

# **UNSD-INEG International Workshop on Economic Census, Statistical Business Registers and Integrated Economic Statistics**

Aguascalientes, Mexico 29 September 29 – 1 October 2015

## **Summary Report**

### **Opening**

Mr. Arturo Blancas, Director General of Economic Statistics of INEGI, welcomed all participants to the workshop on behalf of Dr. Eduardo Sojo, the President of INEGI. Mr. Blancas highlighted the fact that the topics covered by the workshop are currently relevant for the entire Latin American region. He also touched briefly on the importance of the Economic Census in Mexico, which has been conducted since 1930. He emphasized that the compilation of basic economic statistics and conduct of economic censuses need to be done in more modern ways. For example, he highlighted the meeting held by the Inter-American Development Bank 15 days before this workshop in which the importance of better utilization of administrative records for statistics (including economic, population and social statistics) was discussed. Big Data was also cited as a potential source whose utilization should be further investigated by official statisticians. Mr. Blancas stressed that the workshop is an opportunity to learn from each other on how to integrate economic statistics and take advantage of new different data sources.

Mr. Ronald Jansen, Assistant Director of the United Nations Statistics Division (UNSD), thanked INEGI for hosting the workshop and for the hospitality and professionalism of its staff. He mentioned that Big Data is certainly a new potential data source for official statistics and reported on UNSD's role in the Global Working Group for Big Data. He further stated that while the three topics of the workshop have been treated side-by-side in the past, better integration of Economic Census, statistical business registers (SBRs) and enterprise surveys is needed. He described the national statistical data infrastructure where these mentioned data sources have their place and highlighted the tendency to use more administrative data. This data infrastructure can be integrated in a geo-spatial way by deriving statistics at district or community level, or via a systems approach, in which data are placed in an accounting framework such as the System of National Accounts or the System of Environmental Economic Accounting. He also described the systems approach as building a house, where economic census, SBR and integrated business surveys, together with standard concepts and classifications, constitute the foundation on which the macro-economic statistics are built.

Ms. Susana Perez Cadena, Director General for Economic and Agricultural Census of INEGI, welcomed participants to INEGI and Aguascalientes introduced the agenda, and explained some logistical aspects of the workshop.

## **Panel I: Economic Census**

### **Keynote: Results from the Mexican Economic Census INEGI, Mexico, Ms. Susana Perez Cadena**

Ms. Perez presented the results of the most recent Economic Census in Mexico conducted in 2014. She explained that more than 5 million establishments in all sectors were covered, except for livestock and agriculture, which are covered in a separate census. INEGI considers the economic census as the fundamental pillar for its basic economic statistics, national price indices and its economic surveys. She also highlighted the fact that the census includes Mexico's 32 states; over 2,000 municipalities; every town and a sample of rural areas; and uses NAICS classification and 1,000 activity codes. The Mexican economic census also covers special topics, including raw material consumption (values, volumes, and origin); mining reserves; transportation; trade; and tourism. Ms. Perez also related the coverage of urban locations (over 5,000) and 6,000 rural areas and the methods of collection, including in-person interviews, use of tablets, and internet interviews. The census collectors obtained information on name changes of unit, changes in unit, or if the unit still existed by comparing results to prior census. The census also utilized a system of three visits, including initial reconnaissance to verify map data; a systematic visit of every door to collect information on economic activity and geographic visualization; and a final visit, for collecting information on semi-fixed establishments.

The census concluded collection in July 2014, with preliminary results being released in December 2014 and the final results released 28 July 2015. The Mexican economic census also included economic geography (digital maps) and a microdata lab at INEGI for researchers. Ms. Perez stated detecting changes in organization of businesses and establishments was a challenge. INEGI is also working on new methods for validation and dissemination.

When asked how it collected such of level of detail, especially for households and small establishments, INEGI commented that it launched a successful media campaign and also conducted shorter half-hour interviews with smaller establishments and larger establishments are interviewed over the internet which can take six months to complete.

### **Opportunity and challenges in conducting an Economic Census INEC, Ecuador, Mr. Roberto Chavez**

Ecuador reported that it has conducted four economic censuses, in 1955, 1965, 1980 and in 2010 with over 500,000 establishments. Mr. Chavez reported that INEC hires local people to collect the census data, which saved money. Also, some economic activities were not covered, such as insurance and financial transactions for which data from industry associations are used instead. The economic census in Ecuador allows INEC to see business units that it otherwise does not know exist and to see changes in enterprises and units. Ecuador also updated census information with data from the business directory in order to enhance the quality of the data. It also increased the sample size of its business surveys based on the census results. It faced the challenge of missing data.

## **The U.S. Economic Census – Moving Forward**

### **U.S. Census Bureau, Mr. Jack Moody**

The U.S. Census Bureau presented the re-engineering of the U.S. economic census which will take place over several censuses, aimed to accelerate data collection, analysis and product delivery; cut costs; eliminate redundancy; and produce consistent processes. Mr. Moody explained how this will be achieved by enhancing respondents' reporting experience; facilitating consistent processes across the survey life-cycle, optimizing data collection infrastructure for reporting, and integrating and leveraging enterprise solution Capabilities. The U.S. Census Bureau also stresses the importance of building and maintaining collaborative relationships with external stakeholders and respondents to move to 100% Internet collection, which will lead to faster business response time (and the potential to release data earlier and at less cost) and improved coverage and data quality. The re-engineering of the census also entails improving dissemination, by updating content to reflect the changing economy and disseminating more timely and relevant results.

He also outlined the roles of the economic census in the United States, namely to provide comprehensive, detailed and authoritative facts about the structure and functionality of the economy, to inform policies and programs that promote business vitality and job creation, and to provide the foundation for the National Income and Product Accounts and supports GDP estimates. Mr. Moody reviewed that the U.S. economic census covers 29 million business establishments and 963 detailed industries classified according to the North American Industry Classification System, more than 19,000 geographic areas and more than 8,000 goods and services products.

### **Panel I: Plenary Discussion**

Participants cited several benefits of the economic census, including the ability to update the SBR, providing a sample frame for other surveys, providing detailed geographic and product statistics, providing a benchmark for economic surveys, providing a snapshot of economic activity but also a platform for building other economic statistics, such as national accounts and input-output tables. Participants reported that due to changed economies and to know what, where, and when businesses are doing, NSOs need the level of detail and geographic detail that can be obtained from an economic census.

The main challenge of conducting an economic census that were cited was the high cost and instability of funding and/or financial limitations. In particular, costs were cited as increasing by 20-30 percent per cycle of the census in some countries. Other logistical challenges cited were the huge task of building the internal infrastructure to process such a large amount of data and the amount of time to collect the data. Some participants mentioned the advantage of potentially releasing preliminary data available in a more timely manner, to be followed up later with more detailed or final data.

Other challenges cited included attempts to reduce respondent burden, inability to collect some data from some businesses that may not keep much data beyond sales and

employment, changes in authorities mid-way through census, changes in technological resources, outsourcing of construction and other services, and importantly, covering the informal economy and self-employed professionals. Some participants reported that the census is run very infrequently in their countries and response rates are very low. Some countries also reported that there are laws requiring responses to the census but that the sanctions are not implemented and/or are outdated. Several participants cited that un-registered or informal businesses are difficult to cover in an economic census and information on such businesses should be complemented by administrative data and surveys. Some countries reported also considering running more frequent surveys with higher samples rather than a full economic census.

Regarding the users of economic census data, participants reported that individuals, policy makers, businesses, and other government institutions are the major users. Several countries reported efforts to disseminate data in different formats and visualizations in order to appeal to different types of users. Some participants also cited the use of secured confidential data centers which researchers can access after appropriate protocols are followed.

## **Panel II: Maintaining micro-level business statistics**

### **Use of census results for updating the statistical business register INEGI, Mexico, Hugo Hernandez**

INEGI reported on its economic census, which covers 32 states, all urban areas and a probabilistic sample of rural areas and includes geo-referencing of each establishment and household with economic activity. Mexico is starting the implementation process of its SBR. It has basic variables of economic units, which are public; it also has some economic variables that are confidential and that are used for survey design. INEGI has a public view of the SBR, called DENU, that suppresses confidential data, which is determined by the statistical law in Mexico. DENU is published over geographic maps for users to find establishments in their specific location. INEGI reported that it uses proprietary software to cross-reference and clean units and match businesses to its master sample. INEGI links the SBR to internal and external sources, including tax data. The importance of strong inter-institutional arrangements between NSOs and tax authorities were discussed.

### **Challenges of maintaining economic statistics DGEEC, Paraguay, Alcides Nunes González**

Paraguay reported on its economic census, which was conducted in 2011 and resulted in the creation of the SBR and the 2015 business survey. Before 2011, Paraguay's last economic census was in 1964, after which conducted surveys and separate censuses to industrial firms. For the 2011 census, Paraguay did not know the number of establishments or how many statisticians to hire. The first thing Paraguay did after the 2011 economic census was to update the SBR with establishments. The Tax Authority

provided a business directory and some tax data. But Paraguay reports that getting timely access to administrative records was difficult. It also reported that businesses were not accustomed to reporting data on surveys. The NSO addressed this challenge by conducting an ad campaign and engaging leading trade groups and institutions. Paraguay found that non-respondents were mostly in the informal sector, which were high in number but associated with little economic value. Another challenge cited by Paraguay was the difficulty in geo-referencing businesses that had changed location.

### **The U.S. Census Bureau's Business Dynamics Statistics Program U.S. Census Bureau, Mr. Javier Miranda**

Javier Miranda of the U.S. Census Bureau presented its high-frequency and longitudinal data on businesses, which are needed because firms are increasingly inter-related, but are yet heterogeneous. He highlighted the support for this project by policy makers, as the U.S. Census Bureau received \$5 million to further develop the business demographic database. Mr. Miranda identified the importance of linked snapshots of business data over time, in order to observe shocks, some of which are temporary, and their effect on different types of businesses, and to identify instances when businesses themselves are the sources of the shocks. The business demographics database links annual snapshots over time since 1974. The source data is mostly tax data enhanced with census data. He also reported that high-frequency weekly administrative data can be used to model missing data to make the statistics more timely. He then presented analytical results from the database, including demographics of businesses before, during and after the Great Recession and their impact on employment and production in the United States.

### **Panel II: Plenary Discussion**

Panelists discussed how their NSOs are currently looking at and analyzing longitudinal business data compared to the details presented by Mr. Miranda of the U.S. Census Bureau. Particular topics discussed treatment of changes in statistical units, how to deal with non-employer businesses, and activity branches. It was noted by panelists that non-employer databases require quite an effort to develop and are more difficult to clean and maintain. Mr. Miranda noted that in order to create a longitudinal business database, one must first link different cross-sections of data across years, which takes a long time, and then analyze the data cross-sectionally.

### **Panel III: Statistical Business Register**

#### **Keynote “International guidelines for Statistical Business Registers UNSD on behalf of Statistics Austria, Mr. Ronald Jansen**

Mr. Jansen gave an overview of the recently finalized and published UNECE International Guidelines for Statistical Business Registers (“the Guidelines”). In particular, he highlighted that the Guidelines clarify concepts and definitions, including for statistical units; give advice on use of administrative sources for SBR; offer guidance on using the SBR in its own right for production of business statistics and to combined

them with other statistical registers, administrative sources or surveys to produce new statistics; and clarify the role of SBRs in the modernisation of statistical production and services. The main roles of the SBR were also discussed, including as a Live Register, as a Backbone to coordinate populations of statistical and administrative units in space & time through register snapshots and frozen frames; as a survey frame and survey support to minimize reporting burden; the SBR as an information source and its role in international data exchange.

Mr. Jansen also highlighted that the Guidelines recommend that SBRs be created and maintained primarily using administrative sources (such as tax data, social security records, business license registers, the central bank and water supply and electric association registers, among others) due to their high coverage and relatively low cost and low response burden. Other sources cited for maintaining the SBR including statistical sources, such as feedback from enterprise and establishment surveys, SBR improvement surveys, profiling or large and/or complex enterprises, telephone directories and Big Data. Some special topics to consider in maintenance, such as continuity and stability rules were also presented. SBR's role in survey design frame was also discussed.

UNSD further presented its capacity building work on SBRs, including a project to help Costa Rica link its SBR to international trade statistics; the UNSD-Asian Development Bank (ADB) initiative on SBR for improved information on SMEs; and capacity building on linking the Malaysian SBR with Trade Statistics. UNSD also highlighted that printed versions of the Guidelines are available on demand. Participants were interested in how the Guidelines recommend how to increase access tax records, how to manage call centers, and generally how they provide specific guidance to developing countries.

### **Overview of Peru's central business and establishment register INEI, Peru, Mr. Fredy Marengo Cáceres**

Mr. Marengo of INEI Peru presented an overview of Peru's central business and establishment register. He reported that Peru did not have an SBR until eight years ago. Peru's SBR now covers formal, tax-paying businesses and can stratify micro, small and medium enterprises. INEI uses tax records for information on businesses that pay taxes and then filters for active businesses that are actually producing economic activity. Mr. Marengo also reported on INEI's relationship with the tax authority in Peru. He reported that while it has not been easy negotiating with the tax authorities, it has successfully done so since 2004, as well as with the Andean Community. INEI agreed to give aggregated statistical information on small and micro businesses to the tax authority in exchange for tax data on sales based on business ranks.

Mr. Marengo also reported that Peru does not conduct an economic census every five years and supplements this information with on-site surveys. Its next economic census will focus on businesses without visible headquarters.

### **Overview of the U.S. Census Bureau's Business Register U.S. Census Bureau, Mr. Bill Davie**

Mr. Davie presented an overview of the U.S. Census Bureau's SBR. He explained how the establishments covered in the SBR apply to the North American Industry Classification System (NAICS ). He reported that non-employers were added to the SBR in 1994, before which they are updated every five years based on an economic census. Inactive units are reportedly in the millions in the United States and so maintenance strategies were discussed, regarding how long such units should be maintained in the SBR because the files can become ponderous very quickly. The U.S. Census Bureau uses tax data, surveys to large employers, and quarterly births surveys to update the SBR between economic censuses. He also reported that each time a new data source is introduced (such as administrative data sources of Big Data), quality controls must also be implemented which can flag unusual data. It was stressed that such quality controls take time to implement.

Mr. Davie also explained how multi-units, Split-part enterprises, and Alternative Reporting Units are classified in the SBR. In particular, multi-units can be classified to an industry based either on the industry accounting for majority of employment or majority of payroll. The U.S. Census Bureau models the split-part entities and multi-units to split them into establishments. It can also use surveys to update the mother enterprise-establishment relationship, but the units are different and can be complex so this process is mostly done manually, but the U.S. Census Bureau is working on improving this process. It is also interested in establishing a team that specializes in profiling large and complex enterprises. Mr. Davie also touched on the relationship between the U.S. Census Bureau and the U.S. tax authority, the IRS, stating that it does not share data with the IRS or other agencies, but that it is considering ways to strengthen this relationship in the future.

**Linking SBR with international trade statistics  
INEC, Costa Rica, Ms. Odilia Bravo Cambronero**

Ms. Bravo presented Costa Rica's project to link its SBR with international trade statistics. She gave an overview of Costa Rica's SBR, the sources used to maintain it, and the variables included. She highlighted the fact that it was extremely important for the linking exercises to ensure that the ID code in the SBR was the same one used in Customs data. However, she stated that the statistical unit in the customs data was not always known, so matching establishments and enterprises between the two sources was the most time-consuming and complicated step in the process. She also stated it was important to verify that the enterprises were in fact exporters and not transportation/cargo companies. Moreover, Ms. Bravo stated it was sometimes challenging identifying the principal economic activity of the firm based on products it sold and sometimes further investigation into secondary economic activity was needed. Additionally, there was the challenge that some businesses were not included in the SBR and further investigation and manual matching using name of the enterprises was necessary. Ms. Bravo also presented analytical results from the linking project, demonstrating the policy implications of such a project, such as principal export products by region and industry,

and associated employment, foreign direct investment or foreign affiliates or parents, and by means of transport of the exports.

### **Panel III Breakout Session Discussion**

Participants discussed some challenges they have had in conducting economic censuses and financial constraints they face. In particular, the high costs of training personnel were cited as a challenge. Another major challenge cited is getting access to tax records and other administrative data in a timely manner. In this context, participants discussed different strategies for strengthening the relationship with the tax authority.

In terms of the SBR, participants discussed challenges including maintaining a single identifier for businesses; keeping structural units in tact over time; and maintaining quality. Some participants reported that in some countries, even having an SBR is a challenge, especially if the economic census is very outdated and that information cannot be used to update the SBR. Covering non-regulated units and informal businesses were also cited as a major challenge. UNSD acknowledged that challenges are different at different levels of development of national statistical systems and that strong institutional arrangements, sharing SBR data with all statistical agencies, and garnering and maintain political support are powerful strategies.

### **Global survey of linking trade statistics and the business register UNSD, Ms. Nancy Snyder**

UNSD presented preliminary results of its global survey to all NSOs on national practices in linking trade statistics to the SBR. UNSD reported that 94 responses had been received thus far, with good regional coverage and both OECD and non-OECD responses. The results show that 91% of respondents currently maintain an SBR and that 45% currently link international merchandise trade statistics to the SBR; 27% link trade in services to the SBR; and 30% link foreign direct investment to the SBR. Of those currently linking, the type of trade by enterprise characteristic (TEC) data that is disseminated was also presented. Most respondents report they are disseminating value and number of enterprises by size class of the enterprise (number of employees) and by economic activity. TEC data by foreign ownership relationship of the enterprise is also commonly cited. UNSD also discussed the challenges cited by respondents in attempting to link trade statistics to the SBR, especially matching enterprises and establishments. UNSD will write a report of the results of the global survey, as well as incorporating comparisons with its 2013 global survey on general SBR characteristics, and will include some discussion of methodology in this report.

### **Linking trade and business statistics ONE, Dominican Republic, Mr. Luis Gregorio Madera Sued**

ONE presented its project to link trade and business statistics. Mr. Madera reported that the Customs data was very rich, but ONE needed to hire a consultant to clean the

database, which took six months and was a major challenge. However, ONE reports that such a linking exercise is indeed possible. The SBR in the Dominican Republic uses taxpayer identification numbers. By law, enterprises are categorized by employment and production. One result of the linking project was that the quality of the customs records greatly improved. Mr. Madera also presented some analytical results, including the fact that SMEs' values of exports were less affected during the recession, perhaps because they were less involved in international trade.

ONE also presented some lessons learned, especially regarding the treatment of mis-matched records. ONE is preparing a table of equivalencies between numeric and alphanumeric identification numbers to clean such mis-matched records. ONE is also working closely with Customs and other stakeholders to further improve their cooperation. ONE is also going to conduct further investigation into BPM6 guidelines, and trade in free zones because it is a large share of trade in the Dominican Republic.

**Linking administrative records and business surveys**  
**DANE, Colombia, Mr. Miguel Antonio Torres Bernal**

DANE presented its work on linking administrative records to its business surveys. The Mr. Torres reported that the e last economic census in Colombia was conducted in 1990. Colombia maintains a business directory and conducts a very detailed annual manufacturing survey on production, employment, investment, and value-added, among other variables (there are over 600 variables in total). DANE also conducts a trade in services survey. He also reported that the business identification numbers are very sound in Colombia. They are linked to tax identification numbers which are also used international trade data and in the manufacturing survey, facilitating the ability to link records from Customs to the manufacturing surveys. However, DANE reported that cleaning the trade data takes a long time. One challenge cited in the linking project is that the manufacturing survey is based on establishments and the trade data is based on the enterprises level. Mr. Torres also presented analytical results on data by economic activity and enterprise size, as well as export data by enterprise characteristic.

**Panel V: Integrated Economic Statistics**

**Keynote: “Establishing and maintaining an integrated business survey programme”**  
**Statistics Canada, Mr. Pierre Felx**

Statistics Canada presented its ground-breaking program on establishing integrated economic statistics, called the Integrated Business Statistics Program (IBSP). The program ensures mandatory of generic corporate services for collecting, processing, storing and disseminating statistical information within Statistics Canada. Furthermore, it covers all statistical processes, from sampling to estimation. One aim of the program is to integrate 150 business surveys by 2019. The IBSP aims to improve data quality, apply standardized methods, and reduce response burden. Mr. Felx reported on the program's core concepts, including suits for sampling, editing, imputation, estimation, applying confidentiality, and dissemination. He also discussed special tools, such as “smart

replacement”, which checks to see if some businesses’ data could be completely replaced by administrative data. Statistics Canada still manually reviews large and complex enterprises; otherwise certain basic characteristics (such as name, contact information, etc.) is automatically updated directly from the SBR. The importance of metadata were discussed, including how the expansion of metadata framework covering all aspects of survey processing can allow for customization to meet survey needs. Importantly, the SBR is Common Frame for all surveys using the IBSP.

Statistics Canada also presented its use of the rolling estimates model while collecting data from a business survey, whereby estimates are produced in an iterative fashion until an acceptable level of quality is reached. He explained that if quality targets are met for a particular survey, active collection for that survey is closed and follow-ups are stopped. Further, as part of the online data collection method, if a respondent reports data that is much different than the predictive value calculated by Statistics Canada based on earlier submissions or related data, an automatic validation edit will ask the respondent to verify its response. Statistics Canada also presented the importance of its strong relationship with the tax authority, with which it has worked from the outset in order to coordinate the data being collected.

Statistics Canada cited the major challenges to the IBSP were obtaining wide support from subject matter experts; fears that client needs would not be met; and uncertainty regarding staff’s new roles and responsibilities. Statistics Canada addressed these challenges by maintaining strong communication strategies; strong governance of the project; engaging program managers; and working with individual subject matter areas (especially national accounts) to ensure the data they required were collected using appropriate and consistent terms.

### **Strategic Plan on Integrated Economic Statistics INDEC, Argentina, Mr. Gustavo Daniel Rodriguez**

INDEC presented its strategic plan on integrated economic statistics. Mr. Rodriguez discussed that, while there is a legal framework and centralized methodology in Argentina, the various statistical agencies do not readily share information or data with each other. He stated that generational change within Argentina and changes in the political climate have led politicians recognizing the need for more and better economic statistics, which is resulting in innovations in how data is collected. For example, a committee has been created which includes INDEC, various economic ministries, the central bank and other agencies to promote effective coordination of the statistics produced by the different agencies over a four-year period. The committee also aims to safeguard confidentiality, especially of tax and financial data. INDEC reported that it currently has geo-referencing of all economic units to evaluate environmental sustainability, pollution, oil and energy use and their effect on production. However, it faces challenges in establishing demographics of economic units and needs to reduce respondent burden in its surveys. INDEC also reported that it is difficult to get funding for these efforts and has outsourced data processing and considering a Big Data platform.

INDEC has also developed a master's degree program on survey design and statistical management with a local university in order to facilitate recruiting. INEGI also reported that it has created a similar master's degree program in Mexico.

### **Economic statistics and business surveys**

#### **INE, Uruguay Cesar, Mr. Adrian Medero Decima**

INE Uruguay presented its use of business surveys to compile its economic statistics instead of using an economic census. Its strategy has been to strengthen its relationships with administrative data sources and better utilize administrative data to compile such statistics. Through this strategy, INE reported that it has been increasingly able to get more and better data. Mr. Medero reported that the informal sector is not as big an issue in Uruguay as in other Latin American countries and so tax data on formal tax payers is especially useful to compile economic statistics. Importantly, he reported that the tax authority in Uruguay created an incentive program for businesses to register as formal tax payers, which facilitated the registration of businesses. INE also uses a very detailed annual survey of economic activity that was designed in concert with the system of national accounts and the central bank. The survey also uses the variables of enterprise size and economic activity from the SBR as the basis of stratification for the economic units. Mr. Medero stated that he could share the template of this detailed annual survey with the workshop participants.

### **Harmonization of the Economic Census with Business Surveys**

#### **INEGI, Mexico, Mr. Arturo Blancas Espejo**

INEGI reported on its comprehensive and systematic cycle of updates of all programs that generate statistical economic information, starting with the 5-yearly update of the NAICS classification followed by the Economic Census as benchmark and including monthly and annual surveys for trade, services and manufacturing; and specialized surveys on construction and entrepreneurial expectations, among others. INEGI reported that this update process has the approval of all stakeholders. INEGI discussed the role of the SBR in the survey frame and survey design, as well as the relationship between all of its various economic surveys and how each one fits into system of economic accounts. It also presented the calendar of the systematic updates and all they align with the economic census and its program of business surveys.

### **Panel V: Plenary Discussion**

Participants discussed the roles of the SBRs and economic/business surveys in their countries' national statistical systems. Strengthening institutional arrangements was cited as an important step for NSOs in order to take advantage of administrative data, especially tax data. INEGI reported on techniques to validate the quality of administrative data, including the use of diagnostics on tax database.

Participants agreed that creating more integrated economic statistics is easier in a centralized system, but the United States reported that while it has a decentralized

system, it has had success in consolidating collection efforts, targeting data collection, and ensuring data harmonization through harmonized terms and concepts. The Dominican Republic stated that an integrated economic statistics program, such as the one developed in Statistics Canada, may not apply well in smaller or developing countries. It stressed that the statisticians working in the NSO do not have time to think about these strategic issues in their day-to-day work and NSOs may need to hire a special team to work specifically on such issues. Participants cited the need for a toolbox of methodological tools, survey issues, and other questions that can be shared with all NSOs. UNSD in turn reported that the High-Level Group on Statistical Methodology in Europe is in fact working on such methodology tools to open to others.

Participants stated that strong management and leadership from the top leadership of statistical agencies is needed for integration efforts and for ensuring NSOs' access to administrative data, especially tax data. INEGI stated that it is important to prioritize the steps and to not forget to ask if the users are satisfied with the integrated economic statistics. UNSD stated that the first step in an innovation process is to review your current procedures and identify how things can be done better or more efficiently. UNSD also stated that creation of an "innovation office" and "standards office" may be useful in order to keep up-to-date with new issues and to continually ensure harmonization across the national statistical system.

## **Panel VI: Economic statistics and the 2030 agenda for sustainable development**

### **Transforming operations of the national statistical system: the 2030 agenda for sustainable development UNSD, Mr. Ronald Jansen**

UNSD presented the 2030 agenda for sustainable development as it was recently adopted by all UN Member States. UNSD reported that the transformative agenda is a plan of action for people, planet and prosperity and seeks to strengthen universal peace. The plan will be implemented by countries and all stakeholders, acting in collaborative partnership. UNSD reported on the 17 sustainable development goals and 169 targets adopted by the UN, especially goal 8, which aims to "promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all." The monitoring of the goals and targets of that agenda requires a huge amount of data to feed indicators, which should be timely, frequent and disaggregated. This high demand for data is the main driver for UNSD's initiative for a transformative agenda for official statistics, including the modernization of statistical production and services. In January 2015, a high-level conference was organized to systematically address all questions relevant to this transformative agenda. Details can be found at: <http://unstats.un.org/unsd/nationalaccount/workshops/2015/NewYork/lod.asp>

Within this context, efforts are under way to consult with Chief Statisticians in the various regions on the general needs to modernize statistical systems and the specific needs the NSOS may have. The outcome document of the 2030 agenda explicitly calls to strengthen statistical capacities in developing countries, particularly African countries,

least developed countries, landlocked developing countries, small island developing States and middle –income countries. UNSD also underlined that contrary to practice during the MDGs period, NSOs should now try to integrate questionnaires for the purpose of deriving indicators for the SDGs within the existing production processes of the national statistical system. This means that more attention should be paid to develop integrated household survey programs and integrated business survey programs.

UNSD reported that a relatively small set of global indicators will have to be adopted by the UN Statistical Commission at its session in March 2016. As each country has different priorities, national and thematic indicators (e.g., a regional report on health) will be developed in addition. UNSD reiterated that governments are obliged to make additional money available to develop statistical capacity and that NSOs should use this as an opportunity to improve the statistical institute (including the SNA and SEEA), rather than merely running more surveys.

### **Integrated economic accounts in the United States**

**U.S. Bureau of Economic Analysis (BEA), Ms. Nicole Mayerhauser**

BEA presented information on the U.S. decentralized statistical system and BEA’s role in this system. It not only produces the system of national accounts, but also creates integrated macro accounts and integrated production accounts by linking data from many sources. In particular, BEA links data with the U.S. Census Bureau in order to create more detailed data on multi-national enterprises (MNE) and their role in the economy; links MNE data to U.S. input-output accounts to create extended supply-use tables; and links micro household data to macro data to analyze household spending and income by income distribution. BEA described its use of surveys of foreign direct Investment in order to collect more data on MNEs and to be able to investigate global value chains, study impacts of FDI on local employment, and track potential differences in productivity of different types of firms. BEA also reported on its Survey of Industrial Research and Development, which linked ownership to type of R&D activity and location. The quarterly integrated macro accounts harmonize financial accounts with capital and current accounts and cover seven different sectors. BEA’s integrated production accounts present statistics on industry-level total factor productivity. The integrated macro accounts and integrated production accounts allow for compiling GDP growth decomposed into industries and factors of production. Real value added growth decomposed into primary (capital and labor) inputs and multifactor productivity. BEA cited that the major challenges to compiling such accounts are aligning data from different sources and based in different classifications and lack of detailed data.

### **Panel VI: Plenary Discussion and Conclusions of the Workshop**

As some concrete takeaways of the workshop, UNSD started by citing some manuals and sources that may be useful to NSOs implementing some of the themes that were discussed at the workshop, namely

- UNECE Guidelines on SBR (see <http://www.unece.org/index.php?id=40574>)

- UN Guidelines on Integrated Economic Statistics (see <http://unstats.un.org/unsd/nationalaccount/docs/IES-Guidelines-e.pdf>)
- International Labour Organization (ILO)'s Measuring informality, since the Informal Sector is a challenging sector to cover in economic census, or SBR ([http://www.ilo.org/global/publications/ilo-bookstore/order-online/books/WCMS\\_222979/lang--en/index.htm](http://www.ilo.org/global/publications/ilo-bookstore/order-online/books/WCMS_222979/lang--en/index.htm))

UNSD also encouraged Statistics Canada to share documentation on its rolling estimate methodology, its relative predictive error methodology, and its integrated business surveys program; and encouraged the United States to share its methodology and documentation on business demographic data, SBRs and integrated economic accounts.

Further, UNSD emphasized a few conclusions of this workshop:

- ✚ The main purpose of an Economic Census is as benchmark for the statistical business register, for the annual economic survey and for other economic statistics
- ✚ As in the case of the United States, an Economic Census can be conducted more cost-effective if it uses online questionnaires, and uses sample surveys in combination with administrative data for small business
- ✚ A strict (5-year) cycle of revision of classification, conducting Economic Census and updating various economic surveys, as proposed by Mexico, will provide clarity and transparency in the production of economic statistics
- ✚ Countries are encouraged to use the Guidelines on SBR to establish and improve the maintenance of the business register
- ✚ In this respect, countries are encouraged to use as much as possible administrative records, especially Tax records, and for that purpose should seek service agreements with the Tax and other administrative authorities
- ✚ Countries are also encourage to modernize the production of economic statistics by working towards an integrated business survey program, which uses common (corporate) services across the national statistical system, which will lead to more coherence in concepts, definitions, classifications and meta-data across the subject matter economic domains of the national statistical system

Participants cited the following take-aways from the workshop:

- the need to try to lower the costs of conducting an economic census;
- the importance of creating an integrated framework for business surveys;
- the need to look closer at SBRs and their fundamental role in the statistical system and ways in which they can be better utilized;
- the need to strengthen institutional relationships to share data, especially administrative and tax data;
- the need to look more closely at users' needs;
- the need to fine-tune surveys, in order to better align them across the statistical system and also to reduce respondent burden
- identification of the need for more training/capacity building in these areas
- the importance of considering the use of more corporate services and strategies and strategy planning to create an integrated economic statistics programme;

- the need for better marketing the statistical program to policymakers and businesses and to utilize the transformative agenda of 2030 for such marketing

### **Closing of the Workshop**

Dr. Eduardo Sojo, President of INEGI, concluded the workshop. He reviewed the importance and relevance of the three thematic areas of the workshop; namely the economic census, SBRs and integrated economic statistics. He identified how they each fit in strategically in the national statistical system. He stressed how it is important for official statisticians to take full advantage of the different data sources available to them and to modernize the statistical system and work towards integrated economic statistics.