

Technical Workshop on Time, People, Places and Relationships: A New Lens to Organize Social and Demographic Outcomes

Ottawa, Canada, 9 - 11 September 2025

REPORT

1. The Workshop was convened by the Statistics Division of the United Nations Department of Economic and Social Affairs (hereafter UNSD), in cooperation with Statistics Canada.¹ It brought together over 30 experts from Canada, Indonesia, Lithuania, Mexico, Morocco, Netherlands (the Kingdom of), the United Kingdom, and Uruguay, as well as from OECD, ECLAC, ESCAP and UNSD.
2. Experts exchanged perspectives and recommendations drawn from national, regional and global practices to feed into the design of the Central Framework for a System of Population and Social Statistics (hereafter CF-SPSS), focusing on the five building blocks within CF-SPSS – people, time, places, relationships and outcomes – and their interactions.
3. The CF-SPSS aims to provide a structure and common language to coherently organize social and demographic statistics, traditionally developed in silos, ensuring greater harmonization and interoperability across statistical domains concerning social outcomes. Once established, it will serve as a statistical system to describe societies, equivalent to the System of National Accounts (hereafter SNA) and the System of Environmental-Economic Accounting (hereafter SEEA), informing future indicator frameworks for inclusive and sustainable development such as “beyond GDP” and post-SDG metrics.
4. The Workshop was opened by Ms. Josée Bégin, Assistant Chief Statistician, Statistics Canada. Ms. Francesca Grum, Assistant Director, UNSD, delivered welcome remarks, followed by Ms. Inga Masiulaitytė-Šukevič, Statistics Lithuania, and Mr. José Arturo Blancas, National Institute of Statistics and Geography (hereafter INEGI), as Co-Chairs of the Friends of the Chair Group on Social and Demographic Statistics.
5. The Co-Chairs also briefed experts on the preparation and progress of a document entitled “Strategic Recommendations for Strengthening Social and Demographic Statistics”, to be submitted as a background document to the 57th session of the Statistical Commission. The document details key challenges in the field of social and demographic statistics, strategic recommendations, and approaches to enhance their role and the proposal for a Group’s successor mechanism to implement these recommendations, as its mandate concludes in March 2026.
6. In his concluding remark, Mr. André Loranger, Chief Statistician, Statistics Canada, underscored the growing demand for “bigger, better, faster, cheaper” statistics, coherent among statistical domains, linking this initiative to broader Beyond GDP and well-being agendas. Building on existing global frameworks, he also stressed keeping people at the

¹ The workshop’s agenda and presentations are available online at <https://unstats.un.org/unsd/demographic-social/meetings/2025/focgsd-wk-20250909/>

center of measurement, capturing well-being, trust, equity and relationships across time and place.

7. The remark drew parallels with the evolution of the SEEA. Mr. Loranger explained that mainstreaming the SEEA had been a gradual, incremental process rather than a rapid transformation. He cautioned against expecting immediate equivalence between the CF-SPSS and the other established systems, such as the SNA. Instead, persistence, consistency, and incremental progress are essential for long-term success.
8. Key conclusions included broad agreement on the structure of the CF-SPSS and endorsement of a work plan to guide both the finalization of the Group's work and preparation of its successor mechanism. The final output of this work will be submitted as a background technical report to the Commission.

Principles

9. The CF-SPSS is intended to **serve multiple purposes**. It should be usable for policy target-setting, monitoring, research across disciplines, evaluation, and forward-looking analysis. The new statistical system should also provide data ready not only for current indicator frameworks, such as the Sustainable Development Goals (hereafter SDGs) Indicator Framework, but also for future frameworks for inclusive and sustainable development, including the "beyond GDP" dashboard or post-SDGs metrics. In this context, the system should be **nimble, agile and responsive** to emerging data needs and policy priorities, while enabling greater international comparability across regions and countries to better inform policymaking.
10. The CF-SPSS should **enshrine the principle of universality**. First, its taxonomy should avoid cultural bias, ensuring that the system is designed for all lives, not only data-rich regions. To this end, the successor mechanism should build a common glossary that is culturally and politically neutral, proactively involving the Global South via global consultation. Second, the CF-SPSS should allow for gradual implementation by horizons² so that all countries can participate, depending on their statistical capacities and available resources.
11. The CF-SPSS should be **developed gradually, starting with small, simple and agreed areas**. Missing or hard-to-standardize areas (e.g., some cultural dimensions) can be developed via experimental or satellite accounts, mirroring how the SEEA started with economy–environment interactions and then enabled wider applications once the data infrastructure existed.
12. The CF-SPSS should **promote "vertical and horizontal integration"** within and across statistical domains concerning social outcomes. Experts recognized the value of common, hierarchical, mutually exclusive classifications in social and demographic statistics, which enable users to navigate from high-level population views down to more granular groupings (or segments) over time and places. Statistics Canada's approach to standardize variables

² The Strategic Recommendations document elaborates gradual implementation of the CF-SPSS by three horizons: Basic, Detailed and Extended Horizon.

across surveys and disseminate them in consistent formats³ demonstrated its value and great use, as it enables policymakers and the public to compare outcomes across different population groups and to allocate budgets or resources more effectively.

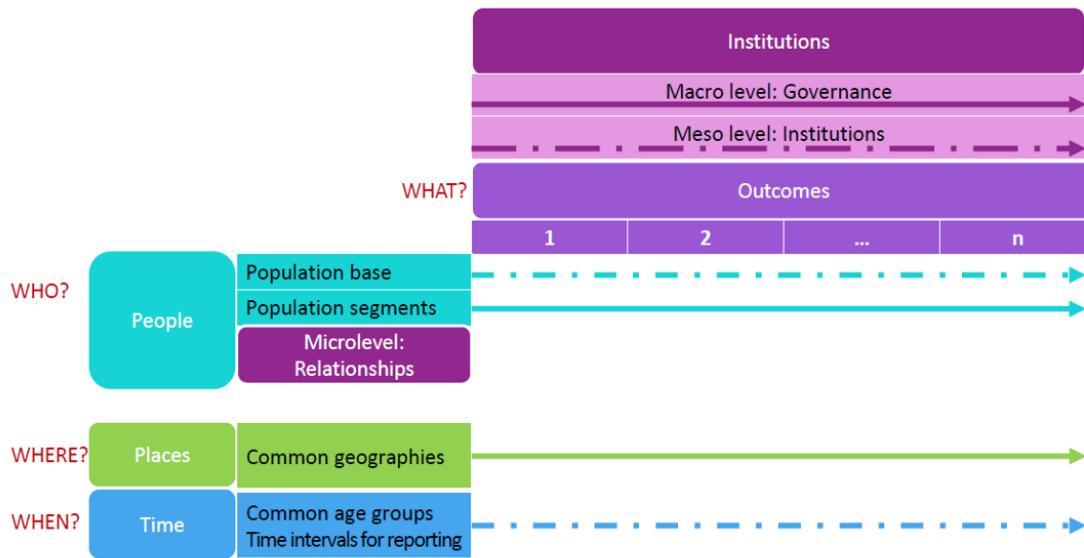
13. Once established, the CF-SPSS will serve as a statistical system **equivalent of the SNA and the SEEA**. Accordingly, horizontal integration across these systems should also be promoted through the use of common concepts, definitions and classifications. Revision cycles should be coordinated with the other systems to manage workload and maintain alignment.
14. Experts emphasized that **communication should remain simple and self-explanatory** so that the CF-SPSS is accessible to policymakers and the public.

Structure: Scope, Boundaries, Building Blocks and Units of Measurement

15. Experts agreed that the scope of the CF-SPSS is to describe “a society”. However, they did not reach agreement on how “a society” should be defined. The definition should be further discussed and determined within the successor mechanism.
16. The CF-SPSS must also capture interactions with the economy and the environment (for example, how nature shapes social identity and health). In this regard, shared concepts and boundaries with the SNA and the SEEA are essential, so that statisticians in different fields can communicate with each other and clearly determine which elements belong to which system. As the SNA already exists and the CF-SPSS does not yet, many of the economy–society boundary lines have effectively been drawn by the economic statistics community. The social statistics community should re-examine these boundaries and define a pragmatic process to resolve inconsistencies. The Framework for Inclusive and Sustainable Development, currently being developed by the Expert Group on Well-being Measurement, may also provide useful insights into this delineation.
17. Experts reaffirmed that people, places, time, relationships and outcomes constitute the “building blocks” or the main components of the CF-SPSS. Furthermore, “institutions” and “events” were recognized as other potential components.
18. The building blocks have been described as
 - a. relevant variables to be measured;
 - b. means for data integration; and
 - c. analytical perspective on social phenomena.
19. Figure 1 illustrates the agreed structure of the CF-SPSS, mapping the building blocks to core questions: people (who), places (where), time (when), relationships – divided into micro-level, meso-level (institutions) and macro-level (governance) – and outcomes (what).

³ Statistics Canada, “Unlocking the Data through Standard Tables”

Figure 1



20. Experts agreed that people are the primary actors in society and constitute the basic unit of measurement in the CF-SPSS. Households and families were also recognized as basic units of measurement.

21. In addition to these micro units, experts emphasized that “institutions”, such as communities, are important actors in the architecture of society and are essential for any intervention logic that explains how outcomes arise. Accordingly, experts agreed that the CF-SPSS includes “institutions” (meso) and “governance” (macro).

Building Block: People and Population Data System

22. A Population Data System (hereafter PDS) serves as a basis for the CF-SPSS. It is defined as an integrated system linking censuses, surveys and administrative registers (as well as citizen-generated data and privately held data) to produce coherent, multidimensional and longitudinal population statistics.

23. A mature PDS should have the following properties:

- Providing an up-to-date list of all usual residents in a given territory at a specific point in time (population stock).
- Supporting alternative population bases, such as workday population.
- Capturing flows (births, deaths, internal/international migration and household formation);
- Enabling flexible and standardized disaggregation (e.g., age, sex, marital, disability, and migratory status) in alignment with international classifications and national legal definitions;
- Providing near real-time information on population stock, flow, composition, distribution and characteristics and their transitions over time (e.g., student → employed → retired);

- f. Building ethical governance for linked sensitive data;
- g. Linking events longitudinally at the individual level and improving access to life-course microdata;

24. Transitioning to a mature PDS requires appropriate governance arrangements: clear roles for national statistical offices and data providers, unique identifiers, common metadata and interoperability standards, secure access protocols, privacy safeguards and investments in infrastructure (e.g., comprehensive and well-functioning civil registration and vital statistics system and border movement records) and public trust.⁴
25. Several experts argued that the development of the CF-SPSS should center on outputs (concepts, stocks/flows, transitions, outcomes) and international comparability, while leaving inputs (how countries collect/link data, build registers) to existing and future implementation manuals.

Building Blocks: Places and Time as Integrators

26. Place is an anchor concept that makes social data more granular, timely and policy-relevant, especially for inherently spatial outcomes such as migration. Experts proposed aligning the CF-SPSS with international geospatial frameworks, including the Global Statistical Geospatial Framework and the Integrated Geospatial Information Framework.
27. Time is presented as a core integrator across people, relationships, places and outcomes. Many of today's biggest policy challenges (e.g., ageing, migration and inequalities) require temporal insight, so the CF-SPSS must embed time at its center to enable modelling and policy design.
28. Three practical approaches are highlighted. The life-course approach tracks age-linked transitions using longitudinal data to reveal long-term disparities such as ethnic health inequalities. Age-Period-Cohort analysis disentangles age effects, time-specific shocks (e.g., pandemics) and cohort patterns (illustrated with smoking heat maps). Intergenerational analysis assesses equity across cohorts (e.g., housing affordability gaps).
29. As a practical application linking social and demographic data with places and time, the People-Time-Event-Location (PTEL) approach was introduced by the National Institute of Statistics of Uruguay. In this approach, person is the core unit, time adds duration and trend, events capture transitions (births, graduation, jobs, migration, health shocks) and location grounds disparities and service access. Together, these elements transform static snapshots into dynamic trajectories suitable for real-time monitoring and retrospective evaluation.
30. Uruguay's experience provides a strong example of efficient data warehousing. The approach ingests diverse sources and applies harmonization to produce multi-dimensional "cubes" for analysis (e.g., education-to-employment pathways, mobility, poverty dynamics).

⁴ The Methodological Maturity Assessment Tool details elements required in transition from survey-based system to register-based system.

31. Experts emphasized that context matters. Integrating life-course data with geospatial context and robust data linkage provides a holistic and dynamic view of equity, mobility, and policy effects.

Building Block: Outcome

32. Statistics Netherlands highlighted three approaches to describing “social outcomes”;

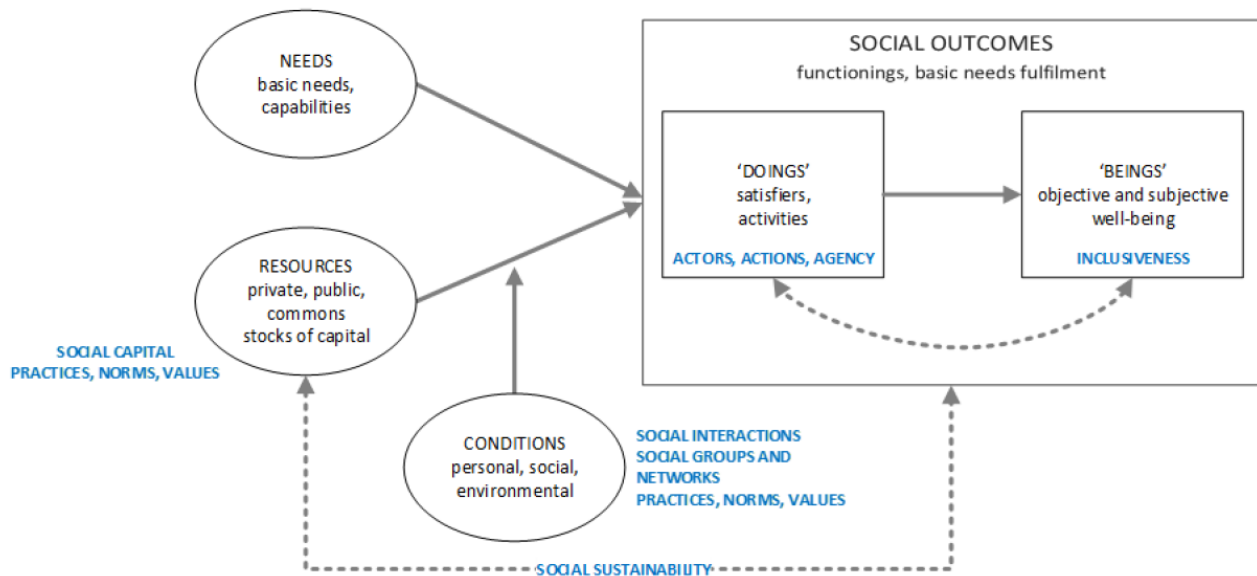
- a. Levels: the current quality of life (objective/subjective) and its trends;
- b. Process: the ways in which outcomes are produced (or causal links to outcomes); and
- c. Valuation: the extent to which social outcomes reflect what society value.

33. With regard to Levels, the expert noted recent convergence toward common principles in measuring well-being across various frameworks, drawing on the United Nations Charter’s aim to “promote social progress and better standard of life in larger freedom” as well as the Capability Approach, Needs Theories and literature on human development and well-being. These principles include;

- a. Well-being is multidimensional;
- b. Outcomes, rather than inputs, should be measured; and
- c. Current well-being should be distinguished from future well-being.

34. Concerning Process, the expert observed that the present framework presents a “black box” between inputs (people/relationships/time/places) and outcomes, and called for an explicit logic of production of outcomes. Figure 2 illustrates a proposal based on Basic Needs Theory and the Capability Approach. The production logic may be further elaborated, with the involvement of a wider range of subject-matter experts and stakeholders, within the successor mechanism.

Figure 2



35. With regard to Valuation, experts agreed that the successor mechanism should decide on the set of social outcome domains of the CF-SPSS based on science and consensus (e.g., ongoing deliberation within the High-Level Expert Group on Beyond GDP).
36. Experts acknowledged that challenges may arise in defining scope: should the CF-SPSS focus solely on outcomes, or also include drivers and conditions? They noted the difficulty of maintaining strict boundaries, as outcomes in one domain often act as drivers in another.
37. Experts further discussed whether the CF-SPSS explicitly recognizes its normative dimension, since the selection of outcome domains is inherently normative and signals what is considered important and worthy of investment. Some suggested that rather than avoiding the issue, the CF-SPSS should explicitly acknowledge its normative basis while ensuring that choices are grounded in science and broad consensus.
38. Several experts emphasized that institutions are actors with agency that mobilize resources and shape outcomes (e.g., schools in education). Governance should be included in the CF-SPSS as a cross-pillar influence, with the social perspective clarifying how institutional functions produce social outcomes.
39. Consensus emerged around the need to begin with a limited set of core social outcome domains (e.g., health and education) and to expand them iteratively. The successor mechanism could issue a standard tabulation shell building on the PTEL-based indicator design sheets, developed by the National Institute of Statistics of Uruguay (Figure 3), thereby promoting both vertical and horizontal integration.

Figure 3: Example of PTEL-based indicator design sheet

Category	Education
Social Outcome	Greater access and equity in education
Indicators	<ul style="list-style-type: none"> • Net enrollment rate in primary and secondary education • % of youth (15–24) completing secondary • Average years of schooling (25+)
Facts (atomic events/records)	<ul style="list-style-type: none"> • Enrollment of a student in a school year • Completion of a specific education level
PTEL approach	<ul style="list-style-type: none"> • Educational attainment of an individual
Measures	<ul style="list-style-type: none"> • Number of enrolled persons • Number completing education • Average years of schooling
Dimensions	<ul style="list-style-type: none"> • Time (year, quarter) • Age group • Sex
PTEL approach	<ul style="list-style-type: none"> • Geographic location (Dept./Locality) • Education level
Granularity	Individual person by school year and education level in a given locality
Business Rules	<ul style="list-style-type: none"> • Age groups in 5-year bands (0–4, 5–9, ..., 80+) • Education level based on ISCED classification • Enrollment defined by official school records

Building Block: Relationships

40. Statistics Canada and the High Commission for Planning of Morocco presented the proposed framework for measuring relationships (hereafter relationships framework) and their respective exercise to map existing relationship measures onto the relationship framework.
41. Drawing on two major international efforts,⁵ the proposed relationships framework consists of four dimensions (extent, function, quality and impact) and three levels (micro, meso, macro). Figure 4 illustrates its matrix and provides examples of metrics. The relationships framework aims to capture both interpersonal and institutional dimensions of relationships.

Figure 4

PEOPLE (Unit of measurement for social statistics)						
People interact in Multi-dimensional RELATIONSHIPS						
RELATIONSHIPS GRID – Illustrative Examples of Relationship Measures						
Measurement Dimension	Relationship Level					
	Individual	Micro Household	Family	Community	Meso Sector/ Institution	Macro Society/ National/ Global
Extent - stock (how many); characteristics (proximity, similarity, diversity, etc.)	e.g., # of friendships	e.g., household composition	e.g., marital status, # children, intergenerational relationships, siblings	e.g., community groups and organizations, neighbours	e.g., connections with colleagues, student to student, student to teacher, between teachers, roommates	e.g., in-group relationships, between-group relationships
Function - activity, service	e.g., social and emotional support, someone to count on	e.g., caregiving, sharing of resources	e.g., child-rearing	e.g., provision of local amenities/supports, community disaster support	e.g., education	e.g., governance, social support programs
Quality - (e.g., weak vs strong, close vs far, positive vs negative, unifying vs polarizing)	e.g., perceived relationship strain	e.g., satisfaction with division of household chores	e.g., satisfaction with relationships; marital quality	e.g., sense of belonging to community	e.g., skills	e.g., confidence in institutions
Impact – intrinsic evaluations, extrinsic valuations (e.g., discrimination, social inclusion/exclusion as +/- impacts of relationships)	e.g., perceived impact of emotional, informational, tangible support; loneliness;	e.g., household economies of scale	e.g., generational wealth transfers	e.g., community safety and socio-economic opportunities such as local schools	e.g., earnings	e.g., peace and economic stability
Interactions/Relationships between People occur in PLACES (Physical) and Spaces (Virtual); complexity of flows (mobility, evolution over time)						
Interactions/relationships between People occur in TIME (across the lifecycle (childhood, youth, adolescence, adulthood, elderly); from transitory interactions to life-long bonds); complexity associated with flows (Frequency, Duration, Contextual Era)						

42. Experts conducted case studies in Canada and Morocco, mapping existing relationship measures onto the relationship framework and gathering feedback from internal subject-matter experts. The exercise highlighted the need for a foundational definition of relationships, as none currently exists in statistical standards.
43. Using their data, the OECD showed how measures of extent (e.g., frequency of in-person interactions), function (e.g., loneliness) and quality (e.g., dissatisfaction with relationships) reveal different patterns over time. Extent indicators have declined gradually over the long term, while quality/function indicators show smaller, shorter-term declines.⁶ This distinction

⁵ (a) Dr. Julianne Holt-Lunstad's SOCIAL framework, which synthesized evidence linking relationships to mortality and proposed a common language around four elements: structure, function, quality and multidimensional aspects; and (b) OECD framework to measure social connectedness, which adopted three of these dimensions (structure, function and quality) and added communal and societal connectedness.

⁶ OECD, forthcoming, "Home Alone? Social Connections Across OECD Countries (tentative title)"

underscores the value of measuring several dimensions to capture complementary aspects of social connections.

44. Experts reaffirmed the conceptual distinction between “social connectedness” as an outcome and “relationships” as a foundational building block of the CF-SPSS. The former examines the impact of human interaction on people’s health, well-being and other social outcomes in order to inform policy making, while the latter considers the broader role of relationships and institutions (as formalized relationships) in structuring societies and organizing statistics.
45. Experts agreed on the need to refine terminologies used within the relationships framework. For example, the term “relationships” might be misunderstood by wider audiences as only interpersonal ties, whereas it also refers to institutions and governance in the relationships framework. Suggestions included distinguishing levels (micro = relationships, meso = institutions, macro = governance) or refining the terminology to ensure clarity across languages through user testing (e.g., focus groups).

Next steps

46. Experts agreed to complete the following tasks before the fifty-seventh session of the United Nations Statistical Commission in March 2026:
 - a. Statistics Canada and Statistics Netherlands develop a preamble detailing the rationale for establishing the CF-SPSS and its structure and common language;
 - b. By 14 October 2025, all contributors will revise their respective inputs for the technical report, reflecting on the discussions during the workshop and further elaborating on the interactions among the building blocks of the CF-SPSS;
 - c. By 30 October 2025, Statistics Canada will consolidate all inputs into a draft report and circulate it to the Group through UNSD; and
 - d. By 15 November 2025, all members of the FOCG-SD will provide comments on the draft report, after which Statistics Canada will finalize the report and submit it to UNSD in early January; and
 - e. UNSD will edit the report and upload it as a background document to the website of the Statistical Commission by 31 January 2026.
47. Experts also agreed that the following tasks should be undertaken by the successor mechanism of the Friends of the Chair Group on Social and Demographic Statistics:
 - a. Agree on an international standard approach to population segmentation;
 - b. Develop and agree on a set of social outcome domains;
 - c. Identify gaps and misalignment in domain-specific concepts, definitions and classifications;
 - d. Propose a process for the development of missing classifications or revision of existing ones;
 - e. Continue work on the relationships framework;
 - f. Decide on the prioritization of the mechanism’s activities and tasks;
 - g. Enhance communication; and
 - h. Mobilize resources.
