

UN Task Team on Training, Competencies and Capacity Development

Ceri Regan – Senior Programme Manager, Data Science Campus, ONS

Dominika Nowak – Head of Unit, Experimental Research, Statistics Poland





Overview

• Institutional Readiness for Big Data in Official Statistics

• NSO Big Data Maturity Matrix – in development

Big Data Competency Framework

• Big Data Training Provision – in development





Institutional Readiness for Big data in Official Statistics

• UN Survey of "NSO readiness for Big Data in Official Statistics"

- Global Capacity Assessment
 - Strategic Data Science Coordination plans for big data analytics
 - Legal Framework for data access and sharing
 - IT Infrastructure capacity for big data storage and analytics
 - Human Resources big data / data science posts, skills, recruitment
- Issued globally to 160 NSOs; 63% response rate





Institutional Readiness for Big data in Official Statistics

Some of the main Challenges:

- Obtaining big data sources outside of Government
- Many Legal Frameworks need to be updated to regulate for big data applications
- Data storage (offsite or onsite) and processing power; few NSOs considering secure Cloud
- Upskilling of analysts: Most NSOs lack a competency framework to develop new skills to cope with big data and new methodologies





Institutional Readiness for Big data in Official Statistics

- So what now?
 - NSO Big Data Maturity Matrix or Big Data Capacity Assessment —
 establish NSO strengths and weaknesses -> roadmap development,
 strategic plans, training programmes (in progress)
 - Big Data Competency Framework general guidance for NSOs' Big Data competency building -> for use when hiring, assessing knowledge gaps, and training staff
 - Training provision work in progres: on-line training to be developed by the UN GWG Task Teams





NSO Maturity Matrix

- Self-assessment tool for the NSO to determine where it is now and where it wants to be -> help inform a plan
- The NSO will set its own target
- Through answering a set of questions, the NSO will be provided with a picture of where it currently is on its big data journey
- Any gaps will be identified and should inform an NSO strategic plan

• We will require NSOs to test our Maturity Matrix before it goes live





NSO Maturity Matrix

Dimension	Pre-Foundation Level	Foundation Level	Intermediate	Advanced
Legal Framework	Questions	Questions	Questions	Questions
IT Infrastructure	Questions	Questions	Questions	Questions
Human Resources	Questions	Questions	Questions	Questions
Application	Questions	Questions	Questions	Questions

