



MINISTRY
OF ENTREPRENEURSHIP
AND TECHNOLOGY



National Smart Specialization in Poland

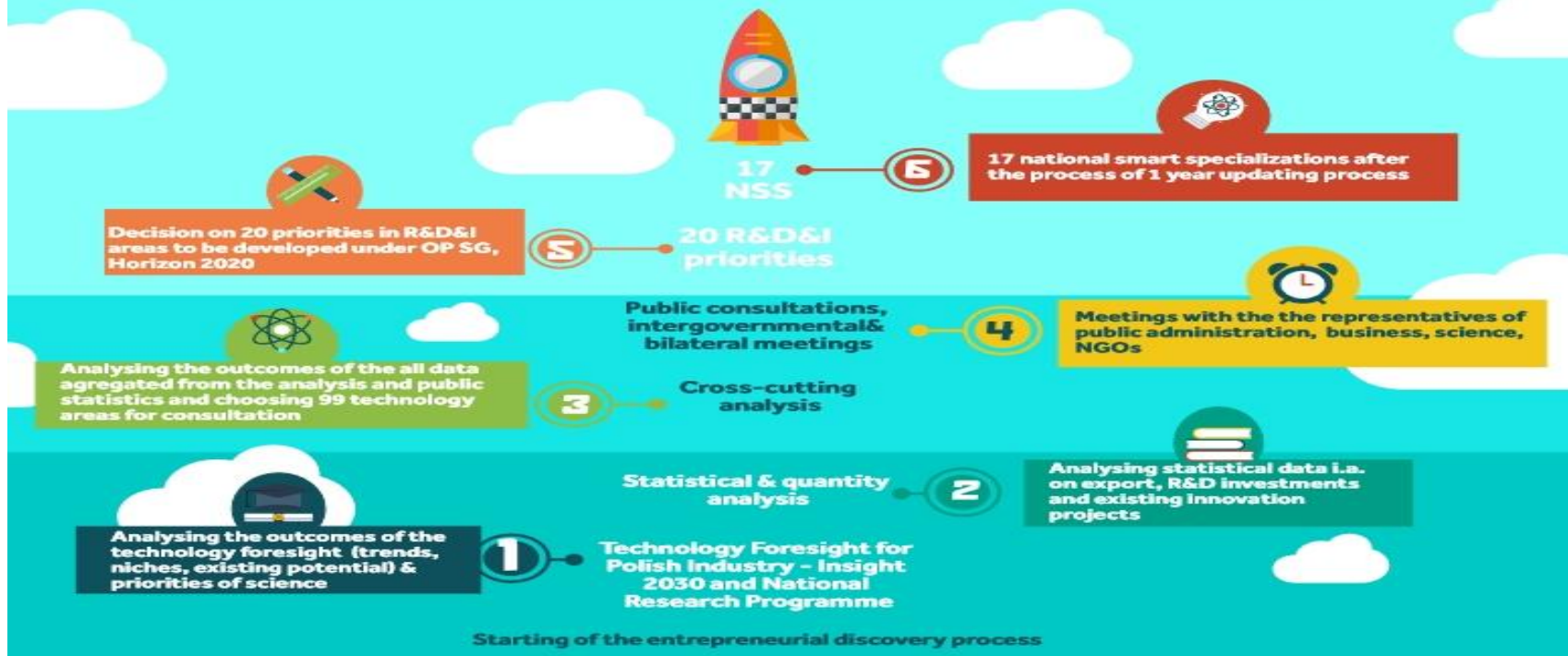
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Cluster Garden, Warsaw 16th April 2018



The road to Polish smart specializations – entrepreneurial discovery process (EDP)

The process of NSS identification – Polish case





Polish R&D&I priorities – updated 1st January 2018

Healthy society

- NSS 1 – **Healthy society**

Agriculture and food bioeconomy, forest based and environmental economy

- NSS 2 – Innovative technologies, processes and products of agriculture and food and forest based sector
- NSS 3 – Biotechnological and chemical processes, bioproducts and products of specialist chemistry and environmental engineering

Sustainable energy industry

- NSS 4- High-efficiency, low carbon, integrated systems for generation, storage, transmission and distribution of energy
- NSS 5 – Smart and energy-efficient construction
- NSS 6 – Environment friendly transport solutions



Polish R&D&I priorities – updated 1st January 2018

Natural resources and waste management

- NSS 7 – Modern technologies for acquiring, processing and using natural resources and manufacturing their substitutes
- NSS 8 – Minimalization of waste generation, including non-recyclable waste, and the material and energy use of waste (recycling and other recovery methods)
- NSS 9 - Innovative solutions and technologies in water and wastewater management

Innovative technologies and industrial processes (horizontal approach)


- NSS 10 – Multifunctional materials and composites
- NSS 11 – Sensors (including biosensors) and smart sensor networks
- NSS 12 – ICT and geoinformation
- NSS 13 – Printed, organic and flexible electronics
- NSS 14 – Automation and robotics of technological processes
- NSS 15 - Photonics
- NSS 16 – Innovative creative technologies
- NSS 17 – Innovative maritime technologies



Monitoring and EDP mechanisms of Polish smart specialization

defining, verifying and updating
R&D&I priorities


coordination of the
NSS actions - decision
making, validation of
the monitoring
outcomes

 **Steering Committee**

exchanging
information &
data on latest
developments
in NSS & 16
RIS, Horizon
2020, the OP's
and other
innovation
initiatives in
Poland (SoRD)

 **Consultative Group on NSS**

defining R&D&I
priorities, strategic
aims and indicators
for monitoring,
creation of the
growth vision till
2023 (SWOT analysis,
development
barriers)

 **Working Groups on NSS**

**ENTREPRENEURIAL
DISCOVERY
PROCESS**


exploring new R&D&I areas
and looking for emerging
specializations

 **Smart Panel**

seed analysis and CATI
interviews with selected
companies

 **interviews**

focus meetings with
business & science
representatives and
preparation of BTR for
the analysed area

 **Smart Labs**

 **Smart Partnerships**

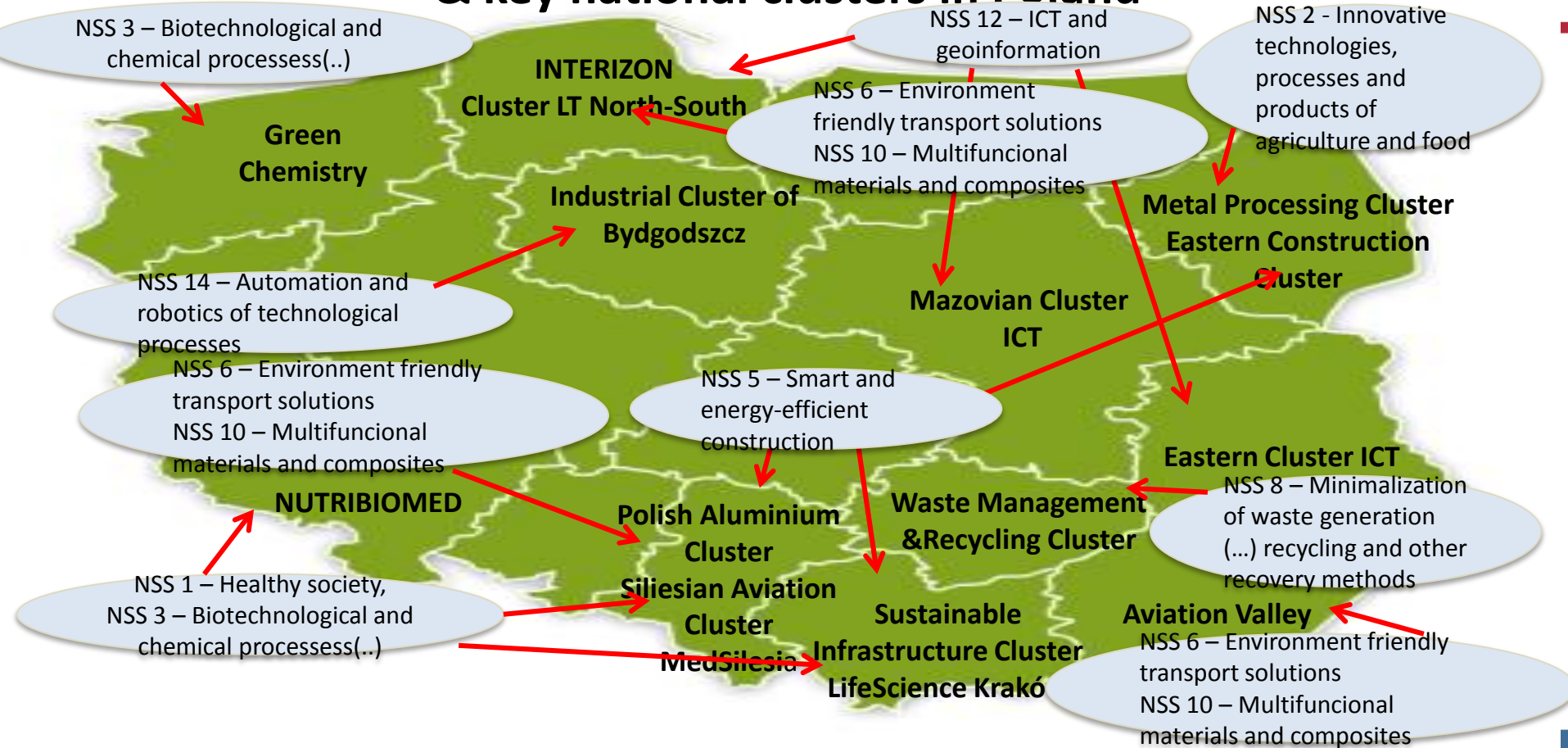
other interested
business & science
entities

international cooperation -
S3 Partnerships, EU Clusters,
Interreg, KICs, Horizon 2020

**cross-regional and
national/regional cooperation** -
cooperation on the national level
between regions themselves and
regions and national level



Smart specializations & key national clusters in Poland





Synergy of S3 with KETs



Healthy society

1

KETs: micro- and nanotechnology, industrial biotechnology, advanced manufacturing technologies, advanced materials



Agriculture and food bioeconomy, forest based and environmental economy

2

KETs: nanotechnology, industrial biotechnology, advanced manufacturing technologies, advanced materials



Sustainable energy

3

KETs: micro- and nanotechnology, advanced manufacturing technologies, advanced materials, photonics



Natural resources & waste management

4

KETs: micro & nanotechnology, industrial biotechnology, advanced manufacturing technologies, advanced materials, photonics

5



Innovative technologies & industrial processes

KETs: micro- and nanotechnology, industrial biotechnology, advanced manufacturing technologies, photonics, advanced materials

Examples:

1. non-ferrous metals industry - advanced materials: KGHM Polska Miedz
2. low cost grafen manufacturing technology - nanotechnology, advanced manufacturing (Seco/Warwick & Institute of Electronic Material Technologies)
3. passenger jet engine manufacturers - advanced manufacturing - WSK Rzeszów (Pratt&Whitney Rzeszów)

KETs Technology Centres

Criteria:

- providing services to industry and SMEs
- active in TRL 5-8

Aiming at:

- helping companies to introduce new KETs -based products
- TRL 3- 8

CAMT - Centre for Advanced Manufacturing Technologies in Wrocław
Center of Bioimmobilisation and Innovative Packaging Materials in Szczecin



I Impact of the smart specialization and its outcomes

More efficient cooperation of the national & regional level

(animation of the cooperation in
common S3 areas, *project
pipeline*, exchange of data on
innovation policy)

Updating of the R&D&I priorities

(thematic concentration on the
endogenous potential, updating
NSS as the result of the evidence-
based monitoring system)

Concentration of the public funds on the real potential of Polish economy

(synergy of NSS with flagship
projects & strategic sectors listed
in the SoRD)

Better cooperation among
representatives of business &
science (common projects) and
observing the **demand from the
market**



Thank you for your attention

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