

**United Nations System Chief Executives Board
for Coordination (CEB)**

First Regular Session for 2015

FORMAL SESSION

ATTACHMENT IV

Data Revolution

Data Revolution: UN System Approach

Executive Summary

1. Access to and use of data in analysis and monitoring forms the basis for effective decision-making. The United Nations system is positioned to play a pivotal role in supporting to the international community in monitoring and meeting progress towards global development objectives by better leveraging the wealth of data it generates and publishes.
2. After the Secretary-General's High-Level Panel of Eminent Persons on the Post-2015 Development Agenda highlighted the need for a "data revolution" as part of an accountability framework, the Secretary-General created an Independent Expert Advisory Group on a Data Revolution for Sustainable Development (IEAG) to help shape "an ambitious and achievable vision" for a future development agenda beyond 2015 to succeed the United Nations Millennium Development Goals (MDGs), by assessing new opportunities linked to innovation, technical progress and the surge in growth / number of new public and private data providers to support and complement conventional statistical systems and strengthen accountability at the global, regional and national levels. Following the release of the IEAG report "A World that Counts: Mobilising the Data Revolution for Sustainable Development" and in the context of its session in November 2014, the CEB called for a proposal of a UN system response.
3. In its last session, CEB tasked UNESCO, the World Bank Group, UNDP, UNICEF, UNFPA, UN/Regional Commissions and UN/DESA to form a working group of experts from their agencies to lead this effort. Using the IEAG report and existing/ongoing efforts as the basis, the group has identified both initial actions as well as further steps that together form an initial approach for the UN system that responds to the call to leverage the data revolution.
4. The working group's proposed approach, as presented herein, prescribes internal coordination activities that strengthen the UN system's capacity to utilize existing, new and emerging sources of data. The four proposed initiatives, drawn largely from the IEAG recommendations, drive innovation, strengthen data exchange capabilities, support knowledge-sharing and identify existing data repositories. Together, these initiatives broaden the UN system's capacity to harness the data revolution.
5. While these initiatives begin to address elements of the data revolution, the UN system will need to formulate a comprehensive response that addresses the revolution's complex nature. Therefore continued consideration by the CEB, UN System Chief Statisticians, and existing coordination mechanisms such as, *inter alia*, and the Committee for the Coordination of Statistical Activities (CCSA), is needed. Furthermore, with the inter-governmental process, in particular the UN Statistical Commission, also working to define a work programme for the implementation of the data revolution in support of sustainable development, the UN system must ensure that further action integrates and supports these activities.
6. This proposed approach to the data revolution is only a starting point to address the inherent complexity, and it needs to further evolve alongside other ongoing/unfolding intergovernmental processes and initiatives, particularly those under the leadership of the United Nations Statistical Commission and those related to Financing for Development data as well as using existing coordination mechanisms for data.

I. Introduction

1. The United Nations is playing and must continue to play a lead role in the data revolution. By addressing the risks and leveraging and supporting the opportunities offered by the data revolution, the UN system is in a unique position to drive a coordinated approach that bolsters the effective and innovative use of data for achieving development goals.

2. The proposals presented to the UN system's Principals in this document represent a starting point towards the development of a comprehensive UN system response to the data revolution in which all entities of the UN system join efforts, in a coordinated manner, to ensure that reliable, timely, and accurate data forms the basis of decision-making. While a few initiatives have already been defined and are being launched by various CEB members, there are some areas that need further discussion and guidance, including those related to the development and adoption of principles and standards on data protection, privacy and governance and the establishment of policies on open data, among others.

II. Background

3. In 2012, anticipating the conclusion of the Millennium Development Goals (MDGs) in 2015, the Secretary-General convened a High-Level Panel of Eminent Persons on the Post-2015 Development Agenda. The resulting report, "A New Global Partnership: Eradicate poverty and transform economies through sustainable development," in addition to proposing five transformative shifts for the post-2015 development agenda, also called for a "data revolution for sustainable development....to improve the quality of statistics and information available to citizens" that can "actively take advantage of new technology, crowd sourcing, and improved connectivity to empower people with information on the progress towards the targets".

4. The High-Level Panel report noted that the growth in the capabilities of information technology provides an opportunity to strengthen the use of data and statistics as evidence for decision-making as well as for accountability purposes. The report stressed the need for data to reach the neediest and that better data and statistics support efforts to track progress on development initiatives, concluding that "a true data revolution would draw on existing and new sources of data to fully integrate statistics into decision-making, promote open access to, and use of, data and ensure increased support for statistical systems".

5. To further elaborate the concept of a "data revolution," the Secretary-General convened an Independent Expert Advisory Group on a Data Revolution for Sustainable Development (IEAG). The resulting report, "A World that Counts: Mobilising the Data Revolution for Sustainable Development", explores the key opportunities and risks associated with a data revolution for sustainable development and presents recommendations for action which aim to exploit these opportunities and mitigate the risks.

6. The IEAG report defines the data revolution as:

"An explosion in the volume of data, the speed with which data are produced, the number of producers of data, the dissemination of data, and the range of things on which there is data, coming from new technologies such as mobile phones and the "internet of things", and from other sources, such as qualitative data, citizen-generated data and perceptions data."

7. The IEAG report identifies two qualities that define the data revolution for sustainable development, namely: the integration of new data with traditional data and an increase of the usefulness of data.

8. The data revolution and the recommendations of the IEAG report were the subject of a discussion by the CEB at its 2nd regular session in November 2014, and concluded with a call for the HLCM, HLCP and UNDG, through a coordinated effort drawing on their respective areas of expertise and in collaboration with existing inter-agency mechanisms, to develop a coherent UN system approach to contribute to the data revolution, to be presented to CEB at its 1st regular session for 2015.

9. CEB members from UNESCO, the World Bank Group, UNDP, UNICEF UNFPA, , UN/Regional Commissions and UN/DESA were tasked to form a working group of experts from their agencies to lead this effort. Using the recommendations of the IEAG report and the existing/ongoing efforts as the basis, the group has identified an initial set of concrete initiatives and follow-up actions that allow the UN system begin to respond to the challenges and harness the opportunities of the data revolution.

10. Several decisions of the United Nations Statistical Commission taken at its forty-sixth session also address the recommendations of the IEAG, including:

- The endorsement of a roadmap for the development and implementation of an indicator framework for the post-2015 development agenda (which foresees, inter alia, the development of a proposal for a sustainable development goal data analysis and visualization platform);
- The recognition that the implementation of the data revolution might take different forms depending on the priorities and the state of development of the countries and that National Strategies for the Development of Statistics will need to be upgraded to include the elements of the data revolution that are relevant to national priorities; and
- The recognition that a World Forum on Sustainable Development Data would be a suitable platform for intensifying cooperation with various professional groups such as IT specialists, geospatial information managers, data scientists, and users, as well as with civil society stakeholders, and
- The definition of the mandate for a Global Working Group on Big Data for Official Statistics.¹

III. Approach for a UN system response to the Data Revolution

11. Given the multifaceted, dynamic nature of the data revolution, the development of a comprehensive, strategic response by the UN system is a highly complex endeavour. However, pursuing first a small number of achievable initiatives while simultaneously developing mechanisms to consider additional and broader actions will move the UN system forward and make a unique contribution to the data revolution.

12. Drawing on the recommendations contained in the IEAG report, the activities presented in this document focus on four “quick win” initiatives (described in detail in the annex), aimed at strengthening the UN system’s internal capacity to collectively address the challenges and harness the opportunities of the data revolution for sustainable development. These initiatives are:

- a. Expand the capacity to drive data innovation (UN System Data Innovation Lab);
- b. Strengthen data exchange and communication capabilities (Data visualization and Dashboard);

¹ http://unstats.un.org/unsd/statcom/commission_46th_session.htm.

- c. Create and strengthen partnerships for coordination and capacity-building in data-driven sustainable development (World Forum on Data); and
- d. Promote greater use of existing data assets within the UN system and by the public (UN System Data Catalogue).

13. The initiatives described in the annex recognize the existence of various intergovernmental processes that address the challenges and opportunities of the data revolution. This approach aims to strengthen the UN system's internal capacity to respond to current and future mandates that may emerge from those processes.

14. Each of these four initiatives integrates cross-cutting themes, such as partnership and technology, recognizing them as critical success factors. Furthermore, while each initiative will require the adequate allocation of resources, funding requirements are not specified at this point; however, the implementation of the initiatives is expected to draw largely (although not exclusively) on resources, expertise and mechanisms that already exist within the UN system.

15. This approach also foresees a broader consultation process across all CEB member organizations, so that a more comprehensive roadmap towards the data revolution for sustainable development can be developed and implemented within the UN system. Such a roadmap will provide the necessary framework to strengthen the UN system's internal capacity to respond in a coherent manner to both current and future mandates from Member States.

IV. Moving forward

16. The complex, multifaceted and dynamic nature of the data environment demands a flexible approach, beginning with a small number of achievable initiatives while simultaneously developing plans that require further analysis. Therefore, while moving forward with the initial elements described above, the UN system must continue working on a comprehensive approach to the data revolution for sustainable development in the longer term.

17. In order to ensure that all inputs from UN system entities are considered, a broad consultation will be carried out by United Nations Secretariat by means of an on-line survey. The consultation will seek the inputs from CEB members regarding their vision of how their respective organizations and the UN system as a whole should realize the potential of the data revolution for sustainable development, both in their own internal operations and in support to countries. Further, it will be used to document the inter-linkages of the key elements of the current initiatives to ongoing inter-governmental and inter-agency processes, and to identify additional actions, both planned and under way, that aim to improve data quality and integrity, disaggregation, timeliness, transparency and openness, usability, governance resources and data rights within the UN system. Finally, the consultation will help identify gaps between current internal processes and the realization of the various data revolution principles, including good practices and standards for the collection, processing, and dissemination of data, as well as with respect to capacity building, technology, innovation and analysis.

18. The results of this consultation, as well as additional inputs from across the UN system will form the basis for a comprehensive action plan to implement and further develop the UN system response to the data revolution. Such an action plan, which should bring to the table specific implementation issues such as standards, policies, technology, analysis, financing and governance, will be presented for CEB's consideration at a futuresession.

19. Furthermore, an internal UN system response must fully acknowledge the existence of on-going processes and programmes at different inter-governmental levels and by individual CEB members, all of which are geared towards addressing the risks and realizing the opportunities of a data revolution in

different contexts. It should also recognize and establish the proper channels to interact with other coordination mechanisms, both existing and being formed, which are also responding to the call for a data revolution. In this regard, the UN system will benefit from streamlining, especially through the continued commitment of CEB members, the inputs from intergovernmental and inter-agency processes. Chief among these is the United Nations Statistical Commission, which the Secretary-General has called upon to also formulate a programme of work, supported by the Statistics Division of the United Nations Secretariat.

20. Other coordination mechanisms will also play a crucial role in the implementation and further refinement of the UN system response, including, but not limited to, the following:

- The Committee for Coordination of Statistical Activities (CCSA) - responsible for promoting the coordination, integration and complementarity among the statistical programmes and fostering good practices to support the data revolution in the work of international organizations. It focuses its work on the efficient functioning of the statistical system, common standards and platforms, development of methodologies, inter-institutional support, outreach, and advocacy for statistics.²
- The Coordination Group of the Statistical Services of UN organizations - composed of the chief statisticians from the United Nations Funds and Programmes, Specialized Agencies and the UN Secretariat, and which reports to the United Nations Statistical Commission on the implementation of improved coordination.³
- The five statistical conferences and committees - responsible for guiding the statistical work programmes of the UN Regional Commissions and coordinating the activities of international and national statistical systems at the regional level.⁴
- The United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) - leading the agenda for the development and use of global geospatial information, and providing a forum to liaise and coordinate among Member States, and between Member States and international organizations.⁵

² http://unstats.un.org/unsd/acsub-public/workpartner_ccsa.htm

³ See <http://unstats.un.org/unsd/unsystem/unsystem.htm> for further information.

⁴ The statistical commissions and committees include: the Committee on Statistics (ESCAP), the Statistical Conferences of the Americas (ECLAC), the Statistical Committee (ESCWA), the Conference of European Statisticians (ECE), and the Statistical Commission for Africa (ECA).

⁵ The priorities and work programme of the UN-GGIM are driven by Member States and focus on providing a platform for the development of effective strategies on how to build and strengthen national capacity on geospatial information, and disseminating best practices and experiences of national, regional and international bodies on geospatial information related to legal instruments, management models and technical standards.

Annex

Data Revolution: Proposed UN System Initiatives

Initiative 1: **UN System Data Innovation Lab**

Description:

1. Within the UN system there are few compelling operational examples of applications that leverage analysis of emerging data sources (mobile call records, social media, financial transactions, sensor data, etc.) with measurable impact in sustainable development programmes and humanitarian action.
2. A UN system-wide joint Data Innovation Lab would address this gap and provide the system with the capability to investigate, design, develop, prototype and test applications of emerging digital data sources in support of global efforts to achieve the data revolution for sustainable development. By bringing together private sector partners, academic centres of excellence, and leading experts in data privacy, the Lab would gain access to new types of data, data mining and visualization technologies and novel analytical methodologies, providing the UN with hands-on experience collaborating within “safe spaces”⁶ for rapid innovation, and would contribute to the development and adoption of more agile, effective and efficient ways of working.
3. A data innovation lab, therefore, would address many existing constraints, including:
 - **Internal Capacity.** Although the data revolution is already transforming private sector and civil society in profound ways, there remains limited institutional knowledge and technical capacity within the UN system for accessing the myriad sources of real-time digital data available today, analyzing them to gain new insights, and harnessing them to improve decision-making in the fast-changing, 21st-century landscape.
 - **Partnership Mechanism.** Although a growing number of private sector and academic organizations are willing to contribute relevant data, technology tools and analytical expertise to support the work of the UN system, the system lacks adequate means to support data innovation on an inter-agency basis, limiting the opportunity to leverage partnerships jointly.⁷
 - **Space for Innovation.** There is need for “safe spaces” for experimenting with new approaches, exploring the capabilities of new technologies, and applying methods from the emerging field of data science to development and humanitarian challenges. Short-term risk aversion reinforces a culture of “business as usual” rather than promoting new ways of working through risk-taking.
 - **Dedicated Resources.** To date, UN funds, programmes and agencies have limited access to designated financial channels for innovation. The current financial regulations and practices may hinder financing for the initiative, piloting and scaling-up of innovative approaches.⁸
4. Using a build-to-learn, “fail fast or scale fast” approach, the Data Innovation Lab would identify high-potential opportunities to leverage new data sources safely and responsibly to address priority

⁶ Human rights standards and principles could guide and contribute to the definition and parameters of “safe spaces.”

⁷ CEB has identified “the use of data and technology” as one of three key areas for the UN development system to jointly address

⁸ Background paper on “Innovative approaches to programme design and implementation to support the operationalization of the post-2015 development agenda” prepared for Joint Meeting of the Executive Boards of UNDP/UNFPA/UNOPS, UNICEF, UN-Women and WFP (2 February 2015)

sustainable development challenges, employ user-centred design and rapid prototyping to develop new analytical approaches and tools, pilot innovations in the field, and share findings, technology, and lessons learned. The Data Innovation Lab will provide a flexible and efficient platform for jointly delivering proven, ready-to-scale tools and approaches while simultaneously strengthening internal capacity for data innovation across the UN system.

5. It is proposed that a coordination mechanism be established bringing together a network of associated data labs from across the system and leveraging external academic and private sector partners and networks, including the “Global Working Group on Big Data for Official Statistics”. Largely based on the experience of the UN Global Pulse, the UN System Data Innovation Lab will coordinate innovation projects implemented directly within the UN system and provide technical guidance to external partners for exploration, research and feasibility testing of new approaches.

6. It is recommended that the UN System Data Innovation Lab work under inter-agency guidance and be coordinated at country level through the Resident Coordinator Offices. While a core group of agencies will lead the work, all relevant UN agencies will be invited to designate focal points to collaborate with the UN System Data Innovation Lab on indicators that fall within their respective mandates.

7. Some of the benefits of the UN System Data Innovation Lab include:

- UN system entities gain experience working with new sources of data, new tools, new analytical approaches, lab-based approaches to data innovation, and data access partnerships with private sector.
- Private sector partners recognize opportunity to play a significant role in advancing the work of the United Nations through both corporate “data philanthropy” and development of new tools for data-driven decision-making.
- Funding organizations are persuaded to invest in both discovery and scale-up of proven approaches.

Expected Outputs of the UN System Data Innovation Lab:

8. Global frameworks and harmonized methodologies for harnessing emerging data sources for new insights, real-time monitoring, and predictive analysis.

9. Dashboards and applications for data analysis and visualization that collect continuous feedback from target populations to allow agile and adaptive approaches to programme implementation, and new tools for anticipating, detecting and managing emerging risks.

10. Case studies drawing on pilot-based evaluation that capture lessons learned, illustrate best practices, and make a compelling business case for investment by providing evidence of implementation feasibility.

Activities of the Data Innovation Lab:

11. Identify priority areas for data innovation through consultation with UN system partners.

12. Develop public-private partnerships for access to relevant data, technology and expertise.

13. Conceptualize, design, implement and evaluate joint data innovation projects with UN system partners.

14. Undertake knowledge management and capacity building activities, including the sharing of findings, methods, tools, and lessons learned through case studies, toolkits and manuals.

Timeframe for Implementation:

15. It is essential that the UN System Data Innovation Lab be able to deliver quick wins soon after it begins operating. By implementing the UN System Data Innovation Lab as a joint innovation effort supported by a core group of UN agencies, planning can begin by mid-2015 and innovation activities may commence by October 2015. Proposed milestones would include:

- a. Designation of an inter-agency guidance mechanism
- b. Development of a workplan and “Standard Operating Procedures” outlining terms of engagement with participating UN agencies and external partners
- c. Resourcing of staff secondment to serve in the UN System Data Innovation Lab
- d. Designation of a UN System Data Innovation Lab focal point from each participating UN agency
- e. Convening of a consultative meeting with Innovation Lab coordinators, knowledge management focal points from across the UN system, and external partners, such as the Sustainable Development Solutions Network
- f. Providing regular updates to the CEB.

16. The UN System Data Innovation Lab will build on, among others, the experience of UN system organizations and Global Pulse.

Initiative 2:
Visualization platform and dashboard

Description:

17. The report “A World that Counts: Mobilising the Data Revolution for Sustainable Development” contains two “quick win” activities:

***SDGs analysis and visualisation platform:** To be launched in September 2015, using the most advanced tools and features for exploring, analysing and re-using data, and demonstrating best practices in the engagement with data users through the provision of guidance and educational resources for data re-use, building on and coordinating with other platforms in other sectors. The development of the website would also represent a laboratory for fostering private-public partnerships and community-led peer-production efforts for data collection, dissemination and visualisation. It would be continuously updated during the lifetime of the SDGs, remaining a showcase for new ideas and innovations and a source of high-quality and up-to-date information on progress.*

***A dashboard on “the state of the world”:** This would harness the richness of traditional and new data, maintain the excitement and openness of the whole SDG process, engage think-tanks, academics and NGOs as well as the whole UN family in analysing, producing, verifying and auditing data, provide a place for experimentation with methods for integrating different data sources, including qualitative data, perceptions data and citizen-generated data, and eventually produce a “people’s baseline” for new goals.*

18. In leading the response to this challenge, the UN system needs to focus its own technical expertise and partner with key stakeholders in the private sector, academia and civil society, to develop new and innovative ways of presenting and visualizing sustainable development data, and make new tools available for users to undertake their own analyses.

19. A collaboration of technology and data specialists across the UN system in specific activities can deliver and continuously improve, starting in 2015, a global analysis and visualization platform for sustainable development data, under the coordination of the UN Statistics Division, including a flagship “dashboard on the state of the world”. Such a dashboard will visually and openly display the most recently available information required by decision makers to obtain a comprehensive picture of the key facts on the state of the world, including trends and inter-linkages. It will also serve as an entry point to obtain access to more detailed information from different sources in specific domain areas.

20. Although one of the main objectives of such a visualization platform would be to facilitate the interpretation and presentation of data to monitor progress and promote accountability on the post-2015 development agenda, its scope would be broader than that. Building on the experiences and lessons learnt from global and regional initiatives such as UN Data (data.un.org), the MDG indicators database (<http://mdgs.un.org/>), DevInfo (www.devinfo.org), CEPALSTAT data portal (<http://estadisticas.cepal.org/cepalstat>), country data (<http://data.un.org/countrydata>), etc., it will provide access to data and tools to support the decision-making process of policymakers, development experts and analysts from national governments, international organizations, academia, civil society and the private sector.

21. The main deliverables from this proposal would include:

- A global dissemination and visualization portal for sustainable development data; and
- A global framework for the exchange of sustainable development data.

Portal for SDG data dissemination and visualization:

22. The report of the Statistical Commission’s Friends of the Chair group on Broader Measures of Progress, in line with the recommendations of the Data Revolution report, calls for the development of a “platform to bring together global and national data” and an “SDG data analysis and visualization platform”.

23. To implement this recommendation, the United Nations Secretariat, as the secretariat of the Statistical Commission and in partnership with other UN system entities, will coordinate the mobilization of resources and expertise within the UN system to launch a portal for SDG data dissemination and visualization, taking account of existing infrastructures, the existing infrastructures for the collection of national and international development indicators, particularly UN data and UN country data.

Framework for the exchange of sustainable development data

24. Building on the experience and lessons learnt from the development of a Statistical Data and Metadata Exchange (SDMX) framework for the exchange of MDG indicators, a new framework needs to be developed in order to facilitate the data exchange of SDG indicators and, more generally, sustainable development data.

25. Such a framework would have to:

- handle larger and more complex datasets with substantially more disaggregated levels of detail (including data at the sub-national level);

- respond to the needs of a much broader set of data providers, within and outside the UN system.

26. Exchange mechanisms for sustainable development data at the international level should be established in conjunction with the development of a data exchange framework for SDGs and other data exchange standards, as appropriate. This will require the collaboration of data exchange experts from international and national agencies. Technical meetings within existing fora, such as the planned Inter-Agency Expert Group on Sustainable Development Goals (IAEG-SDGs), could help bring together experts to design a suitable solution to exchange sustainable development data.

27. Member States should also be supported in their efforts to exchange sustainable development data at the national and sub-national levels. This would enable data providers at the national and sub-national levels to share their data through the SDG Analysis and Visualization Platform.

28. Although this would be a large-scale, far-reaching programme, the UN system, with its collective technical expertise and field presence is uniquely positioned to fulfill this role under the leadership of the UN Statistical Commission, in partnership with experts from national statistical systems, academia, and the private sector.

29. To facilitate the implementation of data exchange with countries, existing mechanisms could be expanded. For instance, one recommended approach to initially orient statistical capacity-building activities jointly organized by the United Nations Secretariat, UNICEF, FAO, the World Bank, the IMF and others to work with countries that have active DevInfo implementations in place or subscribe to the IMF's General Data Dissemination System (GDSS). In the longer-run, such statistical capacity-building efforts should be further developed and run independently by other organizations at the regional and national levels using existing mechanisms.

30. While the structures and software will need to be further reviewed to support additional breakdowns and the full set of SDG indicators, this preparatory work will introduce the key concepts of structured data exchange and will help countries to start working on their data repositories, improving data quality and availability, compiling metadata, etc. Coupled with cooperation with regional organizations, this may lead to the early inclusion of a number of national development indicators in the global SDG data platform.

Expected outcomes:

31. Key features of the data visualization platform and dashboard could include:
- a. Common classifications and vocabularies. This will make it possible to cross-reference data from various datasets regardless of their internal coding systems.
 - b. Tools that will enable a broad base of users to easily tabulate and display data visualizations from various dissimilar datasets (e.g., agricultural and economic indicators along with population) in a single graphical interface.
 - c. Subscription/notification services to inform users when relevant datasets are updated.
 - d. Modern navigation and search subsystems.
 - e. Public Application Programming Interface (API) specifications for users to accomplish specific tasks with the data.
 - f. Simple and easily accessible data download services.
 - g. An architecture that focuses on efficient and effective maintenance as well as frequent updates.

Timeframe/Actions:

32. The global dissemination and visualization portal for sustainable development data is part of a long-term activity that will support the monitoring and implementation of the post-2015 development agenda. However, similar to the UN System Data Innovation Lab, is expected to start delivering data dissemination and visualization functionalities in support of the SDG process as soon as an SDG indicator framework is endorsed by the United Nations Statistical Commission in its next session.

33. In preparation, the following actions are already taking place, or scheduled to take place, through March 2016:

- Definition of the initial set of technical specifications for the global data dissemination and visualization portal, under the guidance of the Inter-Agency Expert Group on Sustainable Development Indicators (IAEG-SDGs).
- Preparation of an inventory of relevant indicators already available among various SDG data custodians, identifying cases in which further levels of breakdown will be needed.
- Development of a common repository of currently available data, using, to the extent possible, standardised data exchange templates
- Development and launch of a prototype SDG portal by the United Nations Secretariat. The prototype portal will support the display and visualization of the initial SDG dataset, and will support features such as data download and a transitional version of the API.

34. Once an indicator framework has been adopted by the inter-governmental process, priority will be given to the development of appropriate data exchange tools, including SDMX artifacts, and to the implementation of the specific data flows specified by the working mechanisms of the Statistical Commission. The prototype SDG portal will then have to be continuously maintained and further developed, with the aim to keep it current over the time horizon of the new development agenda.

Initiative 3:

World Forum on Sustainable Development Data

Description:

35. The Secretary-General, through the UN Chief Executives Board for Coordination (CEB), has called upon the system to be “fit for purpose” to effectively contribute to the implementation of this new sustainable development agenda. The Secretary-General has asked the UN system to reflect on how to deliver differently, based on a culture of collaboration and collective accountability focused on results, and country-level impact based on national strategies and priorities.

36. The IEAG report calls for greater UN leadership through the implementation of a UN-led “Global Partnership for Sustainable Development Data” aimed at mobilizing and coordinating the actions and institutions required to make the data revolution serve sustainable development, promoting several initiatives, such as:

- A “World Forum on Sustainable Development Data” to bring together the whole data ecosystem to share ideas and experiences for data improvements, innovation, advocacy and technology transfer.
- A “Global Users Forum for Data for SDGs”, to ensure feedback loops between data producers and users, help the international community to set priorities and assess results;
- Brokering key global public-private partnerships for data sharing.

37. As the new development agenda is calling for a paradigm shift towards a transformative and universal agenda, the data revolution represents an opportunity to review the mechanisms and instances through which governments, multi-lateral and public institutions, private sector and civil society organizations are involved and collaborate. The “global partnerships for development” and their implications related to financing of the post-2015 development agenda and the Sustainable Development Goals (SDGs) are closely linked with the availability, generation and dissemination of data related to monitoring these goals.

38. Other key areas of development have already fully embraced multi-stakeholder participation and fora, such as climate change and financing for development. Bringing together these stakeholders into a “sustainable data ecosystem” addressing data planning, implementation and monitoring related to the post-2015 development agenda and ensuring engagement of a broad set of actors and generations in a strategic, systematic and sustained manner would ensure the creation of meaningful partnerships.

39. The overall objective of the World Forum on Sustainable Development Data would be to generate momentum, commitment and enabling conditions for a paradigm shift from both public and private actors regarding the production, processing and use of statistics and data to implement the post-2015 development agenda and related policies. It should be open to governments, including relevant ministries and national statistics offices, the private sector, civil society organizations (CSOs), researchers, academics and the scientific community.

40. The specific objective would be to systematically engage and empower the establishment of multi-stakeholder partnerships and networks between governmental and non-governmental sector actors to support the data planning, implementation and monitoring of the post-2015 development agenda.

Expected outcomes:

41. The main expected outcomes of the World Forum would be:

- Strengthened capacities of governments, statistics institutions, civil society and private sector organizations to innovate and collaborate in the production, processing and analysis of traditional and non-traditional data geared towards the formulation, implementation and monitoring of sustainable development policies and instruments in the economic, social and environmental spheres.
- Enhanced and sustained public-private-civil society dialogues, networks and innovative partnerships to support the implementation of the post-2015 sustainable development agenda through data revolution strategies and initiatives.
- Improved ways to support the development of national level data systems, frameworks and networks.

Description of world and regional forums:

World Forum on Sustainable Development Data

42. The World Forum on Sustainable Development Data (WFSDD) would be a high-level event for gathering key stakeholders under the leadership of the United Nations, and is proposed to take place as early as possible in 2016, following the adoption of the SDGs by the General Assembly in September 2015.

43. The WFSDD would be an opportunity for establishing a dialogue on research, policy and partnerships covering the following topics:

- a. Use of traditional and non-traditional sources of sustainable development data
- b. Innovations in the production, collection, processing, and analysis of sustainable development data
- c. Data transparency, openness and dissemination, including data disclosure and licensing policies
- d. Institutional capacities and data governance, including mechanisms for policy coordination across sectors
- e. Technological capacities and strategies for the promotion of technological innovation
- f. Traditional and innovative mechanisms for financing the data revolution for sustainable development
- g. Public-private dialogue on data regulation, standards and principles, including those that are particularly relevant for the use of big data
- h. Innovative “public-private data partnerships”
- i. New learning and educational strategies to improve global data literacy in the context of the data revaluation
- j. Disruptive methods and hackathons
- m. A human rights-based approach to data, including disaggregation requirements and the protection of confidentiality.

44. The WFSDD would also be an opportunity to promote continuous, inclusive dialogue and strategic thinking among the key stakeholders that represent the sustainable development data ecosystem. More specifically, this it would promote new partnerships and networks, foster innovation, facilitate knowledge-sharing and raise visibility of data issues. Therefore, most of its activities and outputs should be organized and implemented collaboratively, making use of all appropriate means, including the organization of periodic events to promote visibility and provide interactive knowledge-sharing.

45. The WFSDD would also provide practical space to discuss the “global partnership” of the Data Revolution report, integrating many of the other IEAG recommendations and themes, and a place where the “network of innovation networks” can be linked, exchange and grow.

Regional/thematic forums on sustainable development data

46. To sustain momentum on the data revolution, other regional and thematic activities may help conduct and sustain this dialogue in the years ahead.⁹ For instance, regional and thematic forums on sustainable development data could follow-up at a more specific level on the outcomes of the WFSDD, and emphasize more granular or focused aspects of the data revolution for development in the field.

47. Regional forums on sustainable development data could be jointly led by the United Nations Secretariat, UN Regional Commissions, UN funds and programmes that are part of the regional UN Development Groups led by UNDP, as well as global and regional development banks. Thematic forums could be led by relevant UN specialized agencies and other bodies.

Strategy for implementation:

⁹ Regional and thematic approaches can be complemented by data-specific events at other high-level political fora, such as the Open Government Partnership Summit and the World Economic Forum

48. The proposed global and regional forums for sustainable development data would complement and nourish existing inter-governmental processes and bodies related to sustainable development data, both at the global and regional levels, including those related to statistics (e.g., UN Statistical Commission, regional statistical conferences) as well as thematic-focused UN inter-governmental conferences (e.g., on population and development; education; science, technology and innovation; gender; financing for development, etc.).

49. In this connection, UN system entities should work with the UN Statistical Commission to facilitate the participation of key partners, such as non-UN agencies, civil society and the private sector.

50. The forums will be a useful mechanism for channelling financing for innovation, through (for example) competitions, challenges, and calls for research. Plans for design and implementation of the forums need to be quickly developed, in connection with UN Statistical Commission and other ongoing discussions.

51. Specific task forces may be put in place to support and supervise implementation of specific events and reflect the continuous dynamism of the community, such as including focal points at the strategic and technical levels. Such a strategy would require the identification of champions, definition of agenda, coordination of research material and background papers on specific topics, fund-raising and budget, and communication and outreach.

Time frame:

52. A platform for the WFSDD should be launched by early in 2016, and a first event could take place early in 2016. Sponsorship of governments and/or multi-lateral institutions should be sought as soon as possible for political support and possible venue.

53. Regional / thematic forums on sustainable development data: These forums should take place from 2016-2017 onwards. Possible venues would be a regional commissions' headquarters, UN specialized agencies, etc. The sponsorship of co-host governments from regional Member States would provide political support and additional venue alternatives.

Initiative 4: **UN System Data Catalogue**

Description:

54. Recognizing the potential that data offers for insight and decision-making, UN system organizations are now required to take stock of relevant data, both internal and external, and maximize its usefulness for exploration and analysis. Data collected within the UN system is growing yearly both in quantity and variety. Data repositories within each of our organizations should be easily accessible. However, a lack of awareness of its existence, a lack of understanding of the nature and potential value of data and a lack of physical access or documented formats and standards often prevents data from being put to good use. This project aims at establishing a data catalogue to overcome some of these problems and maximize the benefits of making UN system data available.

55. While not explicitly identified as an outcome in the IEAG report, a central catalogue of data collected and generated by UN system organizations will provide for an improved understanding of data coverage, inter-operability and data sharing initiatives and thereby, lay the foundations for initiatives building on a comprehensive analysis of available data.

56. This project is an initiative of the CEB High Level Committee on Management (HLCM). In January 2013 the HLCM fully agreed to improve the UN system's capacity and ability to present UN system data to the public. At its 27th session in April 2014 the Committee agreed to create a working group that would explore this area further and propose common action as part of its Strategic Plan. While originally focused on introducing a data visualization framework, the priorities and work plan of the CEB data revolution working group have superseded the scope of this initial undertaking in administrative areas and, hence, taken precedence in the area of data standards review and data visualization.

Expected Outcomes:

57. This project seeks to establish a catalogue of the major data repositories of the UN system's programme and management data and make this catalogue available as an easily navigable tool for senior management and staff of UN system organizations, as well as to Member States, a variety of stakeholders and the general public.. Its principle outcome will be a listing of available datasets, which are defined here as structured collections of data of present or potential interest to a variety of stakeholders.

58. The catalogue will build upon related initiatives in specific areas. These notably include the integration of country-level statistics in the UN Data portal maintained by the United Nations Secretariat, the introduction of organization-specific data catalogues (such as that of the World Bank), thematic catalogues such as (Humanitarian Exchange), and project or resource based data (such as IATI), among others. Because of the variety of data, standards and needs supported by such varied datasets, the catalogue will be strategically and functionally positioned on a level that supports the definition of common elements or characteristics. No data will be hosted on the catalogue; rather. data assets will be summarized (by means of metadata) and visitors will be redirected towards the respective publishing source. It is in this way that the side-by-side presentation of data from organizations pursuing humanitarian, peace and security, and development-driven mandates aims to establish linkages that support subsequent analysis and visualization. The catalogue will, therefore, permit data to be effectively classified and navigated across the wide spectrum of UN system organization activities and interests.

59. In its function as an inventory of data assets, the catalogue will highlight what UN system organizations are already doing in the area of open data publishing. Using UN system data availability as indicator of status, an inventory of data and supported standards will highlight those areas where initial emphasis is needed in the effective sharing of data. Metadata collected will thereby support an analysis of constraints impeding publication of additional datasets, whether already held or under development. Similarly, the data catalogue would present the coverage of data assets as they relate to various dimensions such as theme, organization or region. This exercise also aims to collect information on new and potential data sources, including those which remain restricted in circulation but are considered worthy of evaluation for a wider circulation. In this regard, the data catalogue would evolve to provide an up-to-date and detailed picture of data sources and therefore provide input to other data revolution initiatives including the visualization platform, statistics cloud and dashboard. Close coordination will, therefore, be necessary to ensure that inventory- and catalogue-related activities and outcomes coincide with the needs of the visualisation platform and dashboard.

60. As functionality expands from an inventory to a data catalogue and as coverage becomes more comprehensive and detailed, the UN system data catalogue aims to support the following:

- Streamline and automate the process of detailing and promoting of the availability of important data;
- Improvement of standards and norms to guarantee interoperability of datasets;
- Effective sharing of key sectoral data among UN system organizations;

- Dissemination of data in ways that make data and knowledge accessible and useable to all and promotes multi-stakeholder engagement; and
- Initiatives to define and harmonize common languages for data exchange.

Description of Activities:

61. The effective introduction of a UN system data catalogue is defined by the following steps:
- Maintain an inventory of data assets: consolidate existing data collections from UN offices, agencies, programmes and affiliates into a commonly accessible Open Data Inventory that will in time contribute to the visualization of UN system data;
 - Define a data governance solution for ongoing maintenance: the solution will address the policies, standards and mechanisms by which effective coverage will be assured and reflect technical, legal, stewardship and security requirements. The solution will support the need to make more quality data accessible and available to the public, donors and other stakeholders; and
 - Harmonize technical standards for the classification, storage, sharing, publishing and reporting of UN system data within the data catalogue: while this activity centres on the definition of data assets (metadata), the selection of vocabularies (used to define those assets) will in turn take account of standards currently applied to data definitions.
62. Analysis and discussion of technical, governance and data standards are therefore confined to the requirements of the data catalogue platform – as opposed to UN system practices as a whole.

Timeframe

63. An initial focus has been placed on data that is readily available and accessible (open data), while the platform also intends to support and promote the discovery of new sources. A platform is currently being developed by the UN Secretariat for this purpose, which will visualise the data catalogue itself and in so doing highlight data availability and accessibility by theme and country, related analysis and existing visualizations. Major benchmarks include the following:

64. March – December 2015:
- Circulation of survey (to HLCM, HLCP and UNDG) seeking metadata in order to complete an initial inventory of UN system data assets;
 - Development of internal pilot of UN system data catalogue with emphasis on readily available open data, comprehensive thematic and organization coverage, and the delegation of ownership and administration tasks to organization focal points (identified during the survey);
 - Continued alignment of outcomes and timelines with the evolving requirements and related processes of the data visualization platform and dashboard;
 - Definition of the data catalogue solution in terms of its functional design, content and supporting processes. Governance structure considers long-term positioning of the catalogue in relation to related initiatives and processes;
 - Launch of catalogue, including (access controlled) listing of internal or restricted data assets, or data assets currently under consideration for release. The platform will (a) guide the public in their search of open data; (b) support organizations in internally promoting and sharing their data and open data policies and (c) aid an analysis of the resources necessary for an effective and efficient analysis of data from multiple sources.

Current Lead and Participating Agencies:

- The UN Secretariat (lead agency), through their Office for Information and Communications Technology (OICT), CEB Secretariat;
- Working Group includes focal points from: UN Secretariat (DPKO, DFS & Global Pulse), WFP, WHO, UNDP, UNESCO, UNICEF, UNSSC, WIPO, FAO, ILO, UN Women, UNFPA, UNHCR, UNOPS, UNSSC.