



## Smart specialisation and emerging industries



First Transnational Policy Dialogue CLUSTAT

Jan Larosse – Flemish Government

Stuttgart, 15 December 2011

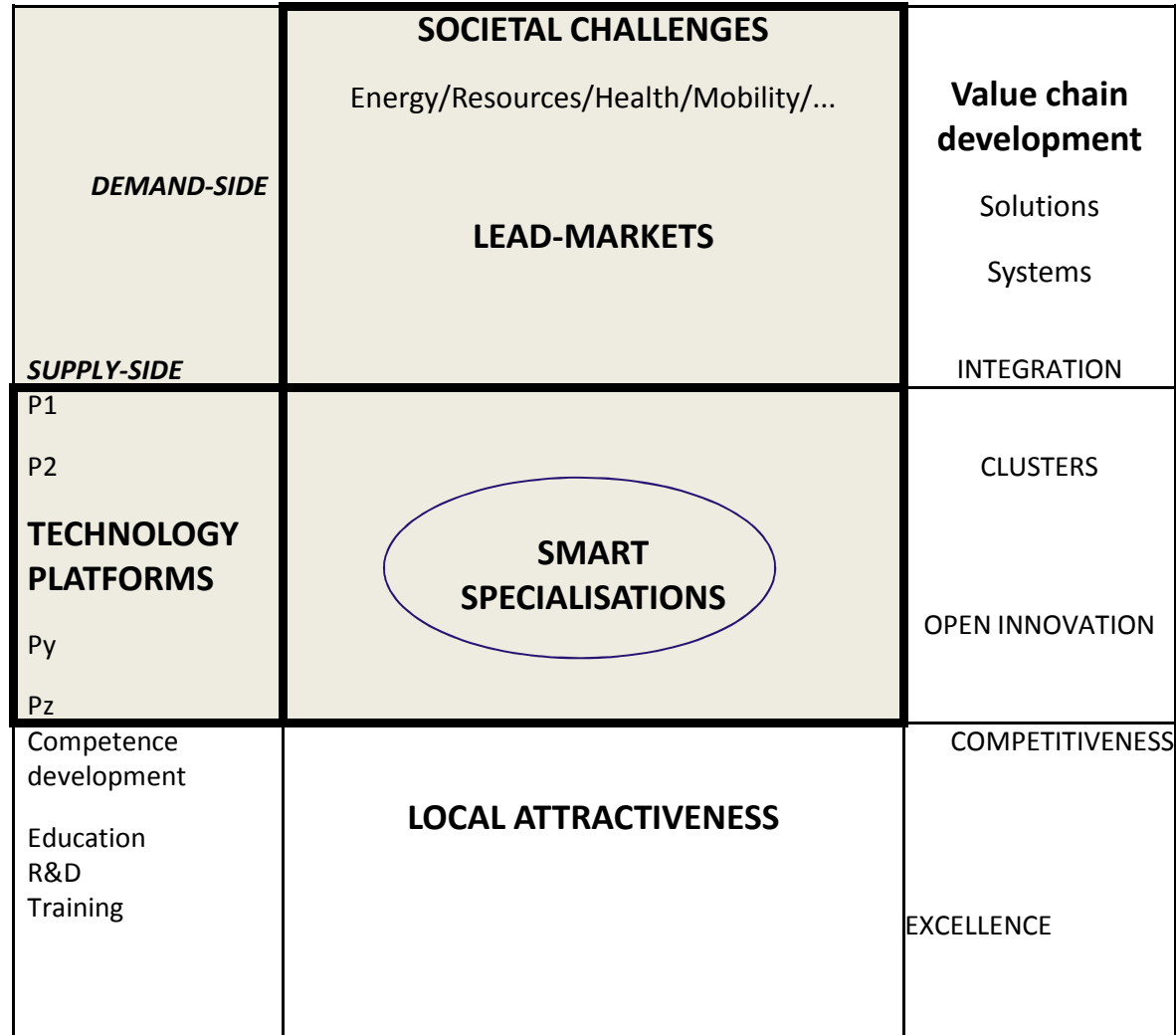
## What is SMART SPECIALISATION?

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An **economic transformation agenda** based on **4Cs**:

- **(Tough) Choices**: select few priorities on the basis of international specialisation and integration on international value chains – avoid duplication and fragmentation in ERA
- **Competitive (Constructed) Advantage**: mobilize talent by matching RTD + i and business needs & capacities – entrepreneurial discovery process
- **Critical Mass/Clusters**: develop world class excellence clusters and provide arenas for related variety/cross-sectorial links which drive differentiation
- **Collaborative Leadership**: efficient innovation systems as a collective endeavour based on public-private partnership (quadruple helix) – experimental platform – give voice to un-usual suspect

# Smart specialisations: at the cross-road of regional innovation competences and global market opportunities/societal challenges



# Future ERDF : new ex ante conditionality!

Thematic objectives	Ex ante conditionality	Criteria for fulfilment
<p>1. Strengthening research, technological development and innovation (R&amp;D target) (referred to in Article 9(1) )</p>	<p>1.1. Research and innovation: The <b>existence of a national or regional research and innovation strategy for smart specialisation in line with the National Reform Program</b>, to leverage private research and innovation expenditure, which complies with the features of well-performing national or regional research and innovation systems.</p>	<p>A national or regional research and innovation strategy for smart specialisation is in place that:</p> <ul style="list-style-type: none"> <li>– is based on a SWOT analysis to concentrate resources on a limited set of research and innovation priorities;</li> <li>– outlines measures to stimulate private RTD investment;</li> <li>– contains a monitoring and review system.</li> </ul> <p>A Member State has adopted a framework outlining available budgetary resources for research and innovation;</p> <p>A Member State has adopted a multi-annual plan for budgeting and prioritization of investments linked to EU priorities (European Strategy Forum on Research Infrastructures-ESFRI).</p>

# Smart Specialisation: what's new?

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- Smart specialisation' is an important new policy approach enabling strategic choice making, needed for the transformation of our societies and economies (in times of harder public budget constraints).

## Dynamic clusters

- Focus is on the 'entrepreneurial discovery process', searching for 'comparative advantages' and 'complementarities'. This is an alternative to both fragmentation in 'bottom-up' decision making and for bureaucratic 'top-down' picking winners.

## Learning clusters

- Multi-actor and multi-level governance: recognising the complexity of interactive strategy development between actors in clusters and between those clusters in global value chains; between policy development in different regions and between different policy levels.

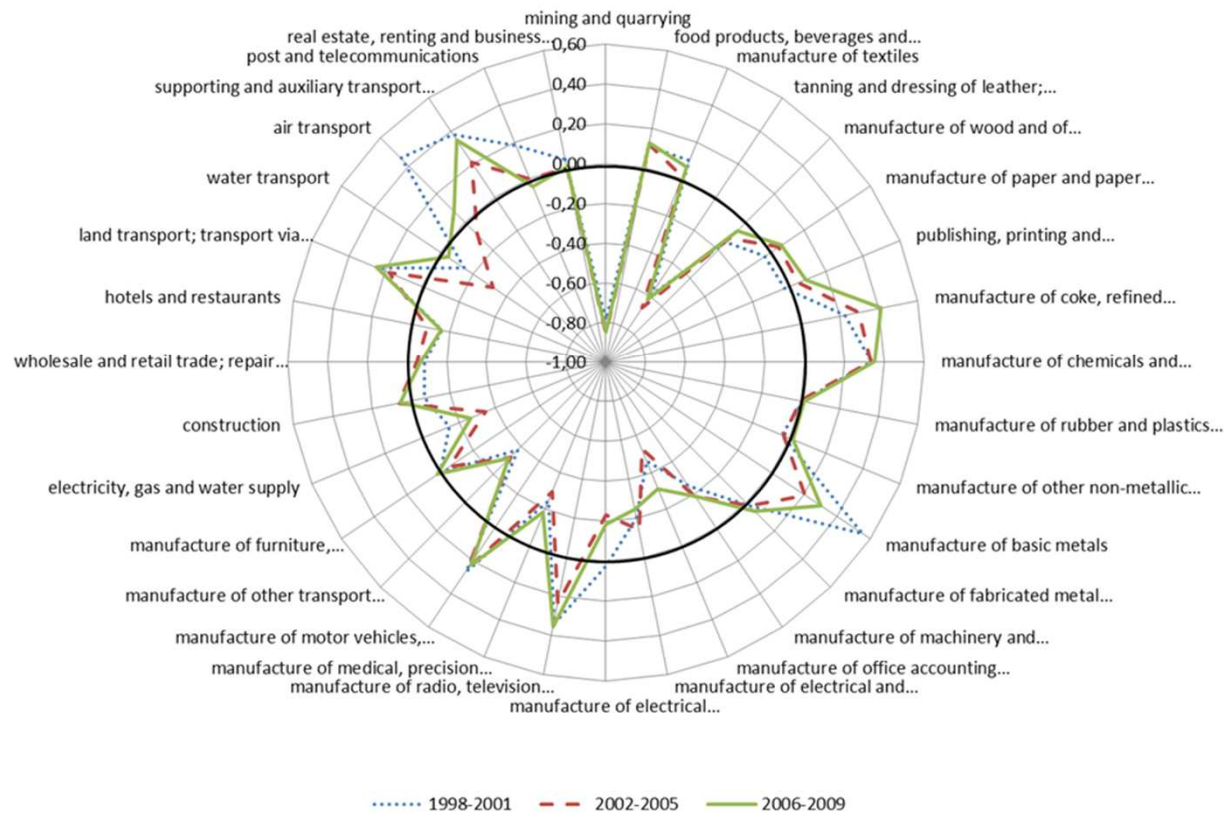
## Open cluster platforms

- Use of shared strategic intelligence in a shared reference framework (road maps) can integrate decentralised decision centres.

## Enhanced cluster management

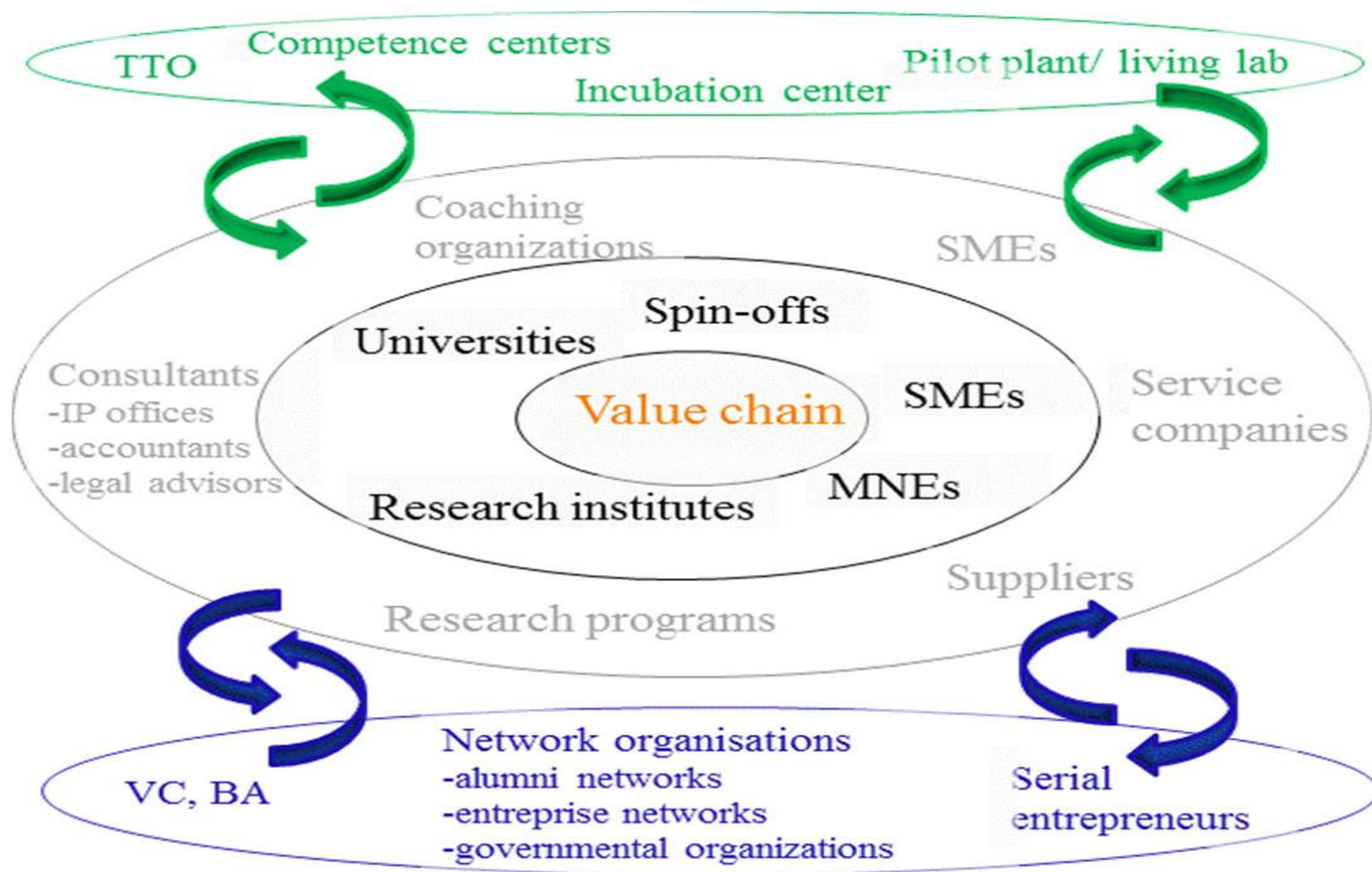
# Tools for strategic monitoring: economic specialisation profile

RCAN - FLANDERS (BE2)





# Another tool: cluster maps for smart specialisations



Consult



# Smart Specialisation case-studies

(OECD-TIP project on smart specialisation in global value chains)

Advancing strategy development with strategic monitoring & case-studies for 'discovery' of smart specialisations

## Case 1: Sustainable Chemistry

- Largest petro-chemical cluster in Europe is in Flanders; strong links with food, building e.o. sectors; cross-border links with NL and DE
- Transition towards bio-based economy
- How to become a world-class cluster in sustainable chemistry?
- Focus on strategic road mapping (cross-border!)

## Case 2: Nano-for-Health

- IMEC: largest independent nano-electronics research institute in Europe; technology platform for open innovation
- Health: transition towards 'personalised care'
- How to leverage technology platform for these new application areas?
- Focus on the management of an **emerging eco-system** (cross-border!)



# Nano for Health in Flanders: A unique knowledge basis and related infrastructure



- ~ 1950 researchers
- ~ 260 PhDs
- ~ 350 industrial residents
- ~ 320 MEuro R&D



- ~ 1250 researchers
- ~ 180 PhDs
- ~ 90 MEuro R&D



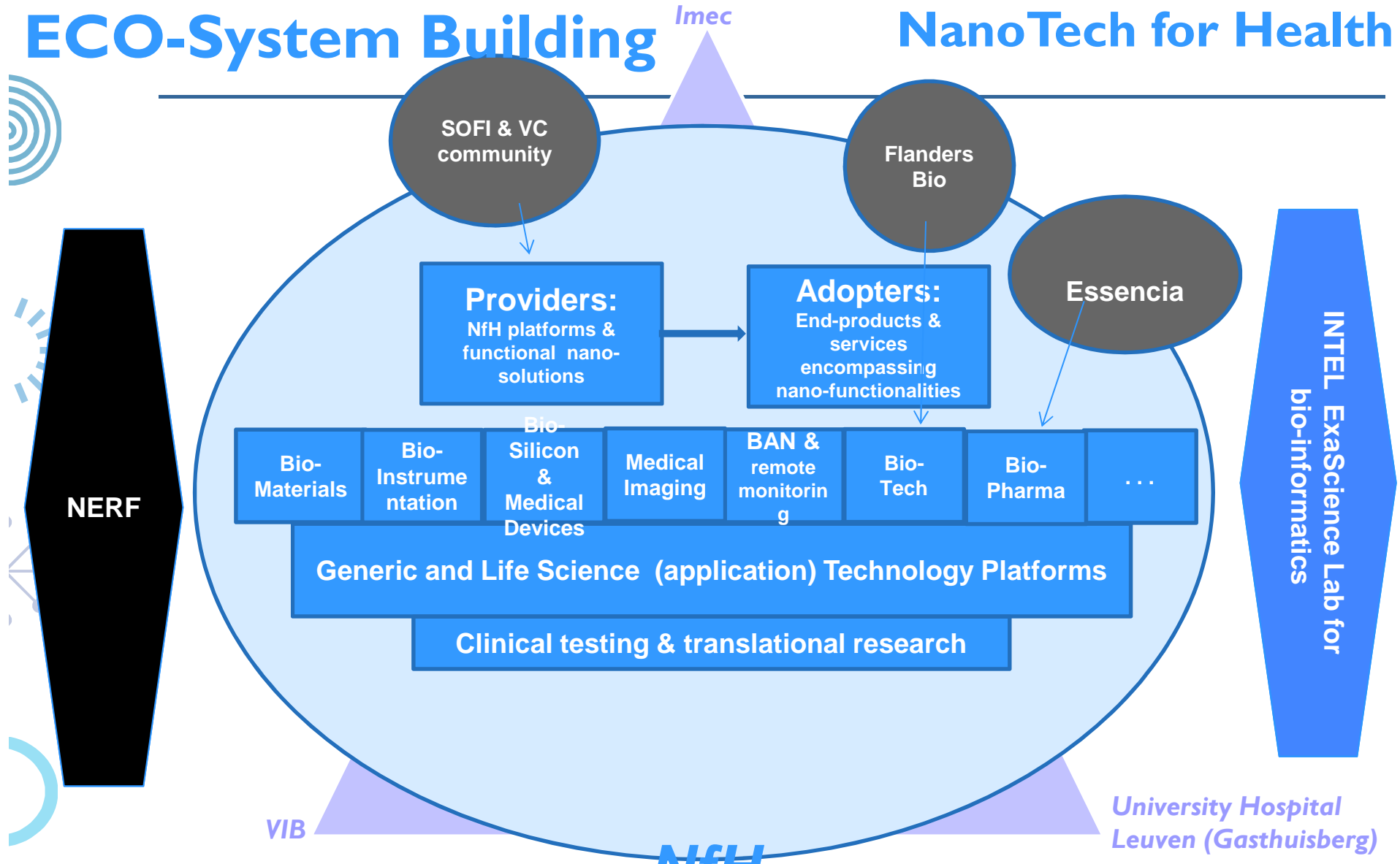
- ~ 18000 researchers & staff (>2000 beds; doubling in the next years)
- ~ 570 PhDs
- ~ 330 MEuro R&D



**+ 1000 m<sup>2</sup> NERF bio-lab**

# ECO-System Building

# NanoTech for Health



VRWI Clusters, Pact 2020, NIP & Innovation Spearhead health care, Smart Specialization



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