



***OECD Working Party on
Biotechnology, Nanotechnology &
Converging Technologies (BNCT)***

15th Meeting of the
OECD Working Party on Manufactured Nanomaterials

4th – 6th November 2015, Paris

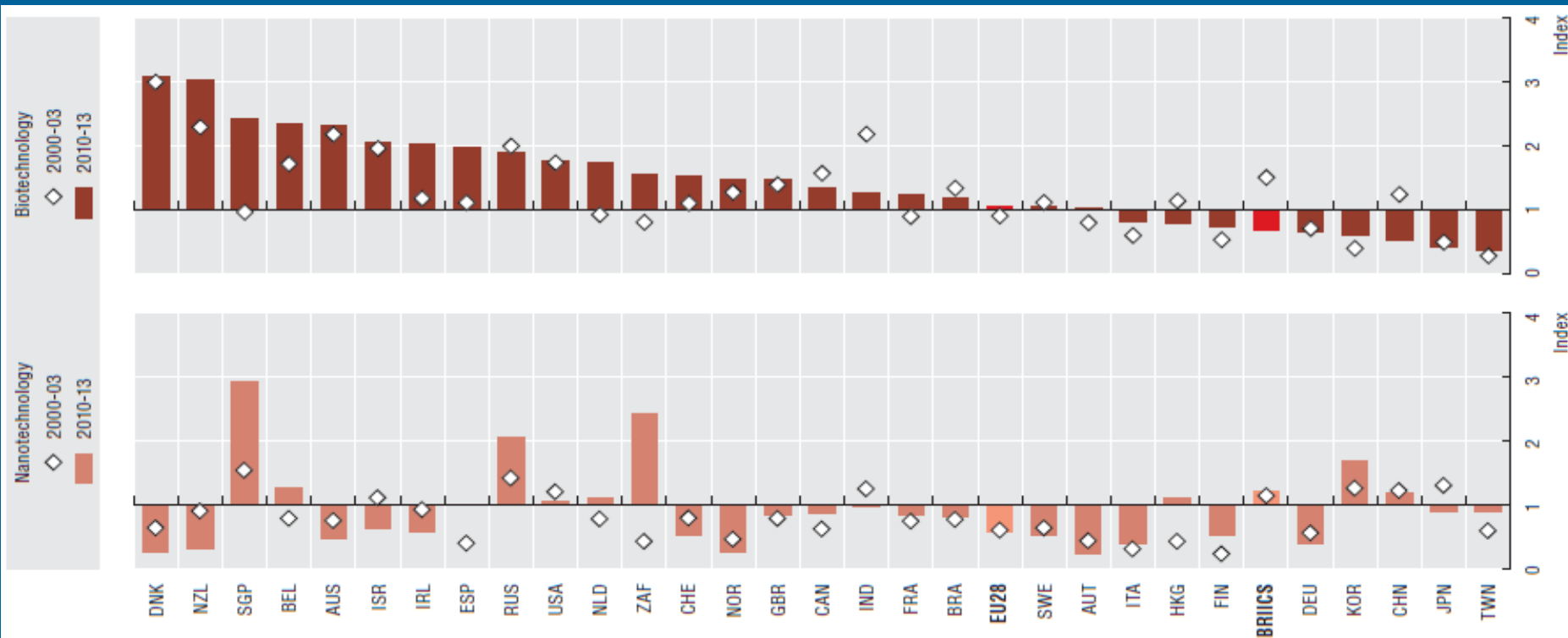


- 1st January 2015: the OECD merged its **Working Party on Biotechnology (WPB)** and its **Working Party on Nanotechnology (WPN)** to form the **Working Party on Biotechnology, Nanotechnology and Converging Technologies (BNCT)**
- Projects of the BNCT (Programme of Work & Budget 2015/2016):
 - **Statistics & Indicators of Biotechnology and Nanotechnology**
 - **Impact Assessment of Biotechnology and Nanotechnology**
 - **Emerging Technologies and the Brain**
 - **Bio-Production for a Bioeconomy**
 - **Better Food for Better Health**



Combined Bio- and Nanotechnology Indicators & Statistics (1)

- Revealed technological advantage (RTA) in biotechnology and nanotechnology, 2000-03 and 2010-13



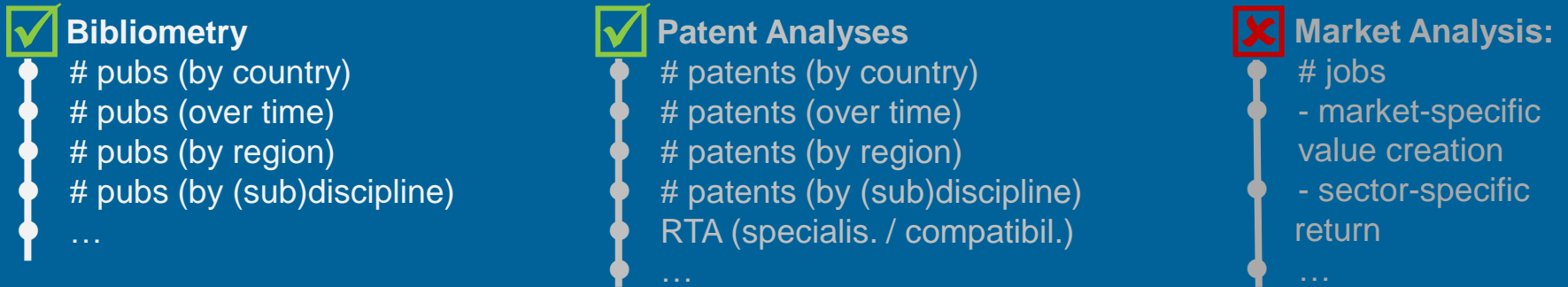
NOTE: The revealed technological advantage index is calculated as the share of country (or economy) in biotechnology/nanotechnology patents relative to the share of country (or economy) in total patents. Index based on IP5 patent families. (Source: OECD STI Scoreboard 2015)



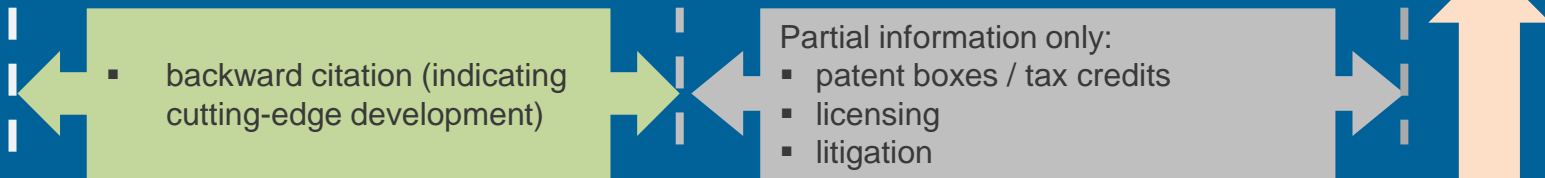
Combined Bio- and Nanotechnology Indicators & Statistics (2)



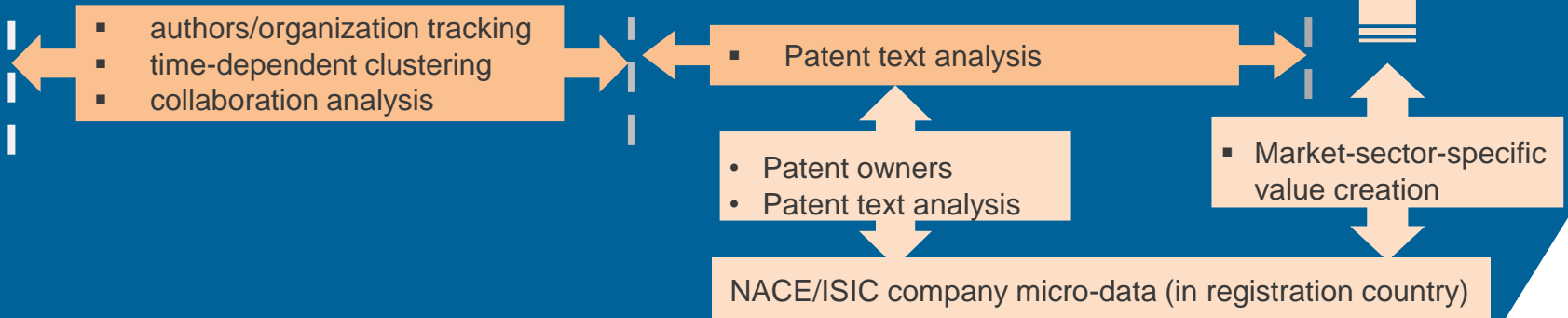
Indicators routinely directly collated:



Existing linked Indicators:



Proposed new / exploratory linked Indicators:





Summary:

nano-specific Work of the OECD BNCT

- BNCT's **Project on 'Emerging Technologies and the Brain'** aims to analyse the role of new technologies (including nanotechnologies) in research and treatments of diseases of the brain.
- BNCT (in collaboration with NESTI) aims to **review and re-confirm indicators** hitherto used in **biotechnology and nanotechnology** assessment, as well as **definitions** underlying the collection of biotechnology and nanotechnology statistics.
 - BNCT's core set of indicators is anticipated to:
 - Allow **backward comparison** with established indicators,
 - Allow **interdisciplinary comparison** with other technologies (e.g. enabling technologies, general purpose technologies, etc.), and thus
 - Allow **identification of converging technologies based on sciento- and econometrics**.
- BNCT's stress-tested indicators will support the **in-depth Impact Assessment** of Biotechnology, Nanotechnology and Converging Technologies and their **respective national policies**.



Find out more about BNCT

<https://www.innovationpolicyplatform.org/oecd-working-party-bio-nano-and-converging-tech-bnct-0>



Project on Statistics & Indicators of Bio- and Nanotechnology (OECD BNCT)

Edit Members Share

Biotechnology and nanotechnology are both disciplines of science and technology in their own right and providers of increasingly widely adopted tools to other fields of science and technology and to each other. This complex pattern of deployment signifies a growing convergence of traditional disciplines of science and engineering, and poses a formidable challenge to the creation and measurement of reliable indicators of the technologies' development and impact.

The OECD Working Parties on Biotechnology (OECD WPB) and Nanotechnology (OECD WPN) have for several years set, measured and published indicators and statistics for biotechnology and nanotechnology (see below: "Background Information on Statistics & Indicators"). With the creation of the new **OECD Working Party on Biotechnology, Nanotechnology and Converging Technologies (BNCT)** in January 2015, the OECD now aims to re-confirm indicators and measurement methodology for these multidisciplinary and partially over-lapping technologies with a view to establishing exclusively accurate and relevant datasets.

Background Information on Statistics & Indicators in Bio- and Nanotechnology



OECD Biotechnology Statistics 2009 (OECD, 2009)

Nanotechnology: An Overview based on Indicators and Statistics (OECD, 2009)

Data Brief comparing the Key Biotech and Key Nanotech Indicators (November 2013)

Upcoming Meetings: BNCT TFMI

2nd TFMI Meeting (1. October 2015, WebEx)
3:00pm to 4:00pm

Latest News: Statistics & Indicators

Welcome to BNCT Statistics & Indicators

Posted by Steffi Friedrichs on August 13, 2015



Welcome to the OECD's work on Statistics & Indicators in Biotechnology & Nanotechnology - a project of the OECD Working Party on Biotechnology, Nanotechnology and Converging Technologies (BNCT).

This website is the one-stop-shop for members of the public interested in the measurement of bio- and nanotechnology, and for the registered delegates and experts of the OECD BNCT, who are driving the setting of relevant statistics and indicators through their work and expertise.



OECD Working Party on Bio-, Nano- and Converging Tech (BNCT)

Members Share



On 1 January 2015, the Working Party on Biotechnology (WPB) and the Working Party on Nanotechnology (WPN) merged into the Working Party on Biotechnology, Nanotechnology and Converging Technologies (BNCT).

The BNCT is focused on policy issues in emerging technology fields related to bio, nano and converging technologies. It aims to contribute original policy analysis and messages to the global community, and to make ground-breaking proposals to policy makers. Policy issues of interest to the BNCT range across topics as diverse as research and technological development, innovation and commercialisation, standards and regulations, best practice policy formulation and implementation, ethical, legal and social issues, public engagement, education, skills and training, organisation of research, and measurement and evaluation methods and tools. In particular, the BNCT will advise upon emerging policy issues related to the responsible development of biotechnology, nanotechnology and converging technologies, and assist Member countries in understanding and managing the changing nature of research, development and innovation.

The BNCT's work programme for the next two years will focus on the following areas:

- Measurement & Impact
- Emerging Technologies for Health
- Bio-Production

Past BNCT Meetings



1st BNCT Meeting (3 days)
(18. - 20. May 2015, Paris)
(access: BNCT only)

Upcoming BNCT Meetings

Sep 16 BNCT Strategic Workshop (2 days)
(Vienna)
2:30am

Dec 02 2nd BNCT Meeting (3 days)
(OECD, Paris)
11:30am to 9:30am

Latest BNCT News

Welcome!

Posted by David Winickoff on August 14, 2015



The OECD-BNCT Secretariat is excited to roll out our Working Party's new website. Emerging technologies have the capacity to help address intractable problems and remake our world. Importantly, there are critical opportunities to intervene -- through policy and collective learning -- to create the environmental for these technologies to develop in optimal ways. We hope this site will enable our important collective work!

BNCT Projects

Statistics & Indicators of Bio- and Nanotechnology

Impact Assessment of Bio- and Nanotechnology

Emerging Technologies and the Brain

Bio-Production for a Bioeconomy

Better Food for Better Health



THANK YOU!

Steffi Friedrichs

Biotechnology, Nanotechnology and Converging Technologies

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