



# STANDARDS FOR MEASURING INNOVATION: *THE OSLO MANUAL AND ITS REVISION IN THE BROADER CONTEXT*

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# Why an international measurement standard?

## The roots of the OECD/Eurostat Oslo Manual

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- Effort to converge on a measurable concept of innovation to overcome limitations of other approaches
  - Not (just) R&D, not inventions, *not...*
  - User need (for a standard)
    - Internationally comparable statistics and analysis
  - Availability of reasonably successful experiences to draw on
  - Feasible and actionable standardisation
    - A community of practice with defined responsibilities and resources (including imposable burdens)
    - A shared interest on what to and how to measure
    - Sufficient similarity/universality of phenomena
- An evolving and open standard
  - Globally adopted in many forms
  - Constant modification and adaptation by users and producers



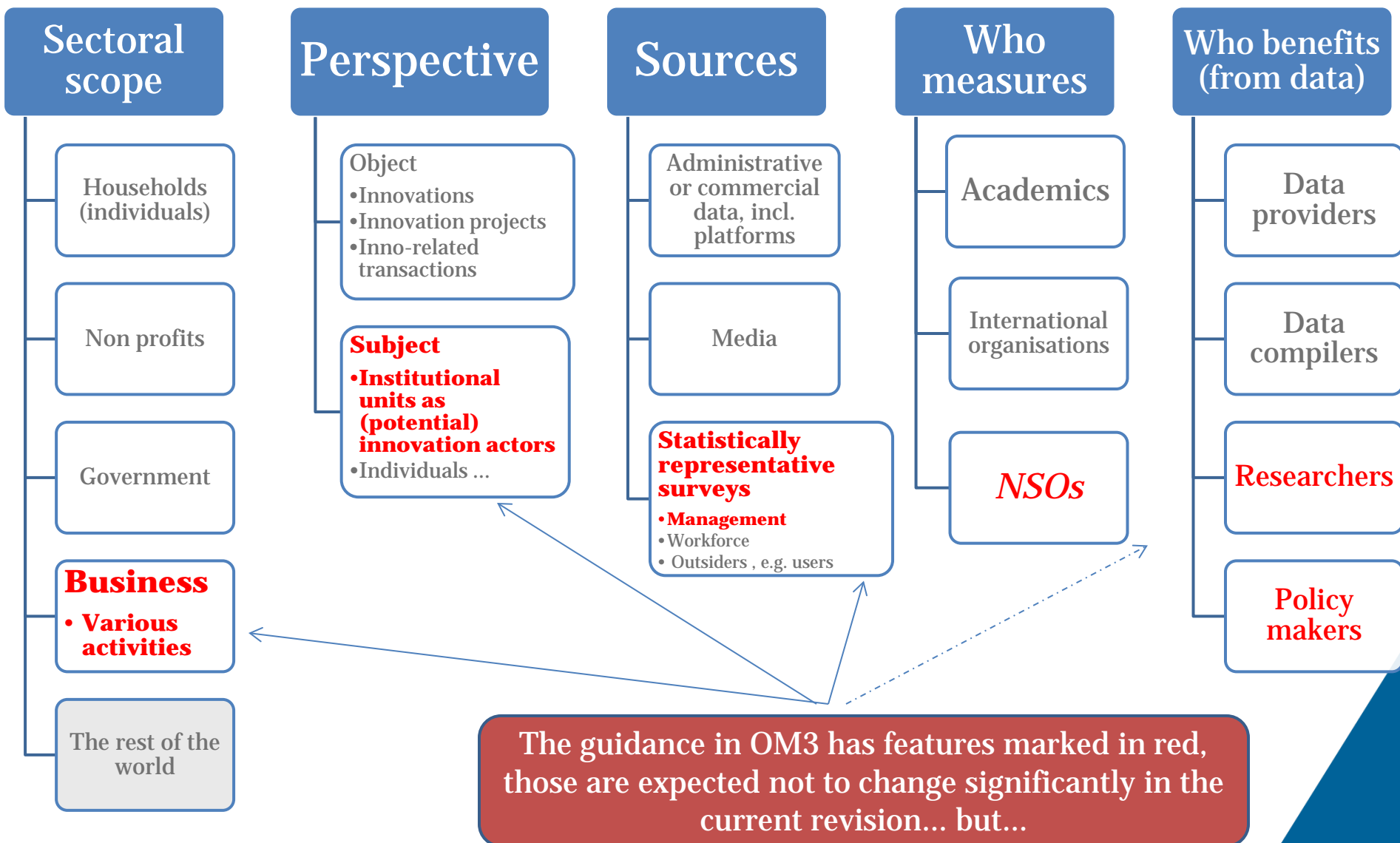
# The Oslo Manual (OM) in a nutshell

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- Object: Innovation defined as implementation by firms of new/improved products/processes
  - Ideas and knowledge crucial but do not suffice
  - Inclusive of “imitations”
  - Stressing that non necessarily R&D or high-tech based
  - Low normative content
  - Other objects captured in relation to “innovation”
- Method:
  - A (non mandatory) standard for representative statistical surveys of self-reported innovation outcomes (and related activities) by business managers about their firms
  - Open to multiple execution approaches



# Measurement choices in a broader context: *The “OM” approach and beyond*





# Main deficits / opportunities of the OM

## *Separating features from bugs*

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- **Uses and purposes of the manual.**
  - International benchmarking
  - Train vs benefit respondents through data
- **Capturing heterogeneity within and across firms.**
  - Same approach fits all?
- **Novelty and its attributes.** Not all types of innovation are equally considered by firms and users of innovation data.
- **Value and impacts.** Coping with user demands v limitations of statistical surveys.
- **Context** in which both innovative and non-innovative firms operate. Practices and competences correlated with innovation, e.g. strategy, management and human resources. Obliquity...?



# Main deficits / opportunities of OM

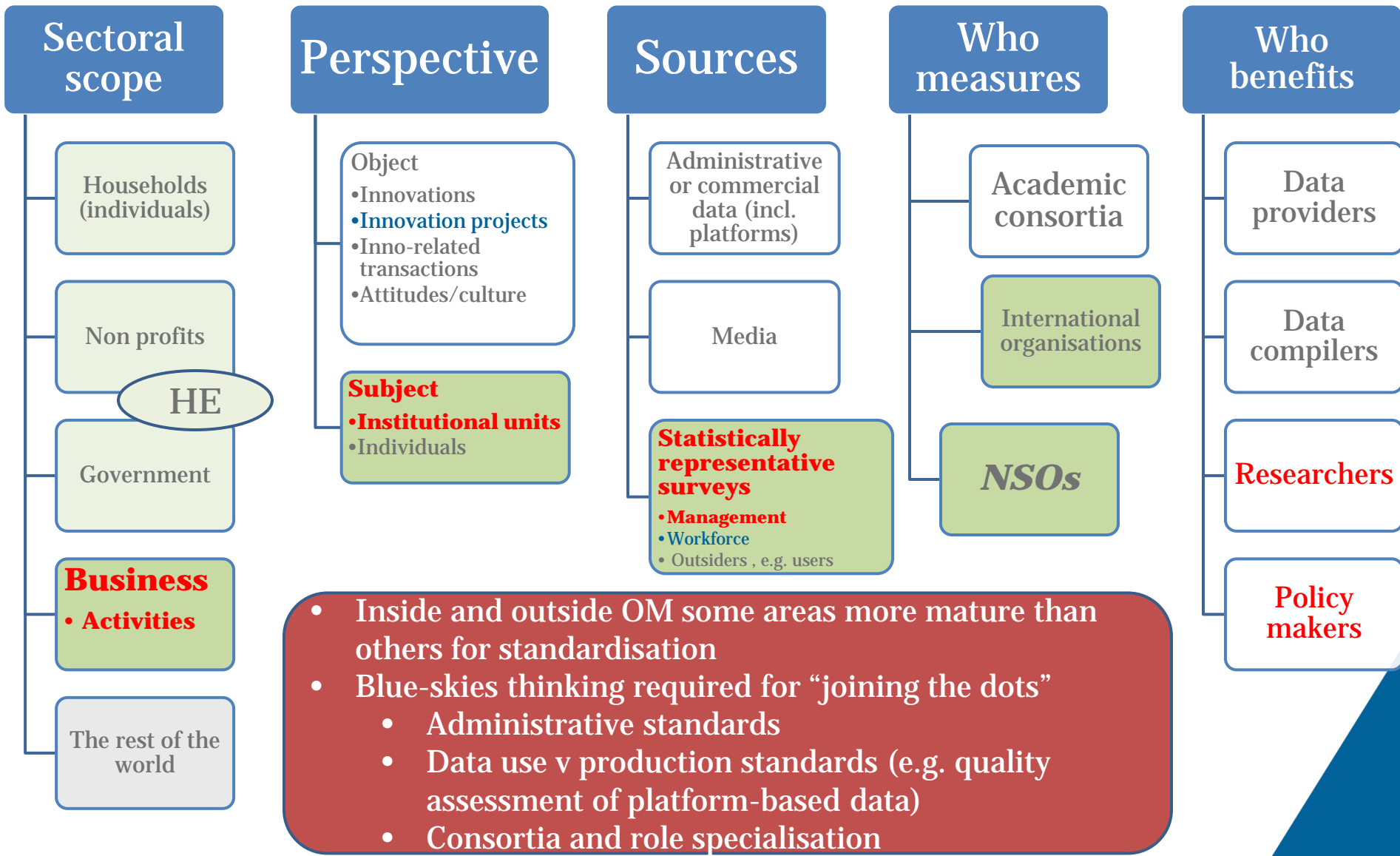
## *(Continued)*

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- The **cost of innovation and investment in knowledge**. Innovation inputs, capitalising/contributing to advances in the intangibles / KBC domain.
- **Linkages and open innovation**. Links as complex objects for surveys.
- **Role of public sector/policy as enabler of innovation**. Perspective from firms.
- **Innovation in some industries and in other sectors**.
  - Can the core OM features be exported / translated to other sectors?
  - Deficits within the agriculture, knowledge intensive services, and other service sectors.
- **Statistical methodology**. Challenges throughout the entire statistical chain (concept and definition testing, survey design and implementation, estimation -incl. data linking- and indicator selection)
  - Response dependence with respect to conditions/framing. Limits to harmonisation.
  - Usual indicators not invariant to irrelevant phenomena



# Can new measurement standards bloom and where?





Thank you

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For more information:

- OECD data and methodology resources on innovation

[www.oecd.org/sti/inno-stats.htm](http://www.oecd.org/sti/inno-stats.htm)

- OECD Blue Sky Forum 2016

[www.oecd.org/science/blue-sky.htm](http://www.oecd.org/science/blue-sky.htm)

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# ANNEX. OM4 – DRAFT OUTLINE



# Draft table of contents OM4

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## **Section 1: General approaches for conceptualising and measuring innovation**

1. Introduction
2. Innovation concepts and their measurement

## **Section 2: Perspectives on measuring innovation in firms**

3. Defining innovation in business
4. Measuring **innovation activities, efforts and capabilities** in firms
5. Business innovation and **knowledge flows**
6. External drivers and enablers of innovation
7. Innovation **outputs and outcomes**



## Draft table of contents OM4 (continued)

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### **Section 3: Methodologies for the measurement and analysis of innovation in firms**

#### 8. Methods for business innovation surveys

- Innovation **questions and questionnaire design**
- Innovation **survey implementation**
- Accounting for innovation **heterogeneity in firms**
- **Quality frameworks** for innovation surveys

#### 9. Innovation data in use

- Innovation indicators and analysis
- Measuring globalisation of innovation