

UNCEBD Task Team on Training, Competencies and Capacity Development

Welcome

RALF BECKER (UN STATISTICS DIVISION, NY)

CERI REGAN (DATA SCIENCE CAMPUS, ONS, UK)

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Thursday 27th Jan 2022, session 2.4

Agenda

(All sessions are hybrid)

09:00 – 10:30 Capability building knowledge exchange with Regional Hubs and NSOs

- *Overview of the products and tools available*
- *Discussion*

10:30 – 12:00 Developing the roles of the Regional Hubs

- *Current plans for the Hubs*
- *Solution focused discussion and planning*

12:00 – 13:00 Lunch

Agenda continued

13:00 – 14:30 Regional Hubs and their provision of data capacity development roles

- *Understanding needs of Hubs*
- *Solution focused discussion and planning*

14:45 – 16:00 UN-CEBD Task Team on Training & Regional Hubs

- *Planning for the capability needs of Regional Hubs*

UN-CEBD Task Team on Training, Competencies and Capacity Development

Capability Building Knowledge Exchange
for UNGP Regional Hubs and NSOs

Overview

- UN Big Data Competency Framework - *complete*
- UN Big Data Maturity Matrix - *complete*
- UN Big Data Training Curriculum – *under development*
 - Courses nearing completion
- UN Big Data Catalogue – *under development*

Task Team on Training, Competencies and Capacity Development

- We aim to provide:
 - Frameworks and training for consistency in global big data capability building
 - Products that **empower**:
 - the **individual** to take control of their own learning development
 - the **NSO** to understand their knowledge gaps

UN Big Data Competency Framework

Dominika Nowak (do.nowak@stat.gov.pl)

Head of Experimental Research and Analyses Unit

Statistics Poland

(On behalf of the UN-CEBD Task Team on Training, Competencies and Capacity Development)

UN Big Data Maturity Matrix

Ceri Regan (ceri.regan@ons.gov.uk)

Senior International Programme Manager

Data Science Campus, Office for National Statistics, UK

(On behalf of the Task Team on Training, Competencies and Capacity Development)

UN Big Data Maturity Matrix

- Is available (pdf) via the UN website
 - Is being moved online to provide an interactive tool

- Self-assessment tool: measures organisational level big data maturity and can help the NSO to:
 - Identify strengths and weaknesses
 - Produce a Development Plan or road map to improve “maturity”

UN Big Data Maturity Matrix

- Set against four Big Data dimensions at the NSO:
 - Legal Frameworks
 - IT Infrastructure
 - Human resources
 - Applications/projects

- There are three steps to self-assessment:
 1. Set your goal/target of where you want the NSO to be in terms of Big Data
 2. Answer some questions that establish where the NSO currently is
 3. Receive some results about your 'gap'

Maturity Matrix

Maturity Matrix is a self-assessment tool that can be used to help the organisation understand the extent to which it has developed or implemented. It aims to help the organisation understand its level of "organisational maturity" with respect to big data development, and also to identify its strengths and weaknesses from which a development plan or road map may be produced.

The Maturity Matrix can be used to find the current level of big data maturity, as well as to define the target level for the organisation. It can help to identify

- where work is needed, and
- what the priorities are for the organisation.

There are two tiers:

- Tier 1: High-Level Maturity Matrix – this may be used to set the target level for the organisation across each dimension (this can be different for each dimension)
- Tier 2: Detailed level Maturity Matrix – this section is composed of questions, answering which, will indicate the current level of organisational Maturity.



Step 1

Goals

Learn more about the various dimensions in the matrix and set goals for each of the dimensions

[Set Goals](#)

Step 2

Assessment

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[Take Assessment](#)

Assessment will be available after goals are set for all dimensions

Results

Email Report

Step 3

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Option to submit to UN



Recommendations

View Results

Receive guidance and training recommendations

(Future) Step 4

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A. Legal & Policy Framework Dimension

3 Courses

[Introduction to Legal](#)

launch course

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[Ethics and Integrity at the United Nations](#)

launch course

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[Preventing Fraud and Corruption at the United Nations](#)

launch course

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B. IT Infrastructure

1 Course

Useful links

- [UN Big Data Maturity Matrix](#)

Any Questions?

Task Team on Training, Competencies and Capacity Development

UN Big Data Training Curriculum

Ceri Regan (ceri.regan@ons.gov.uk)

Senior International Programme Manager

Data Science Campus, Office for National Statistics, UK

(On behalf of the Task Team on Training, Competencies and Capacity Development)

Overview

- The development of the UN Big Data Training Curriculum
- What is already available?
- Future developments
- Next steps

Development of the UN Big Data Training Curriculum

- The Task Team on Training, Competencies and Capacity Development has been working with four of the Big Data Task Teams:
 - AIS (Shipping) Data
 - Scanner Data
 - Earth Observation Data
 - Mobile Phone Data
- All curricula are being pulled into one overarching curriculum
- Individual courses are being placed into a searchable training catalogue, along with courses that already exist from other providers

Development of the UN Big Data Training Curriculum

Our Objective

- To develop a Big Data training curriculum, that:
 - Is focused on delivering specific big data goals at the NSO
 - Considers different Big Data knowledge areas, audiences and proficiency levels
 - Maps to the Competency Framework and Maturity Matrix
 - Makes online training available free of charge, wherever possible

Development of the UN Big Data Training Curriculum

For each of the Task Teams we worked with

Developed a Strategic Outcome

To utilise AIS data via the UNGP for the development of Faster Economic Indicators

What Job Behaviours
expect to see?

What is the best
way to learn?

What are the needs of
different audiences?

What is already available?

- There are many courses out there that are already available online, some are free or offer good value for money – we are collating & checking these
- **Privacy Preserving Techniques** (with Open Mined, Oxford Uni, and partners)
 - [Our Privacy Opportunity](#) - (Foundation level)
 - [Foundations of Private Computation](#) – (Intermediate level)
 - Federated Learning Across Enterprises – (Intermediate level) *under development*
 - Federated Learning on Mobile – (Intermediate level) *under development*

What is already available?

- Mentoring opportunities
 - ✓ Grow skills
 - ✓ Build a project prototype for implementation at the NSO
 - ✓ Assist the NSO on their big data journey



Mentoring Opportunities

1. (Short-term) – International Data Science Accelerator Programme
 - Run jointly by UNSD and the UK Data Science Campus
 - Matches Mentors' skills with Mentee project submissions - internationally
 - Aimed at current Analysts at the NSO who are building their DS skills
 - 12 week programme, 1 day a week (12 days)

The official programme will launch on 31st January

Contact Geanina.sopron@ons.gov.uk for more information



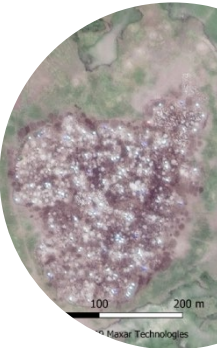
Mentoring Opportunities

2. (Long-term) – International Development Mentoring Programme
 - Offered by the ONS FCDO Data Science Hub
 - Focused on using data science for effective development in low and middle-income countries
 - Provide on-going mentorship – guide, advise and problem-solve together
 - Can also provide training where required

Contact tim.harris@fcdo.gov.uk at the FCDO Data Science Hub for more information

Future Developments – Art of the Possible

- Priority - Raising Awareness / Foundation section of the Curriculum
 - What is Big Data? – *Task Team on Training*
 - What is Possible with AIS (Shipping) Data? – *AIS Task Team with Training coach*
 - What is Possible with Scanner Data? – *Scanner Task Team with Training coach*
 - What is Possible with Earth Observations Data? – *EO Task Team with UNITAR and Training coach*
 - What is Possible with Mobile Phone Data? – *MPD Task Team with Training coach*



Aim for courses to be ready by end of March 2022





Future Developments – Big Data Leadership

- We are exploring different routes for development in Big Data Leadership
- International Data Masterclass programme:
 - Data-driven decision-making & Policy-making
 - Communicating compelling narratives through data
 - Data science and new frontiers
- Global Steering Committee and Working Group currently reviewing and developing the content

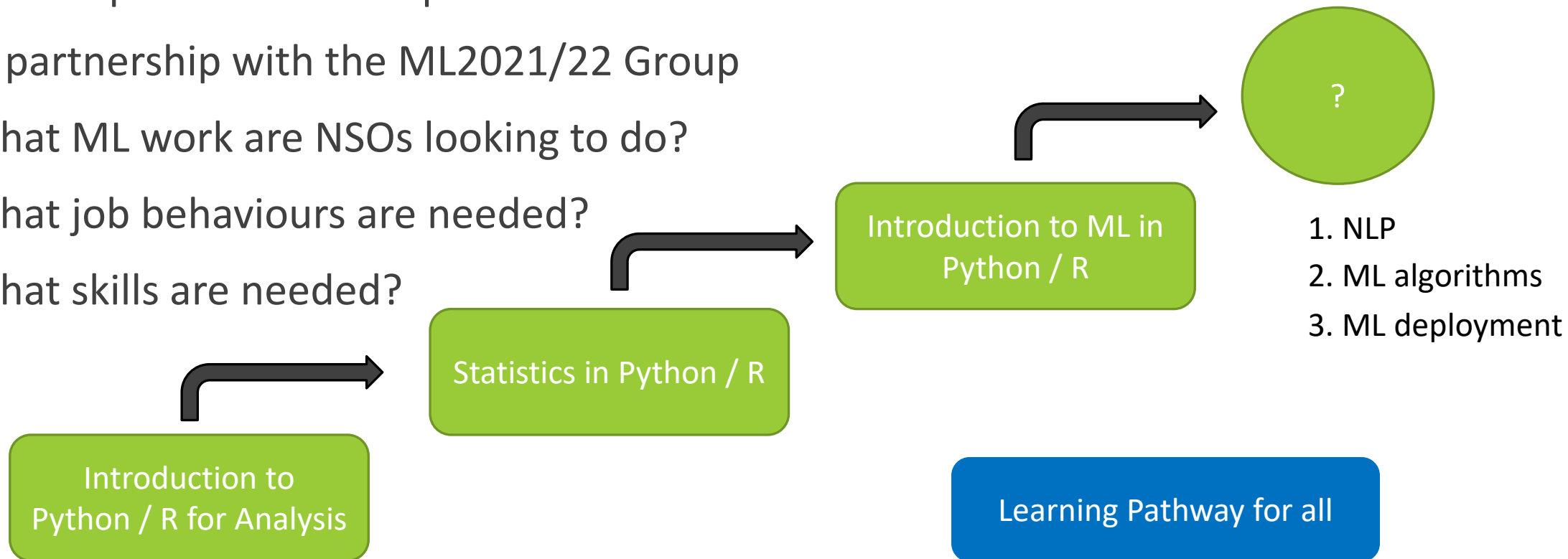


Watch this space!

Future Developments – Machine Learning

Need to explore and develop the ML curriculum:

- In partnership with the ML2021/22 Group
- What ML work are NSOs looking to do?
- What job behaviours are needed?
- What skills are needed?



Next Steps

- Fully incorporate Task Team curricula into overarching Curriculum matrix
- Continue to work with Task Teams to develop their curricula and courses
- Continue to expand the curriculum to incorporate new knowledge areas
- Continue the search for courses that are already available – online, free, fit for purpose & can be recommended
- Fill in the gaps (not quick!)
- Work to link up training to the Competency Framework and Maturity Matrix
- Make all courses available via the new UN Catalogue (see final session)

Thank you

Any questions?

Task Team on Training, Competencies and Capacity Development

UN Big Data Training Catalogue

Ralf Becker (beckerr@un.org)

Chief, Statistical Capacity Management Section

United Nations Statistics Division, NY

(On behalf of the Task Team on Training, Competencies and Capacity Development)

Useful links

- [UN Big Data website](#)
- [UN Task Team on Training, Competencies and Capacity Development website](#)
- [Competency Framework for big data acquisition and processing](#)
- [UN Big Data Maturity Matrix](#)

Any Questions?