

# CHALLENGES IN PROVIDING ACCESS TO MICRO-DATA FOR RESEARCH PURPOSES

## Session I: Drivers for Micro-data Access

**Katherine K. Wallman**

Chief Statistician

U. S. Office of Management and Budget

11 June 2013



# Drivers for Microdata Access

- **Office of National Statistics, United Kingdom**
  - Microdata Exchange And The Challenges Of Open Data And Transparency
- **OECD Statistics Directorate**
  - International Collaboration On Microdata Access
- **Australian Bureau of Statistics**
  - Australian Commonwealth Government Data Integration Initiatives
- **Eurostat**
  - Business case for sharing confidential data in a future European Statistical System: vision and on-going initiatives
- **Statistics Finland**
  - Development and challenges of on-line microdata usage
- **Statistics Estonia**
  - Statistics Estonia's experience in providing national and trans-border access to micro-data



# Drivers for Microdata Access

- The changing data context: New phenomena such as big data, open data, and new opportunities and challenges
- New legal requirements to “push” out data
- Growing recognition of the value of NSO held microdata for social, economic and business analysis
- Increasing demand for integrated data survey and administrative data
- Increasingly sophisticated technological solutions that enable users to access data anywhere or utilize online analytic tools
- Expansion of trans-border research teams
- Growing demands for confidential microdata by international organizations



# What is Open Data?

- Accessible to anyone and everyone, ideally via the internet,
- In a digital machine readable format that allows interoperation with other data;
- Available at reproduction cost or less; and
- Are free from restrictions on use and re-use.



# What are the legal and public policy requirements for Open Data?

- ‘Push’ legislation and policy
- ‘Pull’ legislation and policy



# What are the benefits of Open Data for NSO's?

- Follows scientific principles of corroboration, validation, and improvement of the Official Statistics
- Can be exchanged without costly and bureaucratic administrative obstacles.
- Can be used for any purpose
- Allow NSIs and third parties from all sectors to cooperate and collaborate fully on a shared information resource.
- Are an additional information asset category for a NSI
- Encourages the development of information entrepreneurs, fostering economic and social growth.



# What are the obstacles and challenges of Open Data?

- Confidentiality risks, and concepts, have to be addressed.
- Logistical issues arise, presenting challenges to the business architecture of NSIs.
- Authenticity and identification of assets must be addressed.
- The expected standards for Open Data are high.



# What special challenges do integrated data present for NSO's and how have these been addressed?

- Australia
  - Increasing demand for integration of datasets driven by potential to research “wicked problems”
- Finland
  - Rich linkable administrative register databases and survey data are goldmines
  - Researchers often want to combine microdata from several governmental agencies in different administrative sectors



# What special challenges do integrated data present for NSO's and how have these been addressed?

- Australia
  - Commonwealth Approach
  - Cross Portfolio Statistical Integration Committee (CPSIC)
  - implementing governance and institutional arrangements
- Finland
  - increased demand for extensive confidential microdata sets has created pressure for developing advanced modes of microdata access for researchers.
  - plans for a national remote access system.



# How have trans-border research teams and international organizations driven microdata access?

- OECD Expert Group for International Collaboration on Microdata Access
  - Glossary of terms
  - Recommendations on metadata standards
  - Costs of a microdata service
  - Positive impacts of microdata access
  - mapping process flow systems, and standardised access procedures



# What are the legal issues for cross-border microdata access?

- OECD Expert Group recommendation on breach of confidentiality and applicability of penal sanctions
  - NSOs and other statistical agencies should not overly rely on penal sanctions as a means of protecting confidential statistical data in trans-national exchanges of microdata,
  - Access to microdata should be carried out in a manner that effectively protects the data from misuse and also prevents breach of confidentiality based on normal legal use of a computer system;
  - Administrative sanctions are recommended for researchers or their institutions for breach of confidentiality, because they are easier to implement.



# Are there other legal frameworks for international microdata access?

- Eurostat Vision
  - all the ESS members shall be allowed to have access to the data collected under European legislation
  - National statistical authorities should also be empowered to grant access to European data.
  - "Schengen-like" microdata access policy



# Are there other legal frameworks for international microdata access?

- Statistics Estonia
  - New law on official statistics August 2010
  - All categories of microdata collected for the production of official statistics are available for scientific purposes without the consent of the person
  - All conditions for use of confidential data for scientific purposes are the same for researchers from Estonia and outside.
  - Borrowed best practices from other statistical offices and implemented a policy for access to microdata.
  - Supply creates demand!



# Some Questions for Discussion

1. Are there other drivers for microdata access not mentioned or covered in the papers? How have they impacted NSO's?
2. What are the challenges and risks of not responding to and meeting user demands for microdata access?
3. How can NSO's address user needs in times of declining resources? Would there be support from other ministries to fund initiatives such as the remote access system envisioned by Statistics Finland?
4. What kinds of benefits have NSOs seen in providing microdata access? Can these be quantified?



# Some Questions for Discussion

5. The UK is now launching the Open Data Institute as a public/private partnership. Have other public-private partnerships been established? Have they proven to be successful?
6. Has ABS experienced public concerns about creating integrated data sets from publishing these projects openly?
7. Although it may be difficult in practice for NSO's to impose criminal penalties in trans-national exchanges of microdata, are administrative sanctions for breach of confidentiality sufficient given the legal requirements for protecting the confidentiality of the data?
8. Have European NSOs embraced the Eurostat vision for a "Schengen-like" microdata access policy?

