



HLG-MOS Online Modernisation Workshop 2021

11th Annual Workshop of the High-Level Group for the
Modernisation of Official Statistics
15-16 November 2021



Work collaboratively to identify trends, threats, and opportunities & provide common platform to develop solutions in a flexible and agile way.



Actively engage

Be a trusted data authority

Adopt a service-oriented approach

Have an agile, adaptive culture

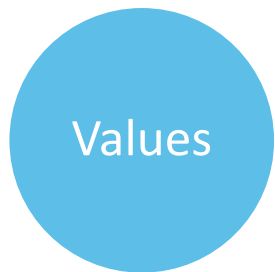
Developing innovative solutions

Demonstrating leadership and collaboration

Discussing challenges and opportunities openly

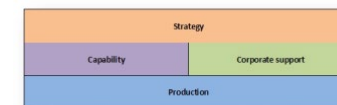
Ensuring that priorities are community driven

Supporting a flexible, result oriented and agile approach



ModernStats Achievements:

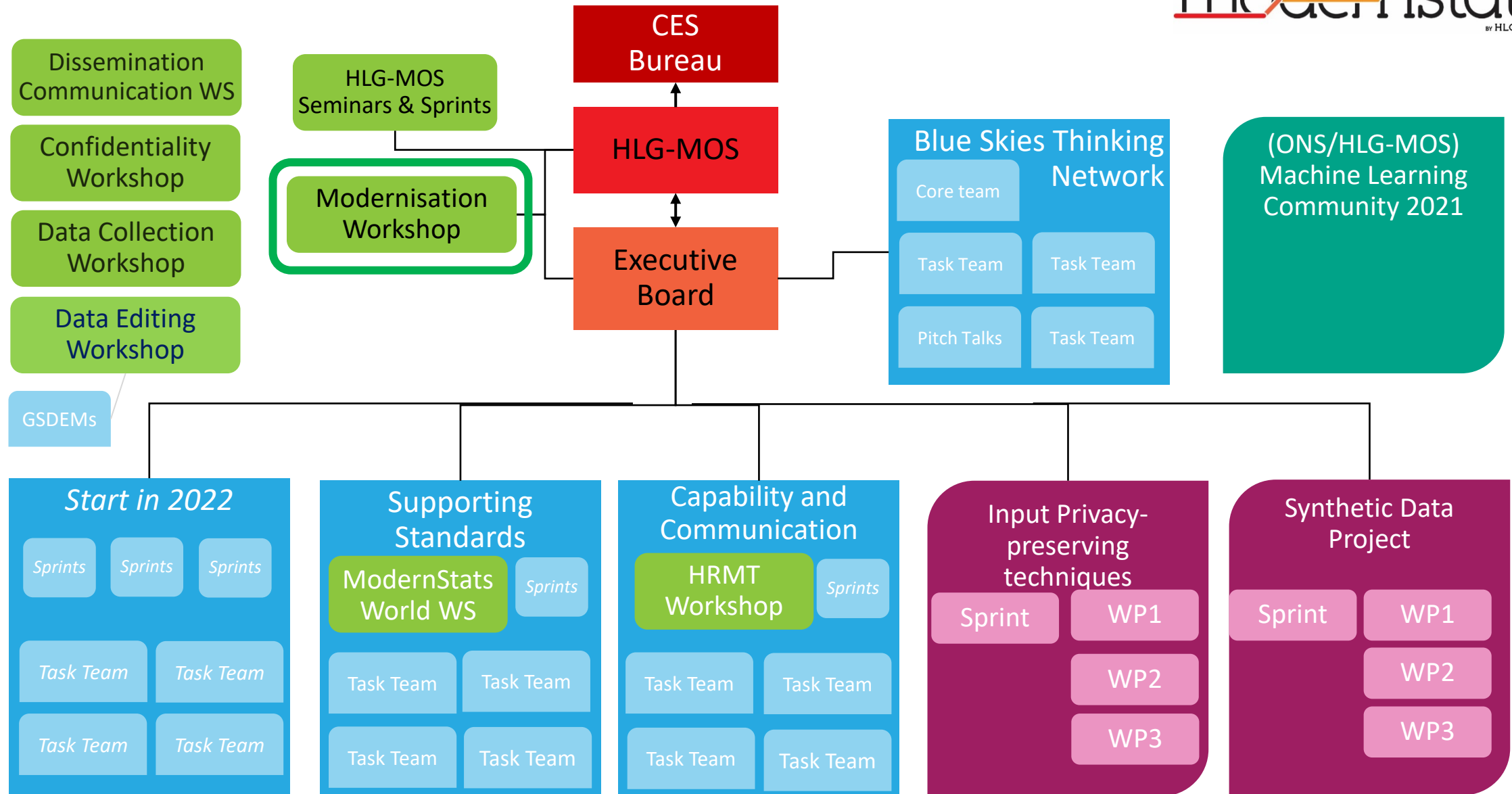
- **Generic Statistical Business Process Model** (GSBPM)
- **Generic Statistical Information Model** (GSIM)
- **Common Statistical Production Architecture** (CSPA)
- **Generic Activity Model for Statistical Organizations** (GAMSO)
- **Generic Statistical Data Editing Model** (GSDEM)
- **Many related products such as GSBPM for Spatial data**



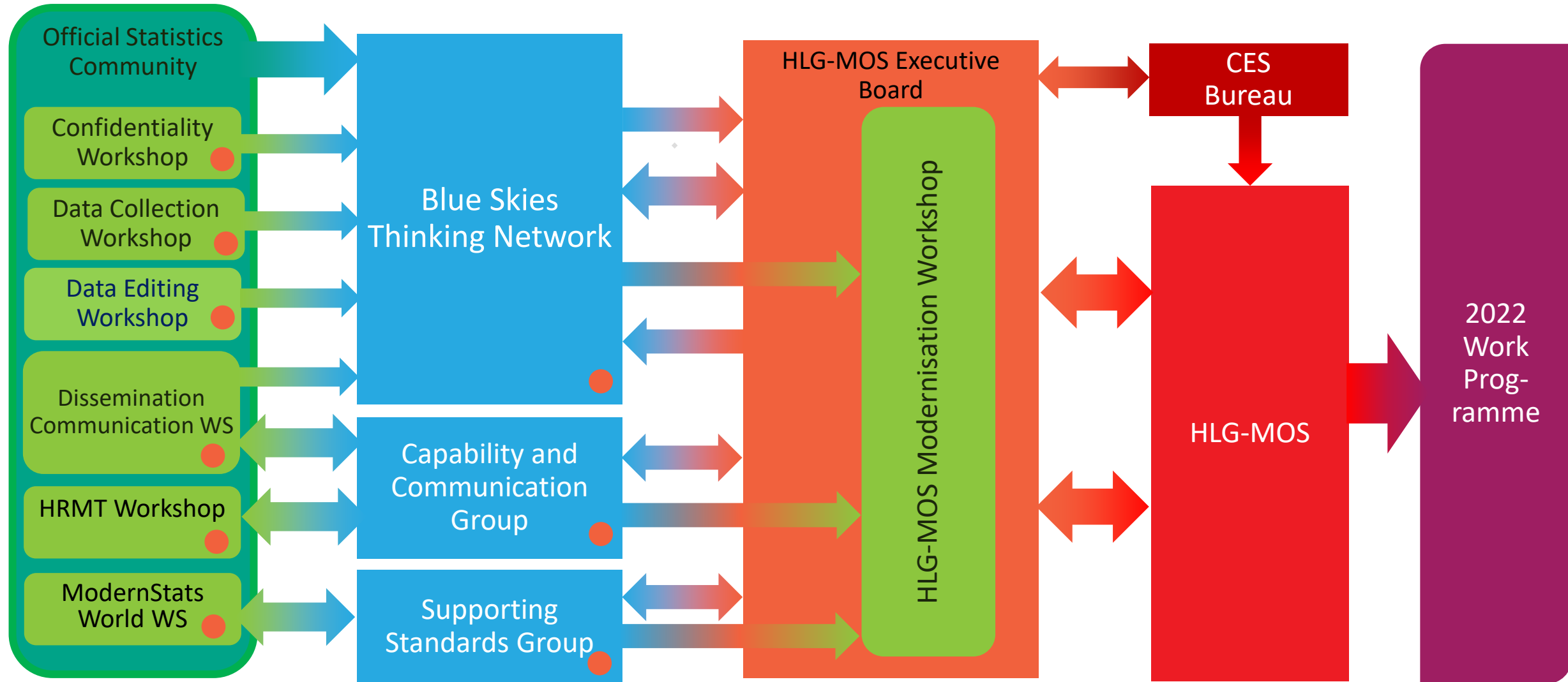
Some other outputs

- Machine Learning for Official Statistics [link](#)
- Common Statistical Data Architecture 1.0 ([CSDA](#))
- Data Integration Guidelines [link](#)
- Common Metadata Framework [link](#)
- Linked Open Metadata [link](#)
- Strategic Communications Framework [link](#)
- Guidelines on Risk Management [link](#)
- Guidelines for Managers [link](#)
- Big Data Inventory [link](#)
- Investment Catalogue [link](#)
- CSPA Catalogue [link](#)

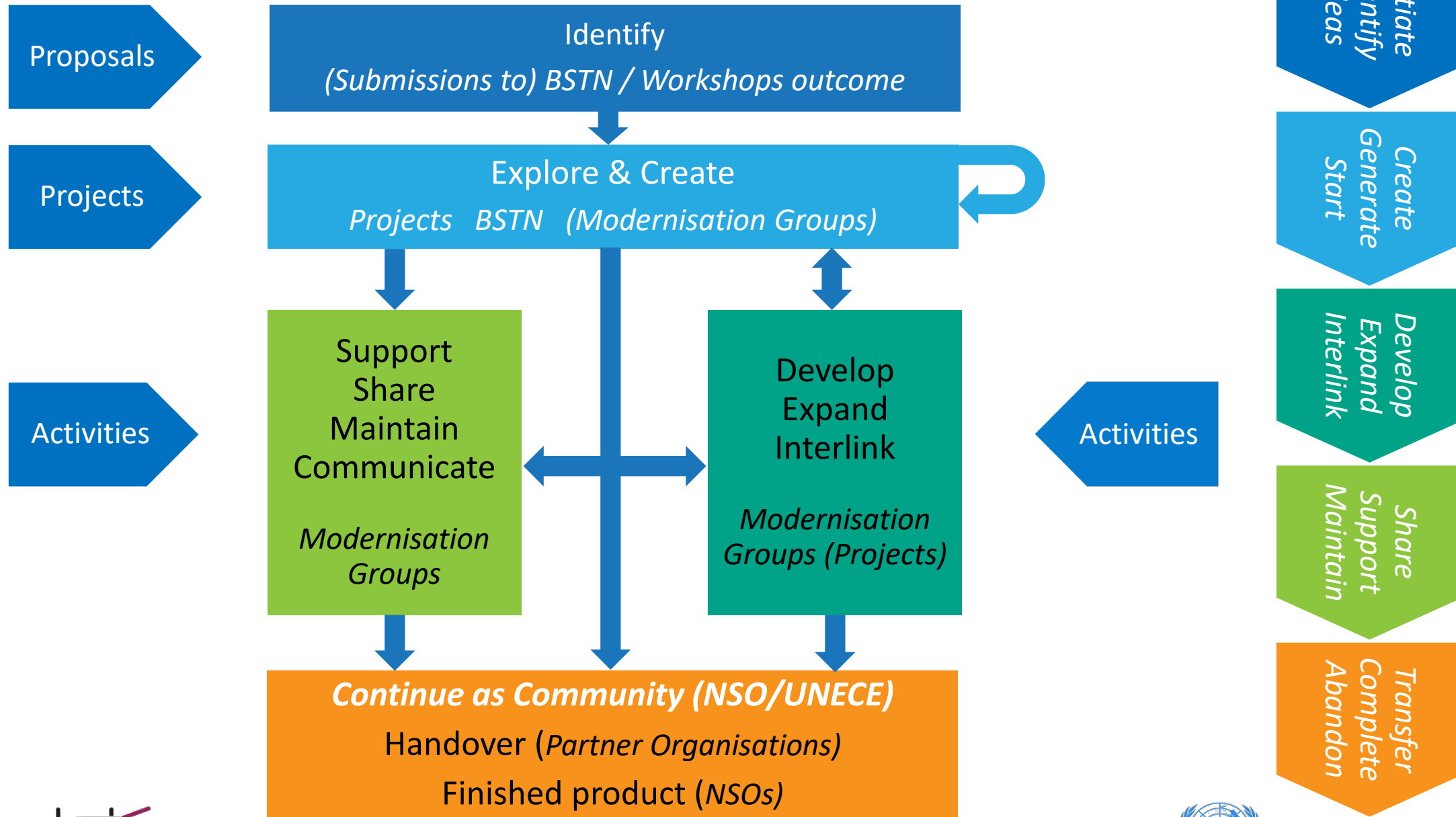
2021 HLG-MOS Structure



HLG-MOS Innovation Pipeline



ModernStats Fundamentals and Pillars



Why are we here today and tomorrow?

Share and showcase our work
Celebrate our accomplishment
Get feedback on results



Identify and Prioritize future work
Drive new developments
Set our 2022 work programme

 modernstats
by HLG - MOS
2021

Involve the community
Induce collaboration and participation
Engage in an open discussion

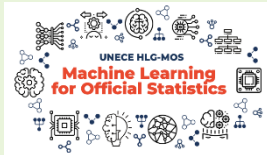
 modernstats
by HLG - MOS
2022

ModernStats 2021

Network & Projects 2021

Machine Learning Community

- Pilots from Idea to Valid Solution
 - Coding and classification; Imputation; Imagery analysis; Modelling for estimation; Transferring knowledge and experience; Route optimisation
- Valid solution to production
- Data ethics and governance
- Quality of training data
- Quality framework for algorithms



Synthetic Data Guide Project

- Use cases for Synthetic Data
- Recommended methods and techniques
- Disclosure risk measures
- Utility Measures
- Experiments
- *Hackathon/challenge*
- Webinar



Input Privacy-Preservation Project

- Generalized use cases
- Private set intersection
- Private machine learning
- Multi-party privacy preserving Machine Learning (tested)
- Test coverage of 3rd party data under limited trust
- External consultation
- Webinar

Modernisation Groups 2021

Blue Skies Thinking Network

- Network data
- Experiments to Implementation
- Facebook surveys
- Hotspot Joint Biosecurity Centre
- Rapid survey system
- Identifying and evaluation new topics
- Evaluation submitted proposals
- Project proposals



Capabilities and Communication

- Future of work and workplace and skills
 - Employer, Employee and Manager toolkits
- Ethical Leadership, Ethics management and Data Ethics
 - Surveys
- Crisis communication and brand management
- *2021 DissComm, 2022 HRMT workshop*



Supporting Standards

- Linking GSBPM & GSIM
- Core Ontology for Official Statistics
- Updating GSIM
- GSBPM Task
- GSBPM for Geospatial Information
- CSPA
- **ModernStats World Workshop 2022**



Expert Meetings, Workshops, Webinars and Sprints 2021

- Expert Meeting on Statistical Data Collection, 27-30 September 2021, online
- Expert Meeting on Dissemination and Communication of Statistics, 11-14 October 2021, online ~~Lisbon Portugal~~
- HLG-MOS workshop on the Modernisation of Official Statistics, 15-16 November 2021, online
- Synthetic Data Webinar, 17 November 2021
- Input Privacy-Preservation Webinar, 18 November 2021
- Machine Learning Community Webinar, 19 November 2021
- Expert meeting on Statistical Data Confidentiality, 1-3 December 2021, Poznan, Poland
- Several Sprints (GSBPM-GSIM, BSTN, Future of Work)

Highlights of Output produced in 2021

- Synthetic Data for NSO Guide
- Generalized Use Cases of various Input Privacy Preservation techniques were defined and tested
- Future Work Toolkits for blended working
- Ethics Survey report
- Crisis Communication and Brand Management Guide
- Geospatial view of GSBPM
- Linking GSBPM and GSIM
- ModernStats Model Governance Guide
- Project Proposals 2022

Community Involvement 2021

**4 Steering
Committees**
35 members
14 org.

**4 Expert
Meetings/
Workshops & 3
Webinars**

800 participants (est.)
80 organisations (est.)

**Exec Board
&
3 Groups,**
134 members
32 org.

**ML
Community**
43 members
& participants
20 org.

3 Sprints
30 part.
22 org.

2 Projects
43 members
27 org.

1000+ Participants
250+ Members
100+ Organisations

ModernStats 2022

Proposals 2022

- Project proposals
 - Extension Input Privacy-Preservation Techniques
 - Meta-Academy for the Modernization of Official Statistics
 - Statistical Data Governance Framework to Achieve Data Interoperability
- Activity proposals & BSTN topics
 - Supporting Standards group: GSIM revision, GSBPM Tasks
 - Capability and Communication group: reaching youth, job of the future
 - Blue Skies Thinking Network topics: digital twins, nowcasting, data virtualisation
- New Modernisation Group: Applying Data Science and Modern Methods

Get Involved! Join the Force!



Consult
Contribute
Collaborate



Questions

