



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

- 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

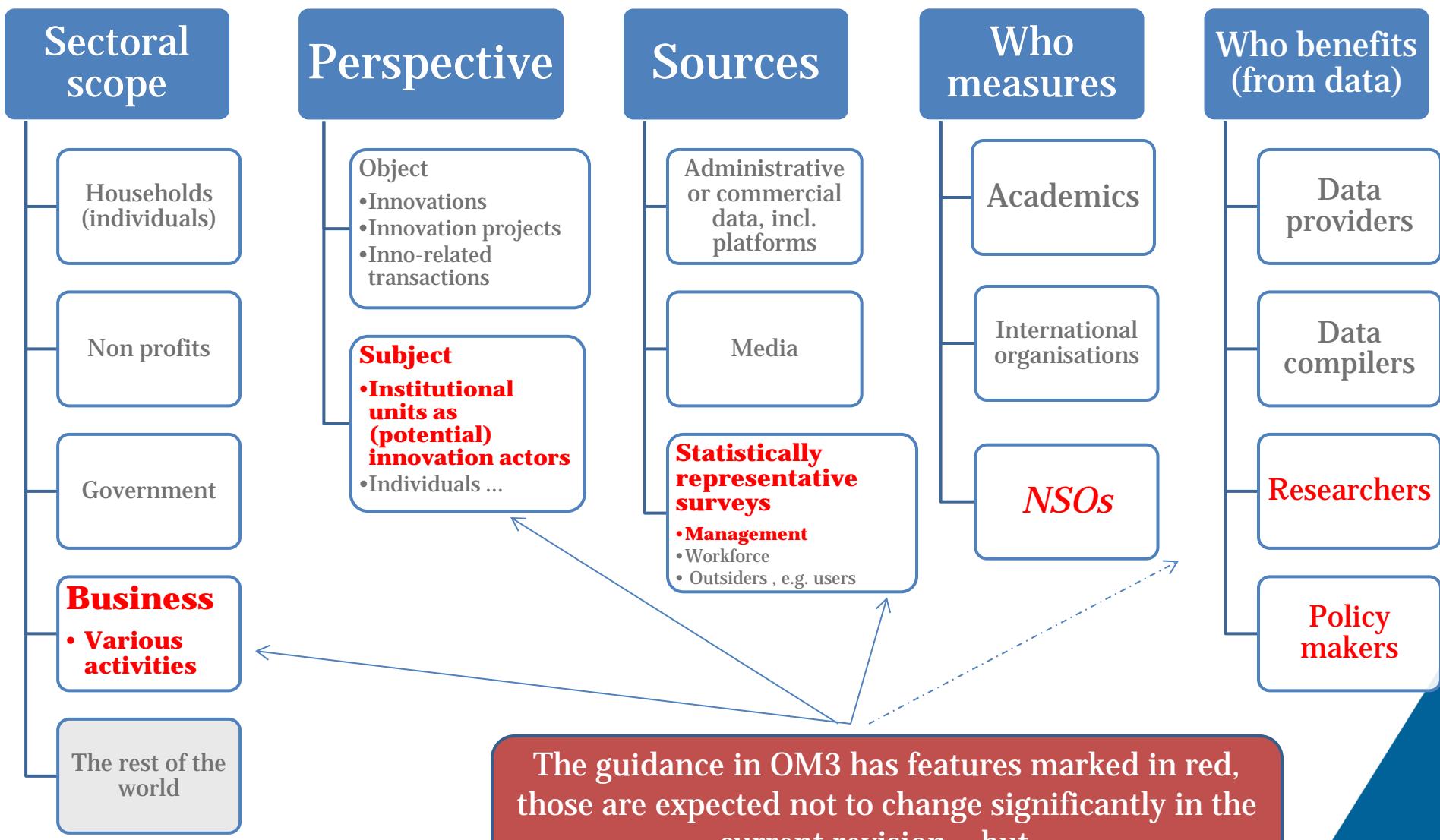


The Oslo Manual (OM) in a nutshell

- 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

- **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...?



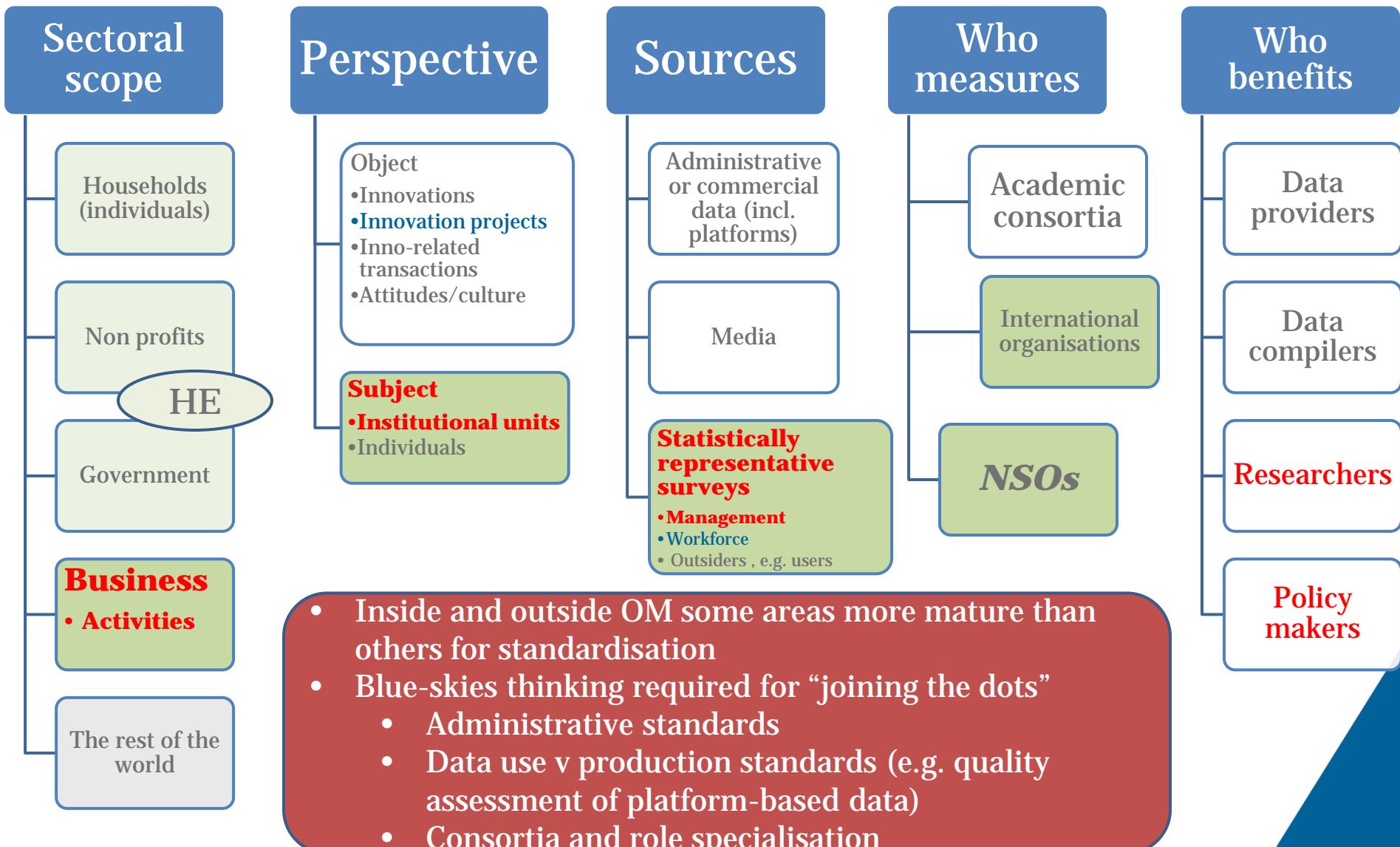
Main deficits / opportunities of OM

(Continued)

- 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

For more information:

- OECD data and methodology resources on innovation

www.oecd.org/sti/inno-stats.htm

- OECD Blue Sky Forum 2016

www.oecd.org/science/blue-sky.htm

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ANNEX. OM4 – DRAFT OUTLINE



Draft table of contents OM4

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)

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**