
SMART SPECIALISATION BETWEEN VANGUARD AND COHESION CHALLENGES

Henning Kroll

developed further from joint work with Roberta Capello

High-Level Meeting on Smart Specialisation, 27/06/2016
Brussels, Berlaymont

Novelty and future of Smart Specialisation

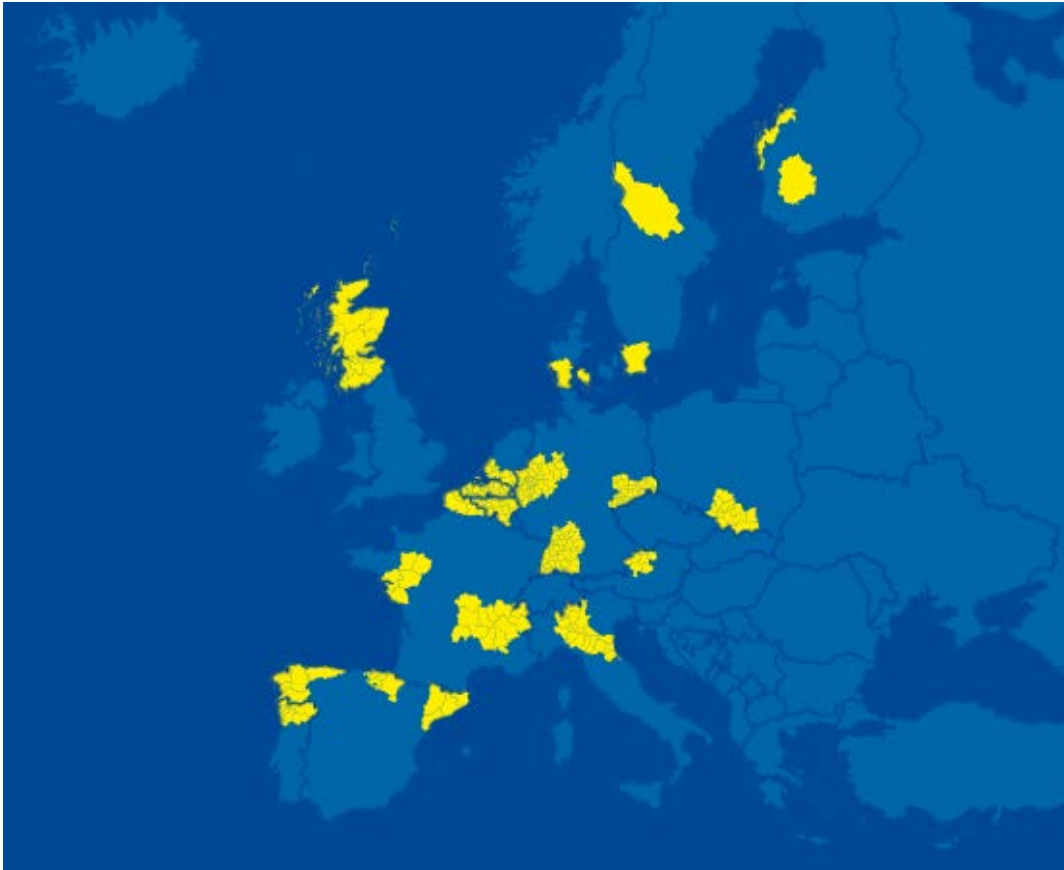
Smart specialization triggered notable changes in the way innovation policies are conceived

- **transcending old centralized planning policy styles**
 - priority setting based on *regional bottom-up self-discovery*
 - public–private partnership processes to identify *and pursue* objectives
- **turning away from high-tech myopia**
 - innovation is no longer set equal to R&D expenditure;
 - consideration of innovation beyond product innovation;
 - inclusion of societal challenges.
- **suggesting “realistic” policy prioritization**
 - *focus on application/use* rather than development of technologies
 - technology domains that *actually matter* for the regional context

BUT:

- **In the coming years (post ex-ante) RIS3 & EDP will effectively become voluntary regions need to see added value, otherwise their will discontinue their efforts**

Novelty works for the centre Vanguard / 4 Motors



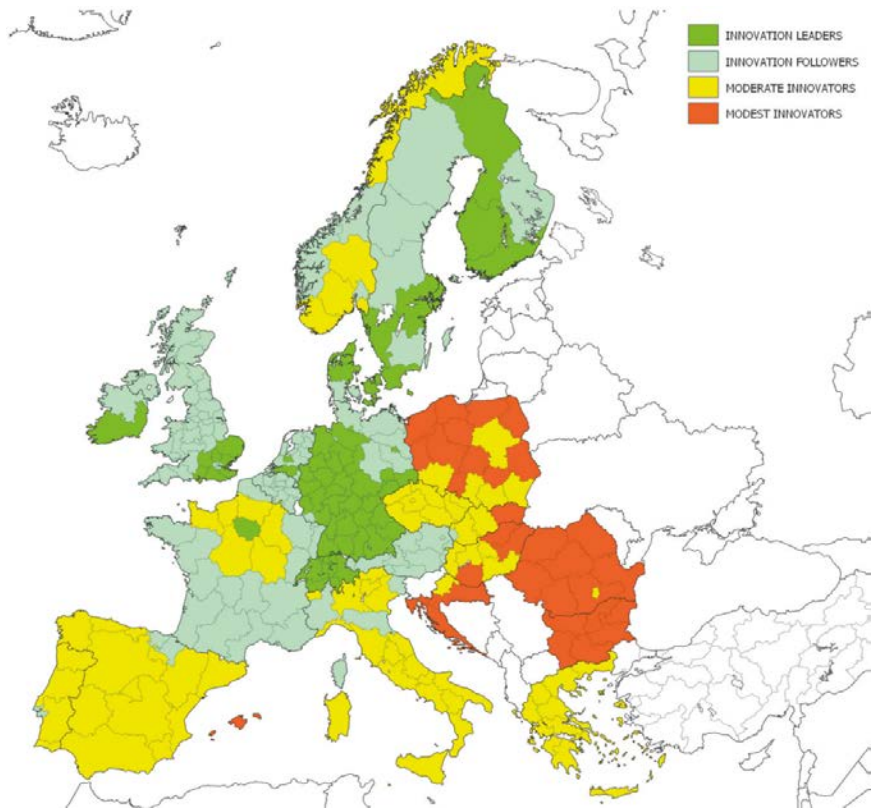
Source: Vanguard Initiative



Source: afersexteriors.gencat.cat

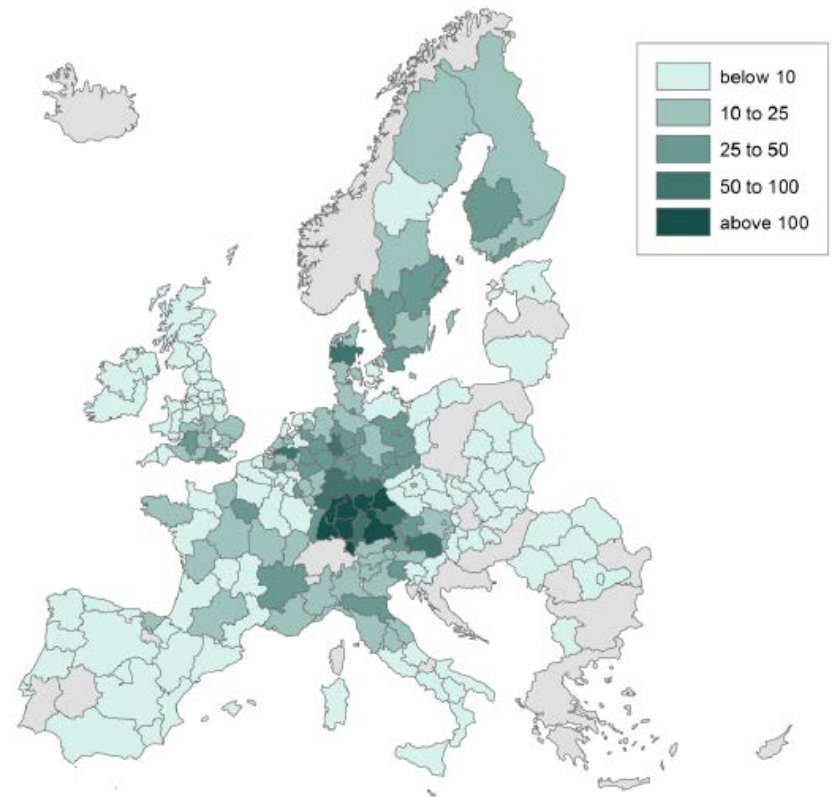
The real economy as it is

GENERAL INNOVATION



Source: Regional Innovation Scoreboard 2014

ADVANCED MANUFACTURING (PATENTING)



Source: Technopolis, Fraunhofer ISI; Regional Innovation Monitor

Limits of the real economy

➤ **lack of regional innovation system**

- lack of industrial strength & diversity,
- no or few research institutions or universities,
- size in terms of market potential,
- lack of intra-regional connectedness.

➤ **multiple actors beyond the direct control of (isolated) local policy**

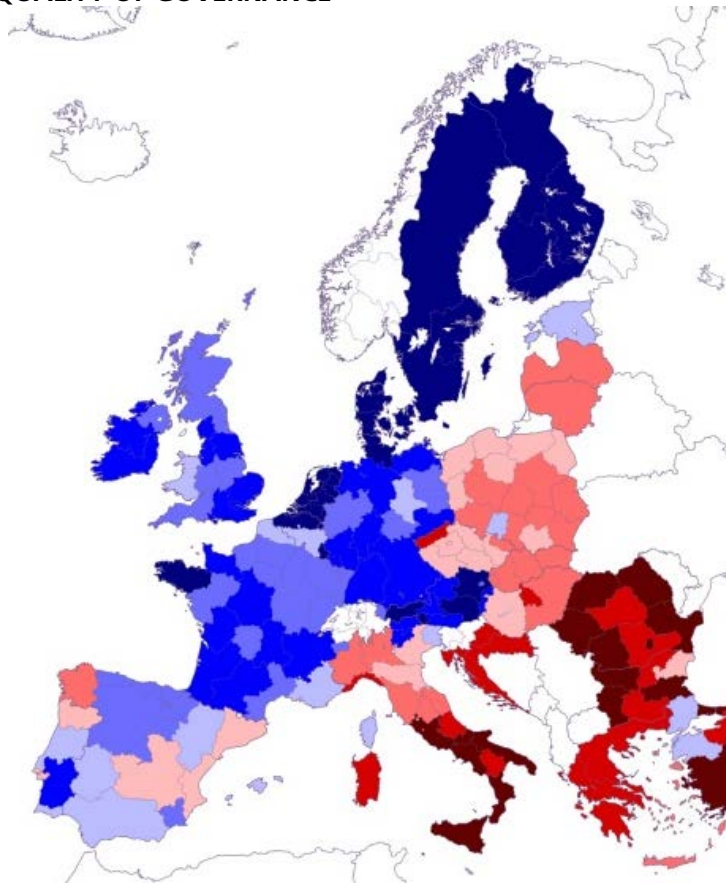
- multinational subsidiaries hesitant (or not entitled) to engage, external corporate decisions
- regions not part of value chains or hold an unfavourable position in them

➤ **limited basis 'cross- innovation domains' in regions with partial capacities**

- specialized diversification does not apply for lack of variety and capacity,
- cross-fertilisation does not work in fragmented RIS – no new domains emerge,
- lock-in around historically grown specializations.

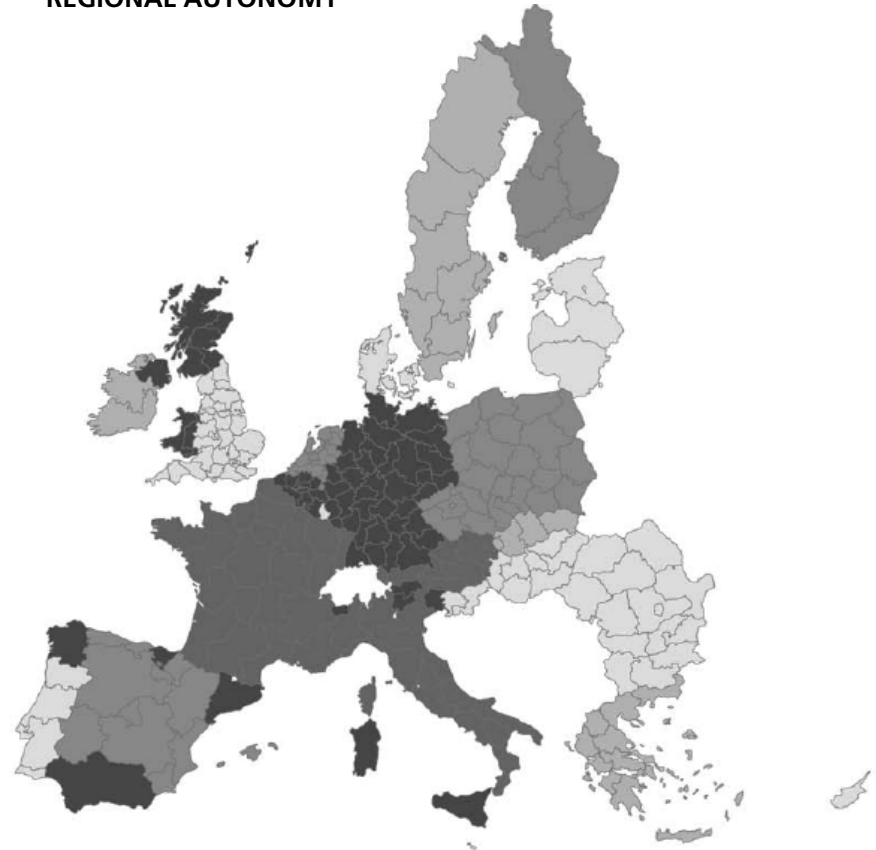
The governance system as it is

QUALITY OF GOVERNANCE



Source: European Quality of Governance Project

REGIONAL AUTONOMY



Source: Baier, Kroll, Zenker, 2013

Limits of policy and governance

➤ **institutional weakness**

- quality of governance,
- lack of suitable institutions to support participative processes.

➤ **barriers at the level of the governance system**

- lack of match between functional and political-administrative regions,
 - lack of regional autonomy and thus remit,
 - lack of resources – number of staff and professional qualification,
 - lack of experience with transformative learning processes,
 - lack of suitable networks and positive standing with the private sector.

➤ **political barriers**

- lack of high-level support, preference for centralist governance,
- reservations cf. possible outcomes of broadened stakeholder involvement.

Conclusions for Cohesion Policy

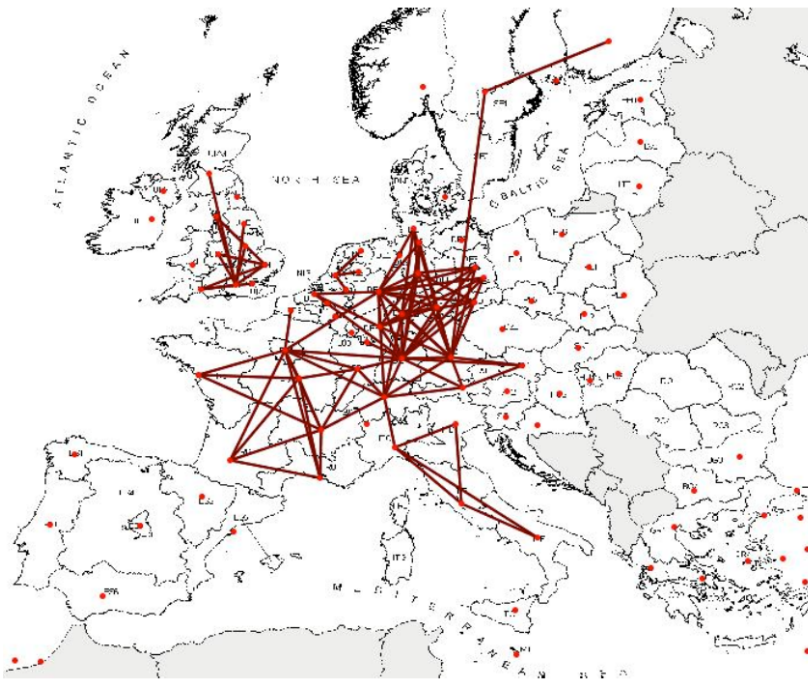
- **R&D capability based smart specialization provides limited practically attractive propositions for regions outside the core or ‘The Vanguard’**
- technology generation-based RIS3 as originally conceived will be attractive for a relevant number – yet a clear minority of European regions
- **a “universal RIS3 approach” as originally promoted has not and cannot become a common solution for all types of European regions**
 - entrepreneurial discovery is a useful headline ambition but has to serve different ends
 - by piloting participatory processes in the first place
 - by putting existing participatory processes to concrete use in innovation policy
 - by establishing a new and more robust framework to meet future challenges
- **for the others, alternative options need to be explored as this will be fundamental to support cohesion objectives**

Re-integrating a territorial perspective - acknowledging connectedness

- future regional development strategies for smart specialisation will have to **embed innovation and industrial policies in their socio-economic context**
=> otherwise they will never be place based
 - **all regions participate in societal challenges** that the application of multi-purpose technologies can help address and resolve
 - **the periphery faces specific regional challenges** that require creative proposals and new technologies for solution
- **Even if peripheral regions cannot generate innovation, they can be relevant testbeds, contexts for new approaches**
 - **Suitable interfaces (or boundary spanners) between the mainframe of knowledge generation and the local context will be needed**

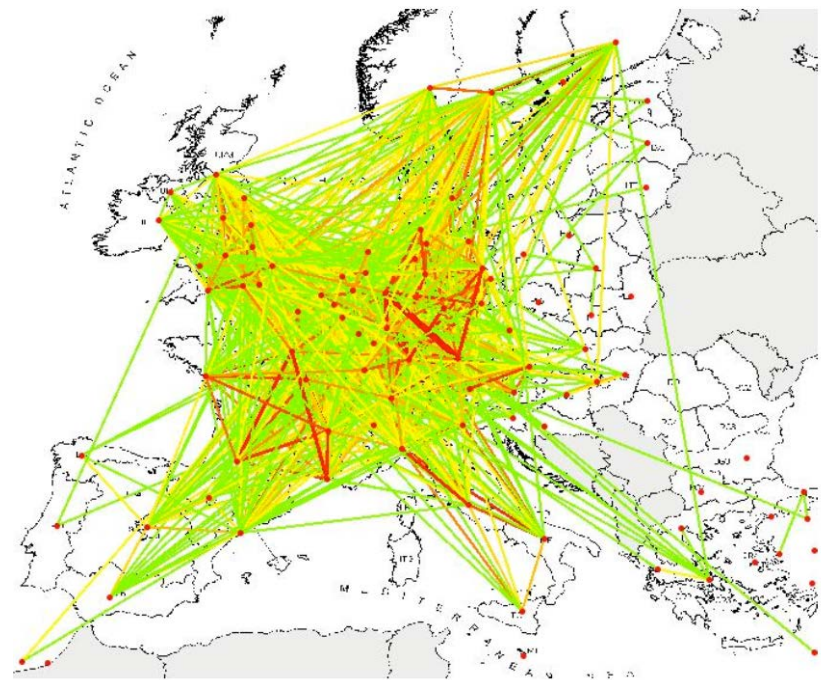
Re-integrating a territorial perspective - acknowledging connectedness (example)

Co-Patenting Networks between EU Regions (>300 links)



Source: DG Research and Innovation, 2012

Co-Patenting Networks between EU Regions

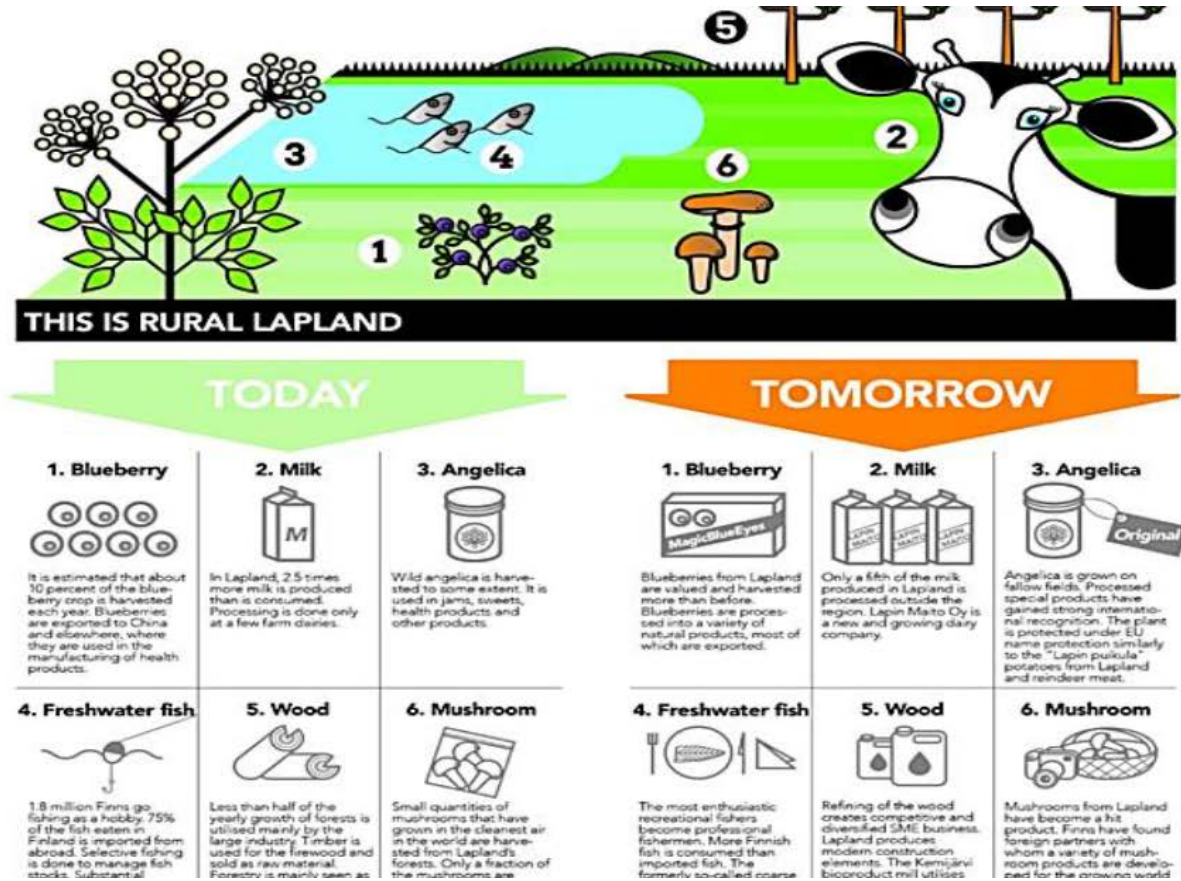


Source: DG Research and Innovation, 2012

Re-integrating a territorial perspective - a different view on potentials

- **consider diverse growth assets beyond industry**
- **compete on the right – i.e. realistic – areas of competitive advantage**
endowment of social and relational capital:
entrepreneurial spirit, creativity, social virtues, cooperation culture, openness to diversity
intangible potentials:
beauty of landscape, art of cooking, traditional techniques
- A **wider concept of smart specialisation** should exploit intangible assets, supporting development strategies based on natural and cultural capital endowment
- **Focus should be on:**
 - **broader understanding of competitive advantage**
 - **capacity to exploit knowledge from outside the region for local purposes**
 - **non-technological innovations (business models)**
- **RIS3 strategies for the periphery** will need to clarify better how their priority fields can become relevant from a cohesion point of view

Re-integrating a territorial perspective - a different view on potentials (example)



Source: Region of Lapland (Finland), WIRE2016 Conference

Possible avenues to pursue

- strategies need to **overcome the supposed tradeoff between “efficiency and equity”**
– or competitiveness and cohesion goals,
 - **identify ‘untapped’ assets of territorial capital** that can be found in all places,
 - mobilize and connect
 - **cross-border and neighbouring regions,**
 - **Europe-wide networks of regions dealing with similar challenges.**
- **Strengthening the centre by leveraging the potential of the periphery**
 - **creating knowledge where there is critical mass**, not least by linking regions with key capacities in related domains across the union (Vanguard), but
 - **developing applied solutions for different challenges** in diverse types of regions, including the economic periphery

Why this could work

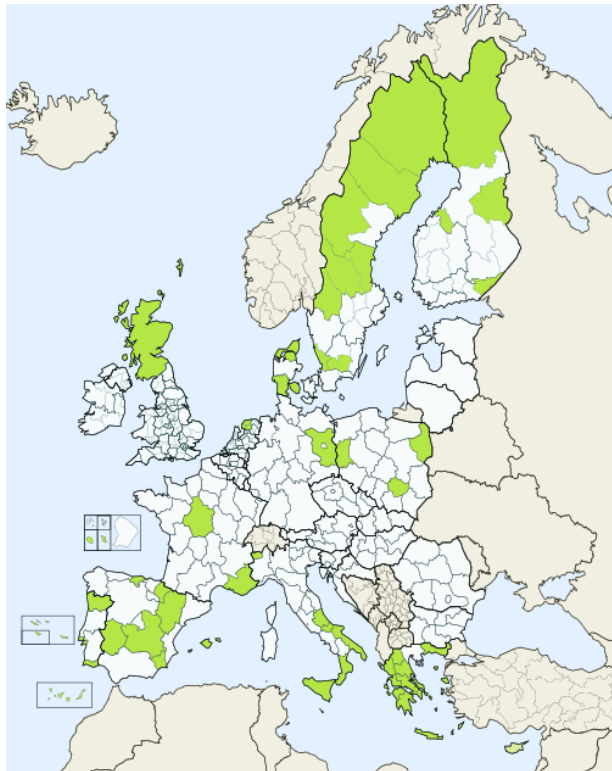
- **Industry needs markets**, Europe is at a disadvantage compared to the US, China, India
 - The European Paradox is far from overcome, creating a larger „area of resonance“ including the periphery might actually be more important than linking capacities
- **Lead customers are important**, but in many cases need not be in leading regions
 - Some market relevant solutions can be much better in regions with a suitable set of challenges that they intend to address
- **User-led innovation gains importance**, „prosumers“ & „makers“ enter the mainstream
 - de-centralised input to innovation will become more important in Europe also and it should be sourced from the full ranges of its complex background

Key policy messages

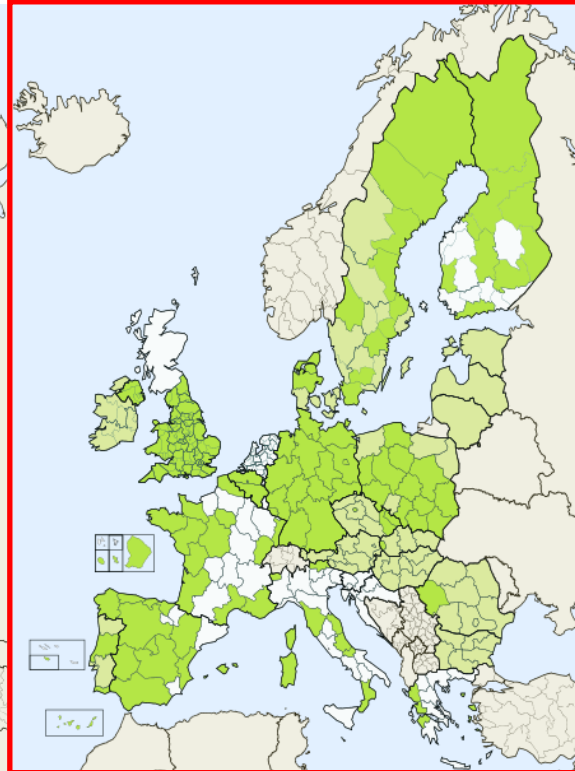
1. Reinforce a **market based perspective** on RIS 3
 2. Strengthen capacities to reliably identify **local societal challenges** (and related assets)
 3. Support **networking among regions facing similar challenges**
 4. Support the integration of lagging regions as a „specific tier“ of relevant **„key users“ in and for the „Vanguard Mainframe“**
- **Raising the profile of neglected regions**
through empowering strategies

Is there hope?

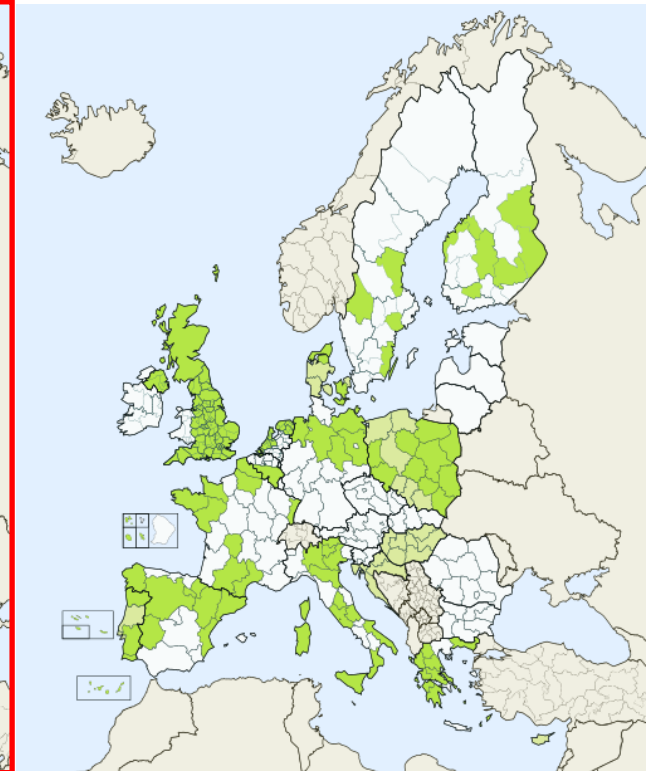
Tourism (Market)



ICT Technology



Agriculture (Market)



Source: Eye on RIS3 Online Tool

Thank you !

Contact:

Dr. Henning Kroll

Competence Center Policy – Industry – Innovation
Fraunhofer Institute for Systems and Innovation Research ISI
Breslauer Straße 48 | 76139 Karlsruhe | Germany
Phone +49 721 6809-181 | Fax +49 721 6809-176
henning.kroll@isi.fraunhofer.de