milestones around achieving a wide-ranging and consistent set of measures which the FISW can rely on for this dimension.
- 64. To ensure consistency through time, summary indicators which are adjusted into real terms, specifically relating to income, need to be presented within these frameworks, potentially on both plutocratic and democratic bases (see Aitken and Weale 2018).

Sustainability

- 65. Up to now, this document has focused on people, and the subtle assumption that people should be at the center of our thinking on the issue of what makes a good life. Reviewing different countries' and cultures' perspectives it is clear there are important alternative views one can take on this issue; for example, that humankind is just one species on the planet and our place is, or should not be, more privileged than that of other species or the ecosystems we inhabit. Whichever viewpoint one wishes to start from, sustainability refers to the trade-off between future and present wellbeing, and hence requires us to consider metrics which can be compared across time, whether these relate to the sustainability of biodiversity and the environment, investment in renewable energy or more direct economic measures such as the debt: GDP ratio.
- 66. To undertake this, it is clear we need to consider the potential for current analytical and accounting frameworks to bring together measures relating to 'flows', that is those things which occur within a period and 'stocks' those things which are sustained and used across numerous time periods. These 'stocks' are often labelled 'capitals', 'resources' or 'assets', which in some arenas can be contentious terminologies to apply to people, creatures, and the environment, where this implies a monetization of these factors, or at least a monetary value is attached to them. In this section we refer to the different forms of 'capital' using their economic measurement definitions noting that many users in a 'Beyond GDP' or 'wellbeing' landscape find these labels instinctively uncomfortable as they

imply, for example that 'natural resources should be viewed as 'assets' or that humanity can be 'monetized'. Finding an acceptable terminology for wellbeing measurement may require us to reconsider such language to deliver a final output.

- 67. This 'capitals' approach is predicated on the concept that to achieve sustainable wellbeing future generations require access to at least an equivalent capital stock as is available today. Of course, this does not assume they will utilize this capital stock in the same way, that it will be distributed in the same way across the asset types and does not consider the benefit of productivity gains**xxxviii. These gains particularly from the environmental perspective, due to the potential for step-changes and non-marginal impacts of changes in the environment, these changes could more than cancel out any marginal productivity gains, particularly in the longer term. As such, considering a wider perspective of stocks of capital, rather than the flows resultant from these, is necessary to gain a realistic understanding of the impact of actions tomorrow on wellbeing in the future.
- This does raise questions about aspects of wellbeing, which may be less related to capital, or at least capital in the traditional sense. It is clear that measures that include human and natural capital are a minimum requirement, as well as capturing currently uncapitalized productive capital, such as those 'intangibles' (see Corrado, Hulten, & Sichel (2009)) outside the current SNA definition (noting that the proposed changes in the 2025 SNA will bring a number of these into the scope of the SNA and hence will be accessible from future National Accounts), and consumer durables used in the household, which are currently recorded as household final consumption expenditurexxxix, and which contribute to the production of unpaid household productionxil. Of course, there are other aspects of welfare that may be less dependent on these 'hard' measures of capital, for example, the importance of social capital in creating and maintaining social interactions or support mechanisms, whilst cultural capital may be a framework for thinking about those assets, either intangible or hard to value in monetary terms, but which have a significant impact on wellbeing through people or societies sense of self.
- 69. An aggregated stock estimate, and consistent flow estimates of services, which for natural capital need to be considered dependent on condition, as per the SEEA, (and which can be considered proxies for income) derived from these assets are essential for understanding both the longer-term sustainability of the position and the here and now impact of this perspective to close the loop.
- 70. Again, as with inclusion three core methods of evaluating the sustainability of the capital stock exist:
 - Inclusive Wealth estimates, as derived by the UN's Environmental Programme evaluate produced, environmental and human capital for 163 countries across 1990-2019. Key to

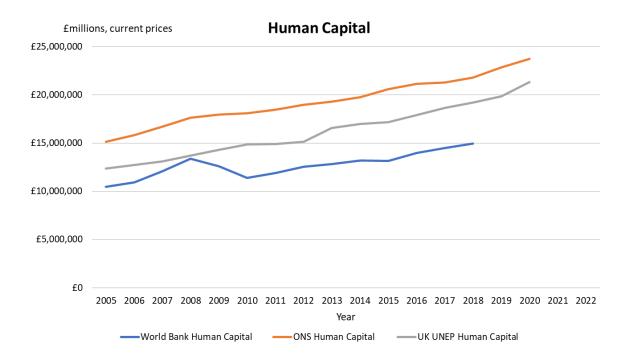
this methodology is the use of 'accounting' or 'shadow' prices, which attempt to reflect the wider costs to society of certain asset types. The UNEP collects data from a variety of sources to deliver their inclusive wealth estimates alongside some key assumptions. For example, the UNEP relies heavily on data from the United Nations Statistics Division and assumes a depreciation rate of 4% to estimate their calculation of produced capital. Alongside these assumptions, there are also slight differences in what UNEP include within their Inclusive Wealth figures when compared to Comprehensive Wealth (as derived by the World Bank) and ONS's natural capital account. In the UNEP's natural capital estimates, they include the following provisioning services; Fossil fuels, Metals and minerals, agricultural land, Forest (including non-timber forest benefits) and Fisheries. However, they exclude provisioning services such as water abstraction and renewables alongside regulating services and cultural services — all of which are included in ONS's natural capital account.

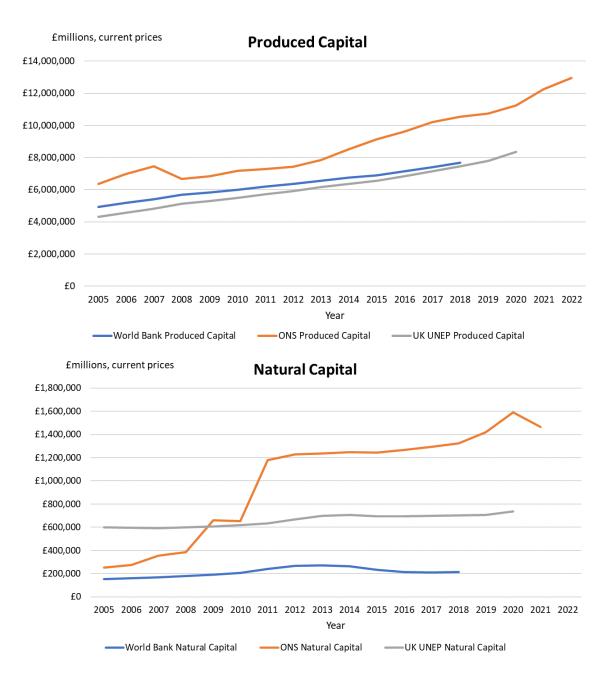
- Comprehensive Wealth estimates, as derived by the World Bank evaluate produced, environmental and human capital for 146 countries across 1995-2018. As opposed to Inclusive Wealth this system uses market prices to determine the volume of assets held. There are also some slight discrepancies between what the World Bank includes in its natural capital estimates compared to the UNEP. Unlike UNEP, the World Bank includes both Mangroves and Protected areas in their natural capital estimates. However, it is still not more selective than those resources included in ONS's natural capital accounts. The World Bank uses a wide range of data sources to derive their estimates. Although there is some overlap between data sources when compared to Inclusive Wealth, the World Bank also relies on data that it collects to derive its comprehensive wealth estimate e.g. when measuring the area of cropland and pastureland.
- National Accounts (SNA), the Natural Capital Accounts (SEEA) and the Human Capital
 Satellite Accounts (SNA) provide, for those countries which produce all three, estimates
 on a domestic basis of all three of produced, environmental and human capital in broadly
 comparable terms, again using market prices.xli
- 71. As well as slight discrepancies within produced, human and natural capital between Inclusive Wealth, Comprehensive Wealth and SEEA, there are also differences in the classifications of certain assets. For example, in relation to land, the World Bank and ONS include urban land within produced assets, whilst UNEP and the World Bank include agricultural land as natural capital, whereas the national accounts also include this in their value of produced assets. Nevertheless, given the different data sources and approaches to pricing, it is not a surprise that comparisons suggest some variation

between the estimates, but what is reassuring is the relative degree of consistency, both in levels and growth rates between the three models. The following figure illustrates this point, using the UK as an example.

72. Some key caveats for the charts below should be mentioned. The World Bank and UNEP estimates have been converted from US dollars to pounds sterling using Purchasing Power Parity data from the OECD. Where required, data have been converted from constant prices to current prices using the UK's GDP Deflator so that all estimates are on a consistent basis. These steps were required to provide an approximate comparison of the different capital estimates. Also, for consistency, all charts span from 2005 to 2022 but the latest year for available capital estimates varies between each organization. The latest year for available capital estimates also varies from ONS estimates because the data sources are updated separately and at different times.

Figure 3: Comparative UK estimates of different capital types using data from UNEP, World Bank and UK National Accounts £million following PPP conversion, current prices





Source: ONS, and ONS calculations from World Bank and UNEP source data

73. Whilst this data suggests further reconciliation work is required, it is clear this can be done off a solid shared understanding of the data, and that a consensus approach / bridging tables should be viable within a limited timeframe.

The role of GDP, or other purely economic data within the FISW

- 74. If we wish to focus on a wider set of capitals and consistent income estimates, which include the impact of the environment, household activities etc., this provokes the question of what role would GDP have in this landscape.
- 75. This entire debate has been stimulated by perceptions that GDP is insufficient to serve as a measure of welfare, particularly as we see increased movement across the production boundary

between those things included in GDP and those things that are excluded^{xiii}. There are those who argue that GDP is not a measure of welfare, which is one we and other authors actively dispute (see, for example Coyle (2015) and Dynan and Sheiner (2018)): the application of price deflators transforms GDP into a volume index that represents changes in aggregate utility over time, and even if that argument is not to your liking, Weitzman (1976) sets out clearly the approximations needed to give a welfare interpretation to Net National Product (NNP), another of the metrics produced from within the National Accounts, and as long as GDP moves largely in line with NNP, it can still thus be thought of as a welfare indicator. Xiiii

- 76. Therefore, whilst we understand the limitations of GDP as a welfare measure, not least because of what it excludes, we cannot ignore the impact increasing Gross Domestic Product (GDP), a measure of economic output, can have on the environment and the ecosystems we rely on for life. It is not that GDP is not a measure of well-being; it most definitely is, but by being an incomplete and biased measure, it is an increasingly weak one. In a world that increasingly does not rely on flows of income to generate well-being: a capital-rich society that values its machinery, buildings, people and environment simultaneously, the failure to reflect the depreciation and depletion (or indeed in the case of human capital, the existence) of these assets leaves one struggling to understand the trade-offs between the economic, the environmental and the social.
- Nevertheless, GDP, or more precisely the National Accounts from which GDP is derived, still has three important roles to play in our framework of objective measures of policy-impacted outcomes that drive SWB. The first is it provides a substantial dataset that informs or provides many of the economic measures we may wish to address. Secondly, it sets a budget constraint which any public policy decision-maker has to bear in mindxliv. Thirdly it provides a perspective on the cost efficiency of policy action to deliver improvements in wellbeing, even if they are excluded from GDP itself. Very simply, current price GDP sets the tax-base within which public policy action is constrained, volume GDP, alongside arguably conceptually stronger net metrics such as net domestic product (NDP) (noting their lack of comparable timeliness) provides measure of output in real terms which can be compared to other volume wellbeing metrics, which is how we might best consider any dashboard or composite index, and a comparison of spend to outcomes achieved gives an efficiency/productivity perspective which in a world of scarce resources is of vital importance.xiv
- 78. As the tax-base and the subsequent tax-take are endogenous to the outcome of policy decisions, it provides a vital metric to ration public policy without which any measure that increases SWB becomes attractive. The model we are really seeking is, of course, a framework of subjective wellbeing measures, supported by objective measures of policy-impacted outcomes that drive SWB

<u>and</u> that allow scarce resources to be allocated efficiently. It is important to note that there will be contextualizing factors which mean the objective measures in such a framework cannot be expected to have a 1:1 relationship with SWB, and indeed subjective opinions and perspectives may go a long way to explaining individual actions, but nevertheless being able to understand the relationship between key objective metrics and SWB is clearly core to the mission.

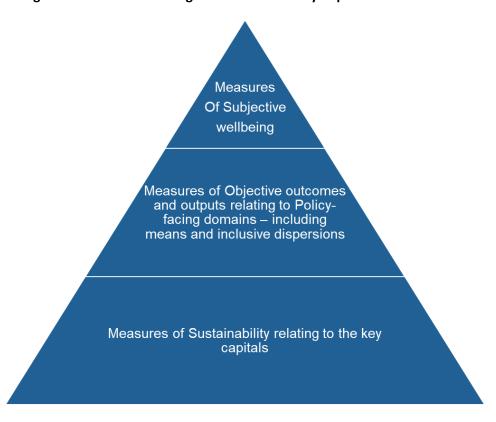
- 79. Of course, such a model, assuming the use of accounting prices on the demand side and market prices on the budget constraint side, may not appear immediately consistent, but in effect, whatever the rationing mechanism, as long as the accounting price of the policy intervention is sufficient for benefits to exceed costs, then irrespective of the functioning of the market we can determine efficient actions by maximizing the net present value of benefits over costs, utilizing common cost-benefit approaches.
- 80. Before we tackle this problem, however, if we are getting into the business of supply and demand, we need to reflect on this at the national level, specifically the statistical office level, recognizing this leaves a gap for future development of more local levels. In the interest of maintaining momentum this may need to be a second-tier priority, addressed when the core framework is in place.

A proposed structure for the FISW

- 81. The conceptual framework for the FISW described above suggests the following tripartite structure (which bears similarities to that proposed by Rao and Min (2018):
 - a SWB core, presenting a clear headline narrative on overall wellbeing, and the key components, such as trust, with accompanying distributional data.
 - a consistent and coherent wrap-around supporting framework for measuring the impact
 of policy interventions and explaining the key trade-offs. This would present a variety of
 data across a spectrum of inclusive and sustainable wellbeing, drawing from the SNA, SPSS
 and SEEA, around:
 - The principle objective measures of material wellbeing, drawn from the economic, environmental and social domains. This core set of 10-20 indices would provide a clear perspective on headline areas of policy. These could be either individual indicators or composite indices, tailored to specific domains or in aggregate, developed using monetary and alternative weights to illustrate the trade-offs while simplifying the presentation of materials.
 - Distributional data, across income, consumption, wealth as well as geography and population groups using either the individual or household as unit of measurement, to provide an inclusivity viewpoint.

- Sustainability data, taking a capitals perspective which allows a deep perspective of the trade-offs between wellbeing today and in the future.
- a GDP-style metric setting the budget constraint for such intervention.
- 82. This is described visually in the following figure.

Figure 4: An illustrative diagram of the hierarchy implied within the FISW



- 83. On the basis of the information gathered by the Network of Economic Statisticians in their sprint series of 2022 and 2023, we can propose a basic skeleton for the FISW. This would consist of the following chapters:
 - An introductory chapter focused on
 - Guiding principles and objectives
 - Scope and purpose
 - o The structure of the document.
 - A chapter on mapping the interrelationships between the FISW topic areas of well-being, inclusion, and sustainability,
 - A chapter on the optimal design of dashboards in selecting and defining dimensions and indicators and the use within such dashboard of composite indices (to aide communication and policy application)
 - A chapter on building composite indices

- A chapter on the measurement of wellbeing in the here and now, focused on
 - Subjective wellbeing measurement.
 - Measures of key objective factors which affect wellbeing, with consideration by domains of environment, economy and social condition.
 - How best to reflect issues of inclusion and sustainability in our presentation of the here and now
- A chapter on the measurement of wellbeing here and elsewhere, focused on inclusion and distributional analyses and how to derive these across topic areas.
- A chapter on the measurement of wellbeing now and in the future, focused on sustainability metrics, utilizing a capitals approach
- A chapter providing a mapping of existing measures, their scope, coverage, and alignment with the FISW.
- Annexes
 - Glossary of terms
 - Future research agenda
 - Index
- 84. Each chapter would provide consistent and meaningful compilation guidance against a set framework of core elements for international consistency, whilst also providing for local variation in the indicators pursued. The chapters would be a high-level articulation of the necessary methods and best practice to enable countries to bring together feasible and policy-useful datasets, either in dashboard or composite indicator form through re-utilizing existing data wherever possible. Clearly in the pursuit of this, a system to monitor progress and change over time will be essential to deliver context to the data presented.
- 85. The FISW should be seen as a tool to aide user accessibility to the best data the statistical system can provide. The FISW will therefore need to reflect where those user needs may vary. For example, there may be specific regional contexts which require greater weight to be placed on specific issues to allow a consistent approach at the strategic level. For example, when considering the impact of income on wellbeing, different degrees of focus may need to be placed on the informal or illegal economies to achieve parity in terms of understanding what affects wellbeing.
- 86. The overall document need not be a multi-part volume. As the FISW will signpost extensively to data fully described in the SNA, SEEA and SPSS, alongside metrics already created from these data by multiple agencies, starting out with a brief document with a focus on key aspects which can be delivered at pace would appear a beneficial strategy.

A Delivery Strategy for the SPSS and FISW

Utilizing existing activity and working in partnership

- 87. To deliver the SPSS and FISW efficiently and effectively we will need to recognize and utilize the extensive and powerful existing documentation and data already collected against these pre-existing manuals and guidance rather than starting anew. A non-exhaustive list of examples includes:
 - The UNECE report on measures of wellbeing and subsequent work to develop guidelines on this topic.
 - The OECD's Better Life Initiative xlvii
 - The OECD's Guidelines on Measuring Subjective Wellbeing**
 - The OECD's Guidelines on Measuring Trust
 - The UN DESA National Transfer Accounts^{xlix}
 - The European Union's work on the 'Wellbeing Economy' and related research projects.
 - The UNECE 'Guide on Measuring Human Capital'
 - The UNECE 'Guide on Measuring Unpaid Work
 - The World Bank's 'Comprehensive Wealth of Nations'
 - The UN Environmental Programme's 'Inclusive Wealth'
 - The System of National Accounts
 - The System of Environmental-Economic Accounts
 - The System of Population and Social Statistics and the assorted existing guidance and manuals in this domain.
 - Recent reviews of country-level approaches to the topics covered in the FISW^{II}
- 88. To deliver on the support offered to the Friends of the Chair on Social and Demographic Statistics Group to lead on the SPSS in 2024, the Network recommends its work focuses on continuing its research building on the clear interaction with economic statistics in relation to the subsystems captured by the SNA, such as health, labor, and inequality presented during the 2023 Beyond GDP Sprint sessions with the objective of improving harmonization between the different frameworks by feeding into and supporting the FOC Group's considerations of the benefits of a comprehensive system for socio-demographic statistics. Taking on an advisory role allows the Network to provide its insights without duplicating efforts. Working with the custodian agencies of the statistical guidance in selected areas of social concerns, a shared structure of a system of tables and accounts of flows and stocks and key indicators could be delineated that builds on common concepts, definitions, and classifications. It is expected that this research with selected custodian agencies can be integrated with the delivery strategy of the FISW in 2024 and passed over into the work programme of the Friends

of the Chair on Social and Demographic Statistics, recognizing that body as the correct group to lead the delivery of the SPSS, with appropriate input from economic statistics, as represented by the Network.

- 89. With particular reference to the work of the Conference of European Statisticians (CES) to develop guidelines on measuring wellbeing, this clearly plays a key role in this journey, which is being delivered at pace in 2024. Importantly this differs in scope in two regards: being focused on wellbeing in the here and now and being delivered to meet a commission from CES member countries. The direction of travel this document outlines, towards a framework which is consulted on and agreed globally, will undoubtedly benefit from the injection of pace and dedicated resource the CES process will deliver, but may eventually draw some different conclusions based on global feedback and capabilities. This can be seen as a positive if, as argued above, the FISW helps to identify a core of data which all countries can produce, around which individual countries or regions can wrap-around tailored packages of bespoke data to meet localized need and priorities. The CES guidelines in this regard will be particularly useful for those countries participating in this work.
- 90. In addition, the FISW should address potential uses of environmental, social and governance (ESG) data from businesses and how to evolve this into a more standardized field which may have wider statistical application.

Bringing together expertise within a clear structure

- 91. Reviewing this list highlights the extensive range of expertise which exists, across a diverse range of specialist areas. It is clear from the 'beyond GDP' sprints that the breadth and depth of topics in the beyond GDP space imply both that there is a strong and active interest in this agenda from a varied set of bodies and agencies, and that it is not possible for a single group to address all the varied and complex issues and relationships in this space alone. Thus, after exploring a range of alternative models and stakeholder engagement, this document recommends the formation of a multidisciplinary Expert Group. This would be comprised of experts from the social and demographic statistics, national accounts, environmental-economic accounting, environment statistics and geospatial communities, academia and, where appropriate, the private sector, to explore how to take forward the various recommendations. If managed, it presents a feasible roadmap to a statistical future where we could meet the needs of all users in a way which allows a more sophisticated and informed debate and, hopefully, evidence of the link between better statistics and better decisions.
- 92. Importantly, the proposed organization structure of this Expert Group would follow identical structures of other Expert Groups which have been previously established by the United Nations to address similar challenges, including the United Nations Committee of Experts on Environmental-

Economic Accounting (UNCEEA) (tasked with the development of the SEEA), the United Nations Committee of Experts on Business and Trade Statistics (UNCEBTS) (tasked with the development of business and trade statistics, the United Nations Committee of Experts on Food Security, Agricultural and Rural Statistics (UNCEAG) (tasked with the development and documentation of good practices and guidelines on concepts, methods and statistical standards for food security, sustainable agriculture and rural development), and the United Nations Committee of Experts on Big Data and Data Science for Official Statistics (UNCEBD) (tasked with giving direction to the use of Big Data for Official Statistics).

- 93. There appear to be strong benefits to this model which would facilitate the development of this agenda at pace. Firstly, with this structure, preparing the mandate and governance document (Terms of reference) would be relatively straightforward because they follow a similar outline and detail as is already used by a number of such 'committees of experts'. Secondly, these practices have been 'road-tested' and been proved capable of meeting need. Thirdly, countries and institutions asked to participate would approach the work with clarity and familiarity on the 'ask' being made of them, with the research agenda advanced by in-kind support from country and agency representatives.
- 94. One key distinctive feature is any such Expert Group would need to have a membership which reflected a diverse range of statistical fields and subject matter expertise, with appropriate roles for academics and non-traditional voices. How to engage the political community is also going to be key, not least where multiple countries have already developed local dashboards or wellbeing measures tailored to domestic need. A strong case to justify further investment will clearly need to be presented by this Group.
- 95. Inherent in following the Committee of Experts format, this implies this Expert Group on Inclusive and Sustainable Wellbeing would both have a sunset clause and report to the UNSC through the Network, not being a standing expert group at this stage.
- 96. It is vital that the implementation of these recommendations become a shared project incorporating the above-mentioned communities and other relevant stakeholders. Being a global group, the UN Network of Economic Statisticians considers itself uniquely well-placed to act as a convening force: we will bring a wide perspective to this Group, incorporating a diverse range of voices and deep expertise, we can deploy expertise built on our recent work in this arena, and we have already established vital networks to ensure this group can leverage the best expertise. Therefore, in 2024, this report proposes the Expert Group operates under the Network of Economic Statisticians, working in partnership with key experts from a range of statistical communities, given the

multidimensional nature work required. The aim would be to ensure the Group could access input from all regions to progress the recommendations in the background document. It is likely to need to convene virtually in most instances, with a small number of in-person meetings if required. The Network would recommend the UK continues to provide leadership in this role as a co-chair alongside a Global South leader in this debate.

- 97. The purpose of the expert group would be as follows:
 - To bring together diverse communities to review methods and synthesize a consensus opinion on the contents of the FISW, whilst recognizing the imperative of a streamlined set of metrics which best meet user need.
 - To commission, review and propose to the United Nations Statistical Commission a draft text of the FISW for consultation and testing.
 - To commission appropriate pilot compilation of statistics and data, from a diverse range
 of countries to fully explore suitability and feasibility. Pilot exercises which can
 demonstrate the capacity of NSIs with limited resources to deliver against the FISW should
 be prioritized.
 - To develop a communications strategy to aide uptake and appropriate usage of the data made available. User and producer interest is vital to secure access to well-informed resources with the required skills and knowledge to make this proposal a reality.

Developing a timeline to delivery

- 98. This process will require clear deliverables and a timeline to bring this ambitious programme to fruition. This timeline will need to be based around the meetings of the United Nations Statistical Commission which will be the decision-making forum for this work. The Commission in 2024 has therefore received a report from the UN Network of Economic Statisticians, to which this is a background document, recommending:
 - In relation to this agenda, the establishment of an Expert Group, reporting to the UN Statistics Commission, comprised of the varied bodies, international organizations and working parties already active in this field to:
 - Agree the definition, scope, and content of the FISW and the SPSS (see following bullets) – including draft chapters with a synthesized and prioritized structure and roadmap.
 - Act as a clearing house to resolve issues and achieve consensus between different approaches and proposals, with authority to deliver finalized recommendations

- Act as a central commissioning function to allocate out required activity with consolidated timelines for development production, consultation of the varied strands of activity and work into a single consolidated output – the FISW – for eventual submission to the UN Statistics Commission
- There is a need to give the Friends of the Chair on Social and Demographic Statistics time to mature its work programme in line with its timetables before delivering a final statement on the preferred direction of travel on a SPSS-type document. As such a multi-disciplinary expert group would initially focus on the FISW whilst looking to provide a venue for the Friends of the Chair on Social and Demographic Statistics to bring its recommendations and collaborate with wider partners, particularly around the intersection of these two strands of work.
- Similarly, the CES work on guidelines in this area needs to be given time to follow its due
 processes to deliver a report which we anticipate will be a strong foundational document,
 standing alongside the other varied manuals and handbooks which the multi-disciplinary
 expert group would look to build upon.
- Equally, the year 2024/25 will give us sight of the finalized draft chapters of the SNA. Once
 again, these will be foundational documents the multi-disciplinary expert group can use
 to establish and scope its further work, noting many organizations will be working to
 achieve implementation of the SNA / BPM updates, and this timetable will need to work
 around real constraints in this regard.
- The aim of this Expert Group in 2024/25 therefore would be to mature and submit to UNSC 2025 a draft structure for both documents, combined with a multi-year workplan for the delivery of the FISW, and, in alignment with the work of the Friends of the Chair on Social and Demographic Statistics, support their development of the SPSS, taking into account existing work, the recommendations and outputs of the Friends of the Chair, the outputs of the 2025 SNA process, the forthcoming UNECE guidelines, and any other newly emerging research or work in this field.
- Delivery against this workplan to deliver a SPSS and FISW documents to UNSC in a reasonable and pragmatic timetable, following public consultation and international engagement on the proposals.

Conclusions

99. This document has sought to articulate a substantive contribution to the statistical response to 'Valuing What Counts' by creating a framework drawn from existing statistical methods and guidance to the international statistics community to deliver conceptually aligned and coherent core

statistical tools which in turn allow users to interpret and understand the complex world we inhabit today, and which can be used to underpin the measurement agenda of 'Our Common Agenda'. The proposed approach, completing a systematic framework which draws data from across the domains of environmental, social, and economic statistics, would provide a scaffold for considering wellbeing, its measurement, main drivers, and key trade-offs and allow the robust analysis of the costs and the benefits of different policy options to be considered impartially and objectively.

- 100. The purpose of such a framework is to enable insights to be imparted in robust ways. Obviously, capturing all aspects of well-being would entail the presentation of a dataset to users containing a near infinite set of variables. In the world of policymaking, which is often pragmatic and frequently time-constrained, the only thing nearly as bad as none or too little data is too much. Policymakers need to be able to 'cut-to-the-chase', deploying the key metrics at the right time, and the framework needs to enable this by signposting which data is most important without losing comprehensiveness.
- 101. The coherent articulation of a System of Population and Social Statistics to accompany and stand equivalent to the System of National Accounts and the System of Environmental-Economic Accounting is an obvious foundation of this ambition. This can be rapidly developed given the high degree of existing conformity and the existence of numerous standalone guidance documents in this space. Of course, whilst we describe it here as a single document, it does not need to exist in a physical form as a document called the 'SPSS'. What matters is the process of aligning and ensuring coherency and clarity in terms of the alignment of the component parts and features, suggesting that the key to success is bringing together the social statistics community *and* those economic statisticians who have ventured into these domains under the SNA to agree aligned approaches which cohere across the domains.
- Developing from this a Framework for Inclusive and Sustainable Wellbeing (FISW) would allow the articulation of a structured framework that could capture directly measured estimates of subjective wellbeing (SWB), accompanied by material measures of or affecting objective wellbeing such that we offer policy-makers ways to explain variation in SWB. Developing a clear and coherent conceptual framework of objective measures of policy-impacted outcomes that drive SWB and allows scarce resources to be allocated efficiently could then be completed, either in the form of a dashboard or composite proxy measures, including on SWB, which can reveal the impact and trade-off between public policy measures, to complement direct survey measures of SWB, existing alongside a robust estimate of GDP to provide a budget constraint for such policy measures.

- 103. It is important to be clear on the different roles the FISW and the three statistical frameworks will serve in this structure: the three statistical frameworks (the SEEA, SNA and SPSS) would focus on defining various data and statistics and ensuring standardization through internal consistency and coherency within and between those three documents, whilst the FISW will place a greater focus on being a public interface which helps producers to compile dashboards or composite indicators using data predominantly drawn from the three statistical frameworks. These in turn would help users navigate to the best data for their policy question, and to provide a clear vehicle for the statistical community to engage with the political imperatives around this topic.
- 104. Of course, delivery of such a framework and data would not be enough on its own: policy-users would also need to be engaged and make use of these data, and whilst provision has to be the first necessary step on the road, it is clear from many failed previous attempts that this is not sufficient. It is vital that whilst we can deliver a framework for international consistency, the key factor will be the replication of data for many countries, on a timely basis, which allows policy-makers both to better understand their national perspective and performance, but also to compare delivery against peers. This naturally requires a focus on the domestic to ensure policy-relevance, which suggests the need for discretion and flexibility in presentation and content to meet different needs, within a framework which draws through headline, comparable indicators, whilst also militating against dashboards of an excessive length and complexity. No matter how logical the conceptual architecture, much more effort needs to be focused on issues of communication and engagement to ensure success.
- 105. Taking that as a given, the conceptual framework needs to support this by being clear and easy to understand. This document proposes a tripartite structure measuring wellbeing to support this:
 - a SWB core, presenting a clear headline narrative on overall wellbeing, with accompanying distributional data.
 - a consistent and coherent wrap-around framework for measuring the impact of policy interventions and explaining the key trade-offs. This would present a variety of data across a spectrum of inclusive and sustainable wellbeing, drawing from the SNA, SPSS and SEEA, around:
 - The principle objective measures of material wellbeing. This core set of 10-20 indices would provide a clear perspective on headline areas of policy. These could be either individual indicators or composite indices, tailored to specific domains or in aggregate, and developed using monetary and potentially other weights to illustrate the trade-offs while simplifying the presentation of materials.

- Distributional data, across income, consumption, wealth as well as geography and population groups using either the individual or household as unit of measurement, to provide an inclusivity viewpoint.
- Sustainability data, taking a capitals perspective which allows a deep perspective
 of the trade-offs between wellbeing today and in the future.
- a GDP-style metric setting the budget constraint for such intervention.

106. To deliver on this agenda, this report recommends the appointment of an Expert Group, similar to those drawn together on similar statistical topics in this past, including the preparation of the SEEA, to move forward this agenda at pace. This Expert Group is proposed to operate under the Network of Economic Statisticians, working in partnership with key experts from a range of statistical communities, given the multidimensional nature work required. The aim would be to ensure the Group could access input from all regions to progress the recommendations in the background document. It is likely to need to convene virtually in most instances, with a small number of in-person meetings if required. The Network would recommend the UK continues to provide leadership in this role as a co-chair alongside a Global South leader in this debate.

Annex A: Weighting Methods

- A1. Considering the question of weights compels us to tackle the concept of value, as surely, we wish to use a structure whereby those components of greater value are given the greater weight, whether one is designing a composite metric or a dashboard. The necessity is to find a mechanism to expose, across a society, the relative value that people as a collective place on different outcomes or outputs in an unbiased fashion. In effect, we are looking to identify a mechanism to expose people's preferences in a format that is not subject to the importation of a bias or a priori opinions from the collecting body or agent. Broadly, there are two ways to consider this: either to identify a metric that reveals people's view through their actions (revealed preference) or directly reported through some selection methodology. In this section, we will briefly discuss five possible mechanisms: the use of **prices** as a numeraire, the use of **time** as a numeraire, the use of **voting** or **surveys** to directly report, and the use of **legislative and regulatory decisions** as a proxy for social preferences, and finally placing a value of a **wellbeing year (WELLBY)** (as per Layard and De Neve (2023) and using the change in WELLBYS times by the value as the weights.
- A2. Prices: Probably the most significant differentiator between economic statisticians and social statisticians is the economist's acceptance of prices as a valid mechanism for exposing revealed preferences on the basis that the 'invisible hand' of the market allows all consumers to express their preferences to reach an optimal outcome where each actor has maximized their wellbeing through the raising and lowering of prices until no-one's outcome can be improved without it being to the detriment of another. Under this model, prices reflect societal preferences^{liv} and relative weights in terms of wellbeing. Let us assume people value an increase in 0.1 on a 0-10 SWB scale equivalently, whatever source it comes from. Let us assume people have sufficient information to say that 0.1SWBs is worth £x, whatever value we may want to put on x. Let us assume that people's actions are rational and informed by this knowledge. It therefore would appear evident that the average person would use their disposable income to maximize their SWB, and hence if some activity/service / good provides them with 0.2SWBs of benefit, they would be willing to spend £2x to access it . If we all do this, then those who achieve the most SWBs from any given activity / service / good are most likely to be able and willing to purchase it, and the market should therefore act as an efficient mechanism for distributing these activities, services, and goods. And hence, if one accepts this story than the prices set in the market (let's call them, in the jargon, 'market prices') are independently set and unbiased estimators of relative value, then one can use these as an objective set of weights which fully incorporate the 'collective wisdom' of all of society and delivers a clean mechanism for removing subjective decisions from our policy-relevant composite index proxy for SWB.

- A3. Except, of course, we already know that SWB is driven by all sorts of factors that are not available on the market and hence, an over-strong reliance on market prices may either exclude or under-value the benefits we all receive. We therefore need to reflect on two issues: what to do with those items that do not have a market price, and what to do with those items whose market price excludes some part of its value (positive or negative)?
- A4. Dasgupta (2021) provides a framework to consider through the development of what he terms 'accounting prices', under which he looks to add (subtract) the value of externalities to deliver a price that would allow an 'inclusive' accounting model to cover not just the economy but other stocks and flows relating to natural and human capital, which are currently excluded from national accounts, and social capital, which is generally lacking a quantitative measurement framework in money terms. This model raises intriguing possibilities, but this is not the only option.
- A5. Time: Diane Coyle and Leonard Nakamura have, in recent documents, raised interesting questions about using time, as collected in time-use surveys as a weighting mechanism. This avenue of work takes time and people's allocation of time as the numeraire whereby people allocate a finite amount of time budget as they allocate a finite monetary budget. This also has the added advantage of being more 'democratic' and less 'plutocratic': all citizens have an equal quantity of time to allocate, whereas those with a higher income have greater weight when using prices. Again, however, the same challenge remains when using prices: how to account for items that affect wellbeing but do not impact people's usage of time, or may impact people differently^[vii]. Global warming happens 24/7; it may change some people's decisions very little, but others, if they need to devote time to fetching water or fuel, or if it changes working patterns, may feel it has a far greater impact.
- A6. **Voting:** Democratic societies look to reflect the preferences of the citizenry through the recording of ballots on a periodic cycle to enable a direct revelation of the opinions of all members of society. Whilst this may appear a strong mechanism to extract an understanding of trade-offs, there are a number of challenges:
 - Timing: Elections can be infrequent and, in some countries, non-existent, or corrupted. In such
 cases, these may serve as a poor measure of public opinion, at the very least in the periods
 between elections.
 - Conflicting viewpoints: Some countries have elections for different tiers of government and how to assess the signal about views when the same electorate elects different candidates with different slates of policies in local or national elections.
 - Franchise: Obviously, only those eligible to vote can participate. This normally precludes the young, may preclude those in prison or with certain types of criminal records, and definitely

- excludes those who are yet to be born. Many elections exclude some combination of foreign nationals, depending on exact political rules around eligibility and residency.
- Slate of policies: Whilst political parties put forward a set of policies, this does not imply the relative importance or weight attached to each or that individual voters may support all the positions taken.
- Variability: Elections can lead to a wholesale change in the dominant position as one government is elected and another defeated. This is probably not reflective of a wholesale change in the value system in a country.
- A7. **Surveys:** Surveys could offer a more timely and nuanced perspective on this topic, but in posing the question to respondents one would need to fall back on some form of relativistic weighting scheme to frame the question, although contingent valuation methods and discrete choice models do exist (see Coyle and Manley (2021) do provide methods for tackling this question which merit serious consideration.
- A8. Legislative and regulatory decisions: One approach that should, *in theory*, approximate societal weights and priorities are legislative and regulatory decisions, specifically the weights given to different aspects within regulatory and inspection regimes. In some discrete areas this may contain a valid approximation of the relative importance, but may struggle with looking across the full sweep of issues.
- A9. **WELLBYs:** Would it not be better, if wellbeing is the metric of interest, to weigh different drivers of wellbeing by the impact they have on statistical wellbeing-year, as advocated by Layard and De Neve (2023)? In the UK context, where HM Government has estimated that 1 WELLBY = £10,000-£16,000, then one could also have inter-changeability between WELLBYs and monetary terms^{|viii|} such that:

$\Delta WELLBY = \Delta Income \times \delta WELLBY / \delta Income$

- A10. Such an approach would close the loop more directly between the policy drivers of SWB and SWB itself, but may 'lock-in' affect sizes when these may actually vary across time or space. Nonetheless, this is undoubtedly an approach well worth considering and one which allows different policy initiatives to be valued *either* in monetary or wellbeing units in a fashion that allows wider comparability.
- A11. It is, of course worth noting that in the absence of a valid weighting structure, applying a neutral regime of equal weights (La Place) may appear to have some advantages in that it does not disproportionately over-weight some aspects through the subjective choices made, although it obviously has equal and opposite costs, that is it disproportionately over-weights other factors by

omission, as the allocation of even weights is in itself a subjective choice, and one which may be deliberately omitting any information from data actually possessed. Such a weighting regime, save in the singular case where all weights are equal, cannot be correct, and given that is the one case where we must presume, if we are debating weights at all, does not exist, the La Place approach clearly offers nil value: given the definition of the problem, it is clearly a biased approach masquerading as an exercise in unbiased practice.

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Endnotes

¹ This name and related acronyms are used throughout this document but should be considered only as a placeholder. As the document lays out, the ownership of this document would lie with a number of agencies and actors who collectively should take decisions concerning the final name of this document. Whilst we need a name to refer to, this document neither asserts a right to undertake this work, or make vital decisions: instead, it only makes a case for this work to be undertaken by the specialist community with the skills to undertake this

activity. The FISW can similarly be considered a draft working title.

- viii This paragraph should not be taken the SNA, SEEA and a successor to the SSDS are the only documents which we would refer to. Whilst undoubtedly central all three would continue to be underpinned by the variety of supporting and parallel manuals and guidance already in place. For example, the SEEA encapsulates specific guidance on water, energy agriculture, forestry and fisheries.
- ^{ix} These may include stock and flow presentations in physical and monetized volumes, coherent simulations, the creation of, distributional analyses and scenario analysis when planning where to allocate national budgets across varied domains.
- * Which can be paraphrased as 'the SNA is not a wellbeing framework and does not want to be a wellbeing framework, but does provide guidance on building key metrics which fit within a wellbeing landscape.'
- ^{xi} In 2020 decision 51/125 " f) Highlighted the efforts being carried out in the economic pillar, and requested the Chairs of groups in the environmental, social and cross-cutting pillars to initiate similar self-assessments as soon as possible" and then in 2021 Decision 52/116 "(d)In line with paragraph(f) of its decision 51/125 and paragraph 64 of the report of the Bureau on working methods, tasked the Bureau with initiating a Friends of the Chair process to review the area of social and demographic statistics, similar to the process of the Friends of the Chair review of economic statistics"
- xiixii For example, real volumes of population and labour measures are traditionally included in the SNA. The 2008 and 1993 SNA have separate chapters for these statistics for the description of productivity measures. Taking Population as an example, there is a strong relationship which merits further research on how best to reflect the needs of the two communities (see Heys et al 2023).
- xiii It is clear that there will continue to be significant interplay between the SNA and SPSS, even where domains remain wholly in the SPSS.
- xiv The SNA primarily focuses on economic matters and provides a comprehensive framework for organising economic statistics. However, (social) statisticians may find that certain aspects related to non-monetary components are not fully addressed by the SNA.
- ^{xv} Including, but not limited to groups or dimensions of special interest, including age (children / youth, working age, retied / elderly), gender and sex, working status (including volunteers, workers, unemployed, and those outside the labour market), Migrants, Refugees, Socio-economic status, ethnic and racial groups and disability status.
- xvi National, regional, and sub-national geographies, degree of rurality (rural, small town, city regions), enumeration and electoral geographies, areas with protected status (national parks etc).

ⁱⁱ Starting with the two seminal works delivered by Richard Stone: 'Towards a System of Social and Demographic Statistics (SSDS), 1970, 1975

Framework for the Integration of Social and Demographic Statistics in Developing Countries (1974)

iv See following sections for more detail.

^v The first version stretching to only 48 pages, as opposed to the 39 chapters proposed for the 2025 revision.

vi The versions of the SNA - https://unstats.un.org/unsd/nationalaccount/hsna.asp

The question of how social issues interact with the environment is a question this paper will consider later.

- xvii Matters of data collection and other similar issues would be addressed in supporting manuals, many of which already exist and can be mapped to this need. The SPSS would focus on outputs and structure.
- inactivity, unpaid domestic and care work, food and nutrition, environment, crime, political governance etc.
- xix In line with the SNA, this will guide how best to achieve international comparability whilst being permissive to different approaches countries may need to take given cultural, historical and budget positions around different models of data collection.
- **The spheres present the data domains where it is most likely to see trade-offs between different policies which simultaneously aim to increase well-being. The dimensions present the key ways well-being may vary, across time, place, and social group within and between these three spheres.
- xxi www.beyond-gdp.world
- xxii See for example, UNECE's recent work on wellbeing measures.
- xxiii See the European Commission's recent Horizon funded research projects, to give but one example.
- ^{xxiv}In some contexts, alongside measures of personal subjective wellbeing, it may also be necessary to consider collective or societal aggregate metrics of subjective wellbeing if the wellbeing of one part of society impacts on the wellbeing of another.
- ^{xxv} Recognising wellbeing is a relative term. A millionaire in a town of paupers is in a manifestly different position to a millionaire in a town of billionaires.
- xxvi Clark et al (2018) discuss that the biggest driver of adult life satisfaction is parental mental health when you are a child, which is something policy can very much leverage and support, for example through more early years support, subsidising child care, breastfeeding support, more health visitors, improving opportunities for peer support during maternity leave.
- Possibly over-simplify. This equation uses the author's terminology and does not seek to claim this is a representation of Layard and De Neve's own articulation of this point.
- Recognising that government may have a role to play in creating spaces for people to meet, in keeping inflation low so people have disposable income to go out or erect social / community spaces which encourage the development of such bonds.
- xxix Layard and Du Neve (2023).
- These could be considered in terms of 'luck' or factors outside personal or governmental control. Indeed, one can very easily imagine a situation where England winning the Football World Cup would be enough to disguise a worsening set of public policy outcomes in SWB data for the UK. Perhaps, in a statistical sense it is best to consider such exterior factors as an individual level error term, noting that this could be correlated across individuals, particularly within some stratified groups. It is also worth reflecting that research suggests that personal well-being assessments are linked to our biological make up. A person can be genetically happier, and more likely to put themselves in environments where they will gain well-being benefits. <<<Eleanor reference required>>>. As such, genetics or other factors may lead to sustained differences between countries, even holding such public policy metrics constant. International comparison would therefore need to be considered in terms of whether data may benefit from a process of normalization.
- And this is before we reach the question of whom to include: if improving the SWB of the UK population today was at the expense of the SWB of those living in other countries, or the SWB of future, yet-to-be-born UK citizens, would that change our perception of the policy which led to that improvement?
- ^{xoxii} Recognising that departmental siloes are frequently an issue which presents the consideration of such tradeoffs. 'Wellbeing governments', such as Wales, which have legislated around 7 wellbeing goals where steps to improve one goal induces a negative impacts on another goal compels further reflection and revision of the policy show this can be delivered if there is the political will.
- it is important to note that even 'objective' measures may have a 'subjective contributing factor: An area with residents who have strong feelings of 'belonging' are shown to have lower crime rates. These subjective assessments have real life tangible impacts and benefits. <<Eleanor reference required>>
- The easiest way to consider this is to imagine the difference between a car driver's display and a tray of volau-vents. The car display of dials is a dashboard in a very literal way, which a trained driver is able to interpret. If one is going fast, in a low gear, with too little oil in an overheating engine, then a rapid perusal of a combination

of speedometer, gear-stick, oil gauge and temperature gauge will tell the driver the remedial action to take – change up gear, slow down, and purchase some oil at the next available garage. The tray of vol-au-vents, a pick-and-mix of interesting, but ultimately unsatisfying facts with no coherent framework (which can be compared to the car-driver's user manual) is a very different beast. Dashboards structured in this type of demand-driven way may have some value, at least as vehicles to aid access to key metrics, but it is hard to see major policy-decisions being driven in this way: for example, no country, to the author's knowledge, ran its COVID response from an SDG dashboard

- By which this document means suffering from (at least the appearance) of subjective viewpoints being applied via the weighting which result in a 'biased' conclusion.
- xxxvi At least if they did not agree with the weighting methodology.
- xxxvii Annex One discusses briefly the key options available currently in terms of generating weights.
- wxxviii Which would allow more to be produced from the same inputs and hence may reduce the demand for capital per unit of output or per capita to achieve a sustainable model of living.
- xxxix Because they have no relationship to output produced in the national accounts.
- xl 'Dad's taxi', producing own-account transport services, utilises a car, for example.
- xli Taking account of any changes in definitions or scope agreed as part of the 2025 SNA revision.
- ^{xiii} For example, the substitution between free digital goods and traditional market goods causes existing estimates of national output to become a misleading indicator of welfare (see Coyle (2019)).
- xliii The new SNA revision scheduled for 2025 is in any case going to give a bigger role to net measures, so focussing on net measures such as NNP or NDP would also be a step forward in measuring wellbeing, over and above GDP, as the SNA revision makes clear.
- xliv Noting that the inclusion of the informal and black economy erode this point at the margin.
- xiv The issue of deflators, and how these are assembled is obviously a key issue here, and the fact that these can vary according to the comparison one is wishing to make: see Aitken and Weale (2018)
- xivi We should also note that national borders may not align to ecological boundaries which, from an environmental perspective may have an impact.
- xlvii https://www.oecd.org/wise/better-life-initiative.htm
- xiviii https://www.oecd.org/wise/oecd-guidelines-on-measuring-subjective-well-being-9789264191655-en.htm.
- xlix https://www.un.org/en/development/desa/population/publications/development/NTA Manual.asp.

Ihttps://data.consilium.europa.eu/doc/document/ST-10414-2019-INIT/en/pdf

ii See for example:

https://www.pbl.nl/sites/default/files/downloads/gb2023_country_approaches_to_the_sdgs_and_wellbeing_overview_report.pdf and https://www.gerald-berger.com/wp-content/uploads/2022/07/Second-Report_Country-approaches-to-the-SDGs-and-wellbeing_case-studies_FINAL_for-publication.pdf

- ^{lii} Objective wellbeing reflects the functioning and capabilities of individuals. Capabilities refer to the opportunities and the freedoms available to create a life that you value. Objective wellbeing is typically measured along a number of dimensions, including health, education, security, living standards, environmental conditions, and social factors. See IIASA (2023).
- From the point of view of the FISW, the primary questions revolve around the trade-offs which need to be made between different policy domains, and therefore a key aspect of the FISW will be the bridging tables which will deliberately confront data from the varied domains. However, this equally applies to the bridging tables between the SEEA, SNA and SPSS, although these should fall into the scope of the FISW by preference.

Clearly with n domains there will exist n-1 bridging tables which will require populating. Again, these can be ranked and prioritised, at least for initial implementation. In reality, this task will be made more complex by the fact that any bridging table may be in terms of stocks, flows, key metrics, composites or distributions, suggesting the true maximum number of bridging tables or similar presentations will, as a minimum stand at c(n-1) where c represents the output components. Identifying which of these should be prioritised, and equally which can legitimately be concatenated into a composite index is a key priority.

- liv Noting these can change through time, as the Covid pandemic starkly revealed.
- ^{lv} Ceteris paribus, obviously diminishing marginal returns are an issue here.
- lvi Formal proofs of this are available from, for example the works of Dasgupta and others.

Noting this can be available in some Time Use Surveys

|viii | The authors would like to thank Fabrince Murtin (OECD) for the insightful comments that deriving monetary values such as these 'can be tricky due to income measurement issues and attenuation biases.'