

UNECE HLG-MOS: Achievements

Lidia Bratanova, Director UNECE Statistical Division
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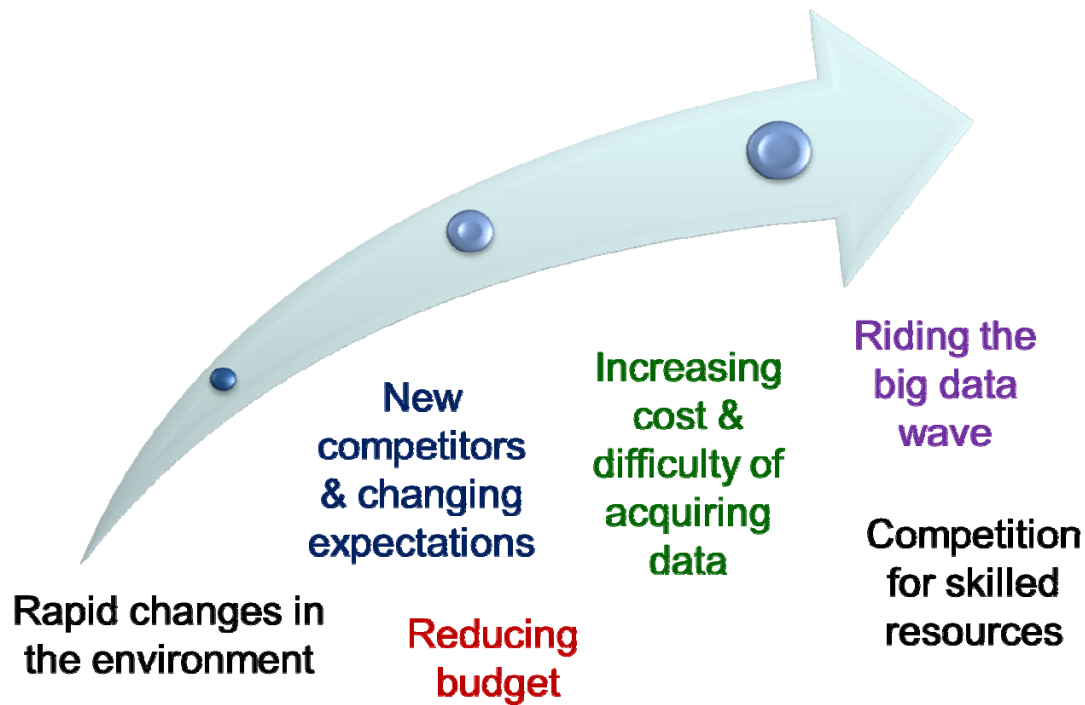


Introducing UNECE Statistics

- Regional Commission of the UN
- 56 Member countries
 - Europe, North America, Central Asia
- Many other countries join statistical work
 - Australia, New Zealand, Mexico, Japan, Korea, Chile, Columbia, South Africa,
- Overseen by the Conference of European Statisticians (CES)
 - Annual meeting of the chief statisticians



The Challenges



These challenges are too big for statistical organisations to tackle on their own

They need to work together

UNECE High-level Group for the Modernisation of Official Statistics

- Created in 2010
- 11 Chief Statisticians
- Vision and Strategy adopted by the CES in 2011/2012
- Promotes standards-based modernisation

Who are the HLG members?

- Pádraig Dalton (Ireland) - Chairman
- Trevor Sutton (Australia)
- Wayne Smith (Canada)
- Giorgio Alleva (Italy)
- Bert Kroese (Netherlands)
- Liz MacPherson (New Zealand)
- Park, Hyungsoo (Republic of Korea)
- Genovefa Ružić (Slovenia)
- Walter Radermacher (Eurostat)
- Martine Durand (OECD)
- Lidia Bratanova (UNECE)

What does the HLG do?

- Oversees activities that support modernisation of statistical organisations
- Stimulates development of global standards and international collaboration activities
- “Within the official statistics community ... take a leadership and coordination role”

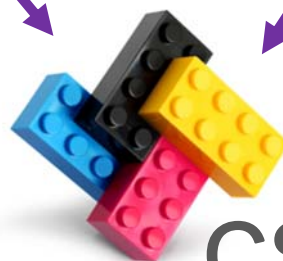
Tools to support collaboration

Quality Management / Metadata Management							
Specify Needs	Design	Build	Collect	Process	Analyze	Disseminate	Evaluate
0.1 Identify needs	0.1 Design outputs	0.1 Build production infrastructure	0.1 Create forms & data capture	0.1 Integrate data	0.1 Prepare data products	0.1 Update output systems	0.1 Gather assessment inputs
1.2 Collect & assess needs	0.2 Design variable specifications	0.2 Build or enhance physical infrastructure	0.2 Set up collection infrastructure	0.2 Prepare metadata	0.2 Prepare dissemination products	0.2 Control backlogs	0.2 Control backlogs
0.2 Establish output objectives	0.2 Prepare & manage metadata	0.2 Prepare & manage metadata	0.2 Prepare & manage metadata	0.2 Prepare & manage metadata	0.2 Prepare & manage metadata	0.2 Prepare & manage metadata	0.2 Prepare & manage metadata
1.4 Identify resources	0.3 Prepare & manage metadata	0.3 Prepare & manage metadata	0.3 Prepare & manage metadata	0.3 Prepare & manage metadata	0.3 Prepare & manage metadata	0.3 Prepare & manage metadata	0.3 Prepare & manage metadata
0.3 Check data availability	0.3 Design production variables & workflow	0.3 Design production variables & workflow	0.3 Design production variables & workflow	0.3 Design production variables & workflow	0.3 Design production variables & workflow	0.3 Design production variables & workflow	0.3 Design production variables & workflow
0.4 Prepare business case	0.4 Design production variables & workflow	0.4 Design production variables & workflow	0.4 Design production variables & workflow	0.4 Design production variables & workflow	0.4 Design production variables & workflow	0.4 Design production variables & workflow	0.4 Design production variables & workflow
	0.5 Finalize production system	0.5 Finalize production system	0.5 Finalize production system	0.5 Finalize production system	0.5 Finalize production system	0.5 Finalize production system	0.5 Finalize production system
				0.6 Calculate weights	0.6 Calculate weights	0.6 Calculate weights	0.6 Calculate weights
				0.7 Calculate aggregates	0.7 Calculate aggregates	0.7 Calculate aggregates	0.7 Calculate aggregates
				0.8 Finalize data files	0.8 Finalize data files	0.8 Finalize data files	0.8 Finalize data files

GSPBPM

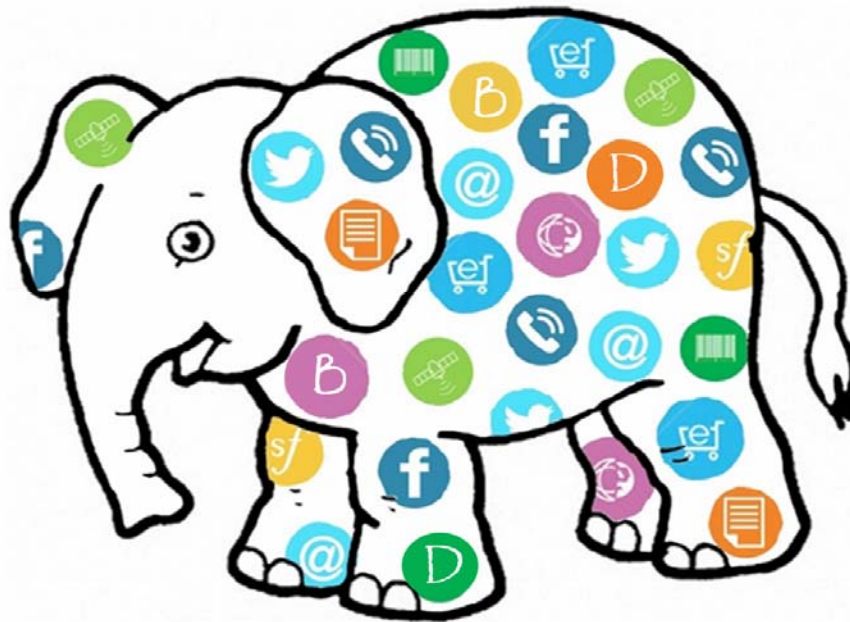


GSIM



CSPA

Big Data



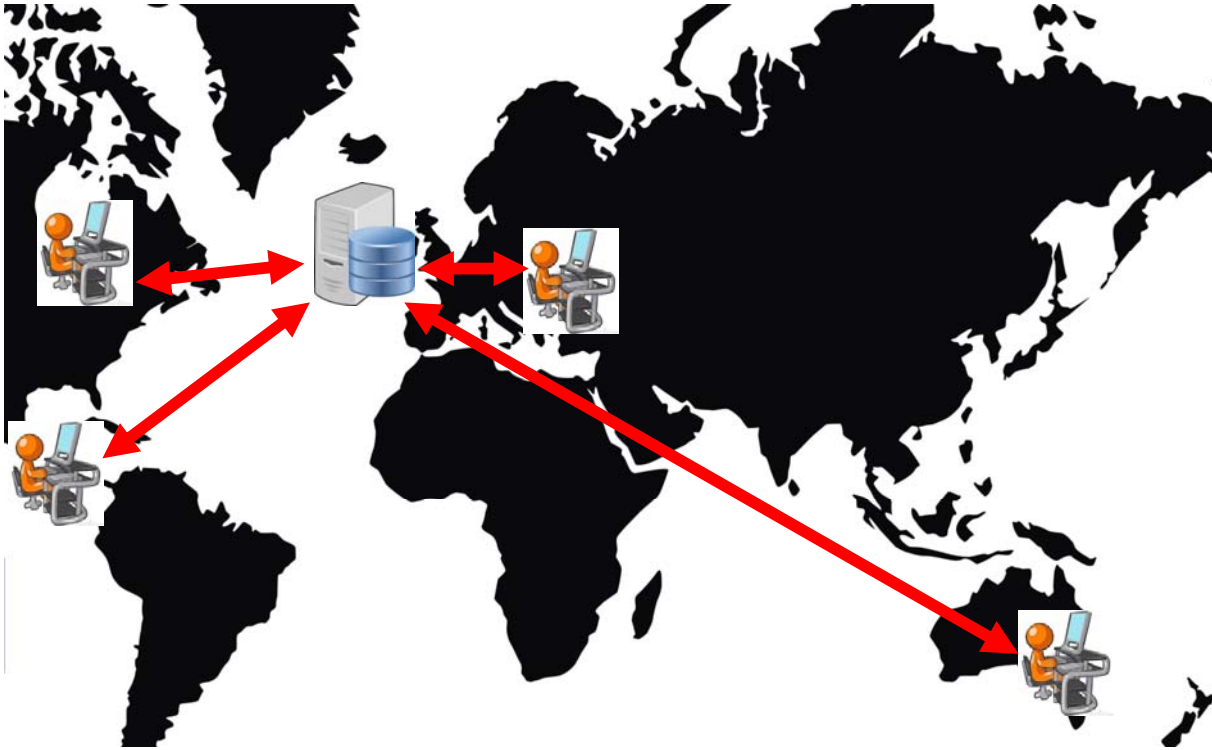
Sandbox

- The Irish Centre for High-end Computing hosts the UNECE Big Data ‘sandbox’ containing data and tools for international experiments

“Play is the highest form of research” – Einstein



UNECE Big Data Wiki:
<http://www1.unece.org/stat/platform/display/bigdata>

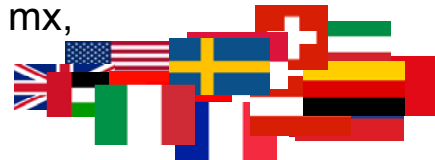


Participants

More than 40 experts from 22 entities

International organisations: Eurostat, OECD, UNECE, UNSD

Countries: at, ch, de, es, fr, hu, ie, it, mx, nl, pl, rs, ru, se, si, tr, uae, uk, us



ICHEC Assisted the task team for the testing and evaluation of Hadoop work-flows and associated data analysis application software

Work Groups

Four main activities, for each task one multinational group



Wikistats - [Wikipedia hourly page views](#): use of an alternative data source



[Twitter](#) - Social media data: experiences comparison in tweets collection and analysis



Enterprise websites: the Web as data source - web scraping and business registers



Comtrade - [UN global trade data](#): use of Big Data tools on a traditional data source

Big Data Project – key lessons

- Scope for Big Data sources to be used on their own to produce new statistics, or replace existing ones, seems rather limited
- However, Big Data sources do seem to have value if used in conjunction with other types of data sources (survey data or administrative data)

Future of Sandbox

- Extend access beyond the current project
- Running experiments and pilots
- Setting up and testing of statistical pre-production processes, software
- Platform for supporting training courses
- Supporting the implementation of CSPA
- Data Hub, shared data repository - share non-confidential data sets for multiple countries

Implementing CSPA in 2015

- A new governance model for CSPA development and support
- A new method and tool to collect information from stat. organizations
- A multi-layered catalogue of information about investment intentions
- A new version of CSPA and enhanced guidance documentation for implementers

Future work and projects

- Implementation of CSPA
- Data integration
- Organizational Maturity model - evaluation
- Roadmap for implementing standards (GSBPM, GSIM, GAMSO, CSPA)
- International barriers to international collaboration
- Machine learning in official statistics
- Artificial Intelligence and Official statistics



Final comment

- Official Statistics is confronted with a number of challenges
- 2030 Sustainable Development agenda and measuring the SDGs
- Develop new data sources, methods and tools to support the “Data Revolution”

- **Modernization of statistical production is key for the future of official statistics**

modernstats

Get involved!

Contact: support.stat@unece.org

More Information

- High-level Group Wiki:
www1.unece.org/stat/platform/display/hlgbas
- LinkedIn group:
[“Modernising official statistics”](#)