



Smart Specialisation Strategy – a new policy approach to support structural transformations in regional economies

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2 - Smart Specialisation: The Concept

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This brief introduces the basic concept of "Smart Specialisation" (SS) which has been a leading idea of the European Union's regional growth policy. The concept is based on its more detailed in Policy Brief n° 17 in relation to globalisation. Other briefs in this series also refer to the concept and have an accompanying member states' list and an industry and specialisation list.

Rationale for integrating the RIS3 specialisation policy dimension

Addressing the issue of specialisation in the RIS3 and innovation is particularly crucial for regions because that sets out leaders in key of the digital economy and technology domains. They would argue that these regions/countries need to increase the intensity of knowledge production in the form of high education and regional training, public and private R&D, and other innovation-related activities. The question is whether there is a better alternative to a policy that spends that expenditure directly across various domain technology research fields, versus a policy that encourages innovation, now in the current technology of new industries and, in a complementary way, makes search of an answer to some key questions: How can a region/country benefit from its own knowledge base, and how will it strengthen the industry's other production assets to create better products, quality and innovation? **Smart Specialisation** has been proposed as a policy approach to address this question. We have received this policy approach as a response to the following question: How can a region/country benefit from its own knowledge base, and how will it strengthen the industry's other production assets to create better products, quality and innovation?

First paper

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Research and Policy Brief of the RIS3 expert group on the RIS3 in Europe (2016-2017).

<https://www.researchgate.net/publication/312121212>

Umbria Region: Towards a RIS3 strategy

Scotland's smart specialisation strategy focuses on

Our niches within each of these (examples in brackets)

From idea to impact

Some history of S3

From the first period of design and implementation (2014-2020):
We learned a lot!

We learned what are the critical S3 practices – and what is unnecessary

Towards a more transparent & robust concept – able to contribute to effective transformations of economic systems



- Education & MOOC
- Research
- Consultancy & projects



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S3 – general approach and fundamentals



S3 – a general approach and a toolbox

Relevant questions for any regional/national economy:

How can it change and develop into areas with higher growth potentials?

How can it manage transitions?

- First level answer: improve human capital, improve university-business interactions, improve funding mechanism, support SMEs, create incubators & accelerators, etc..
- Second level answer: make explicit what are the important sectors, industries which need to be transformed

S3 – a general approach and a toolbox

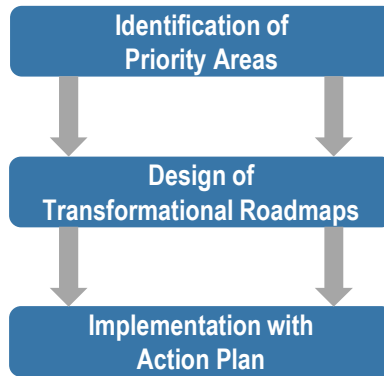
- To identify a few areas with potentials for future growth **AND** to define the associated transformation goals
 - S3 priority area consist of an area + a transformation goal
- To produce a roadmap for these transformations
 - In activity X, we are at this level – we want to reach a higher level – what project, infrastructure, training, management, capacities do we need?
 - The roadmap is produced through an entrepreneurial discovery process involving the government and the key stakeholders in the concerned area (private companies, universities, experts, ...)
- To implement an action plan to support the execution of the roadmap
- S3 supports robust and coherent diversification

Basic principles

- **Concentrate** on certain priorities
 - To generate density, synergies and agglomeration
 - To reach the level of inputs specificity which is required to innovate in a given domain
- Concentrate not on structures but **on the transformation** of these structures
 - A priority makes explicit what transformational goal for what sector
- Encourage a logic of **entrepreneurial discovery**
 - The targeted transformation will not follow a path that is decided from the top but will be discovered as the process unfolds
 - EDP is a mechanism to address the informational problems from the highly specific nature of innovation within specific sectors
 - EDP is not one-off, but continuous

S3 – process

Basic principles: 3 steps of developing a S3

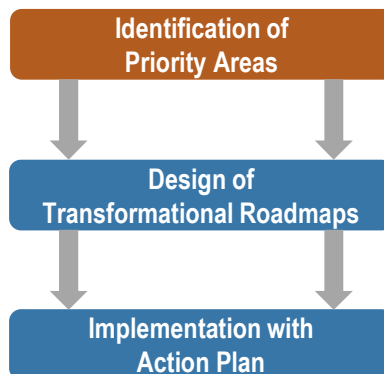


Basic principles: 3 steps of developing a S3

Governance

It's a central governance authority driving the process of priority areas identification

→ following a planning logic



- Making explicit what transformational goal for what (sub-) sector(s)
- Not too broad, not too narrow
- Reflect region specific capacities, potentials and opportunities
- **Main issue** – prioritize not a sector but **the transformation of this sector**
- A small number of Priority Areas = a national S3

Basic principles: 3 steps of developing a S3

Some examples

```

    graph TD
      A[Identification of Priority Areas] --> B[Design of Transformational Roadmaps]
      B --> C[Implementation with Action Plan]
  
```

Examples in thought bubbles:

- Moving to a bio-economy in materials & construction sector
- Digitalizing tourism and the valorization of natural heritage
- Transforming medical devices through digitalization, diversification and certification
- Modernizing the development of local agri-products

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Basic principles: 3 steps of developing a S3

Governance

Specialized board for priority areas

→ following a bottom-up policy logic

```

            graph TD
              A[Identification of Priority Areas] --> B[Design of Transformational Roadmaps]
              B --> C[Implementation with Action Plan]
          
```

- Converting each priority area into a concrete transformational roadmap
- The Transformational Roadmap (TR) is “discovered” through an EDP
- A TR is a collection of projects and actions – all involved in the transformational goal
- Projects in one TR are related and complementary
- Projects cover many issues – R&D, training, services, technology diffusion → S3 is an inclusive policy

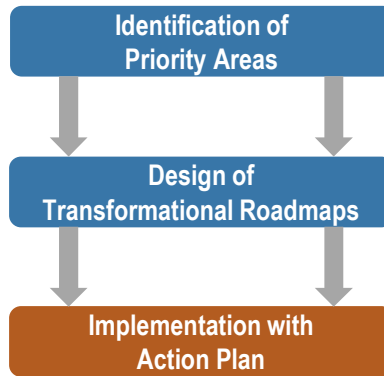
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Basic principles: 3 steps of developing a S3

Governance

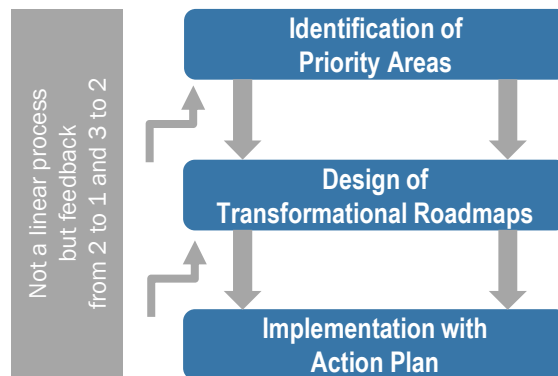
Specialized board for priority areas

Centralized project administration, monitoring and evaluation



- Supporting the development of the transformative activity
- Mobilizing and coordinating funding instruments
- The plan should fit the profound logic of S3 – the value of a simultaneous support of related and complementary projects and investments
- Monitoring, feedback and flexibility

Basic principles: 3 steps of developing a S3



Not a linear process
but feedback
from 2 to 1 and 3 to 2

Planning component
Stability
Centralization

EDP
Change
Decentralization

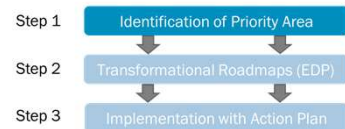
Continuous EDP
Change
Decentralization

Example of the process



An Example: Canton of Fribourg - Switzerland

The S3 Process



Agrofood

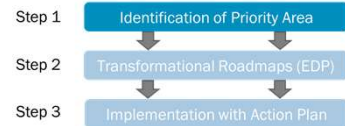
Materials

Construction

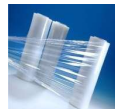


An Example: Canton of Fribourg - Switzerland

The S3 Process



Agrofood Materials Construction

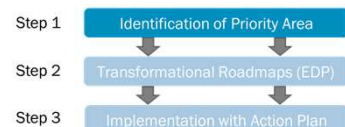


Too broad:
Which **specific existing capacities**...?

Not targeted enough:
... to stimulate which kind of **transformation**?

An Example: Canton of Fribourg - Switzerland

The S3 Process



Agrofood Materials Construction



Combines a clear **transformational goal** with **specific capacities** from existing sectors

- **Transformational goal:** Tapping into the opportunities of the bio-economy
- Based on **regional capacities:** Manufacturing industries in which the region has particular strengths and in which fossil-fuel based inputs can be replaced by bio-based ones

An Example: Canton of Fribourg - Switzerland

Brainstorming / EDP result: a list of potential projects

- A – algae based biotechnology
- B – promotion of agro-tourism
- C – development of bio-based packaging materials
- D – bio-economy training programmes
- E – training workers to deal with digital technologies in agrofood sector
- F – R&D: biomass from meat industry waste-streams
- G – Innosquare: platform to coordinate and set-up new projects within the priority and match with funding agencies
- H – call for continuous submission of complementary applied R&D projects
- I – concrete recycling
- J – developing story telling about agro-based industries
- K – biorefinery prototype

The S3 Process



Project Mapping

Is this “list of potential projects” already sufficient?

No!

**What makes a project
a «good» project
to support a Priority Area
(supports the transformation
of a sub-sector towards ...)**

The S3 Process



Project Mapping: Metrics

- Capacity
 - Are the resources needed in the project available?
- Opportunity
 - How well are latest developments taken up in the project?
(like: technological developments, megatrends, new business models, ...)
- Relatedness
 - How many “points of contact” has the project with other projects in the map?
- Support of transformation (towards the transformational goal)
 - How large is the potential of the project to initialize the aspired transformation?
 - Is it consistent with the S3 / Priority Area goal?

The S3 Process



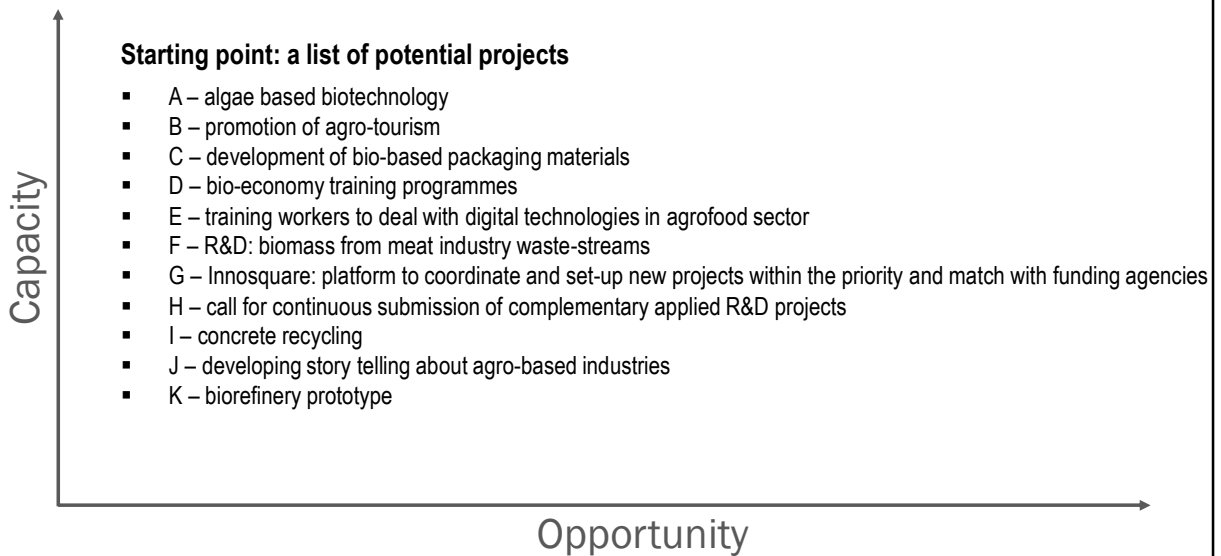
Martin Eichler, Dominique Foray, Michael Keller, 2019



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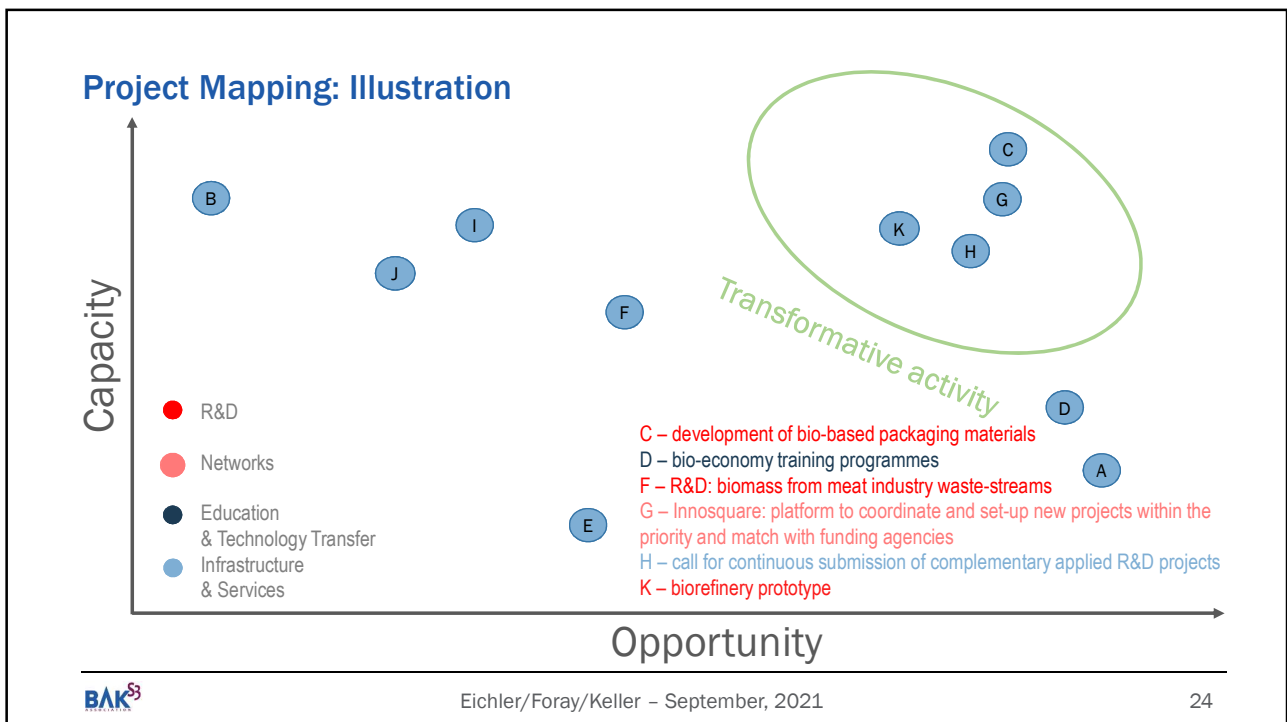
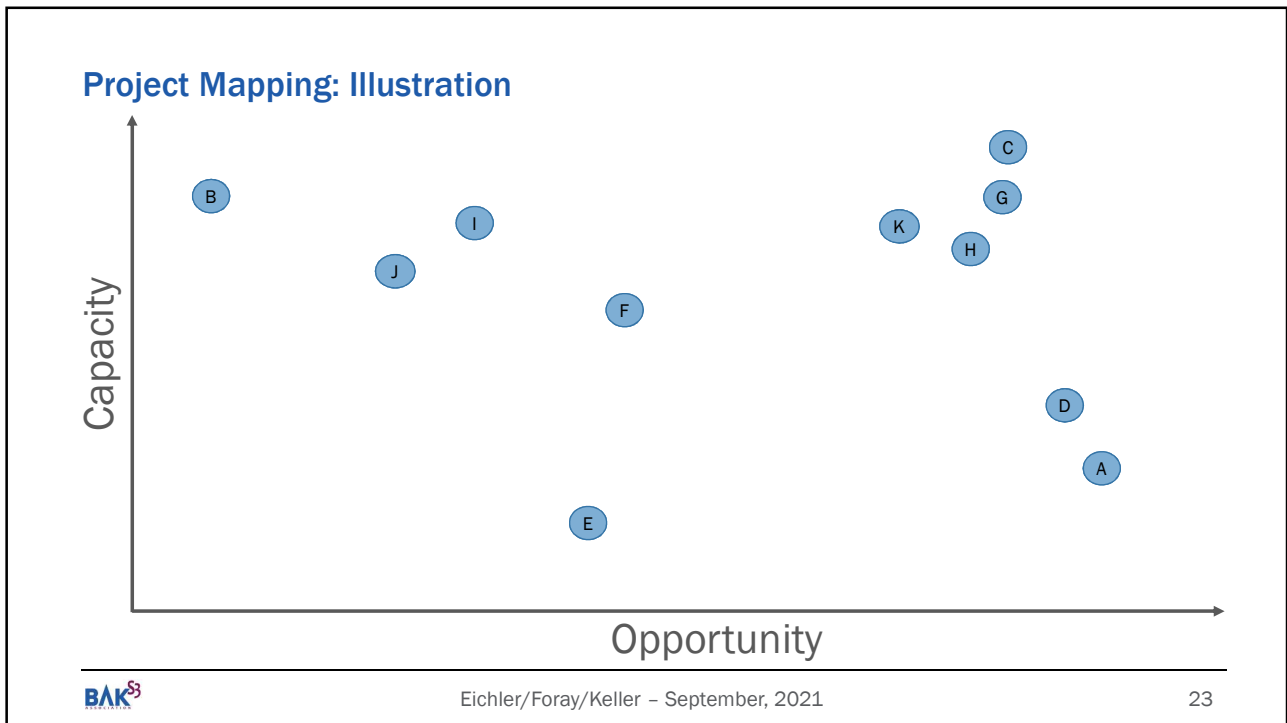
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Project Mapping: Illustration



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**Project Mapping:
A tool for effective policy practices**

The S3 Process



The **transformational roadmap (TR)** reflects the appropriate level of granularity at which the S3 must materialize

Hence, a TR (instead of priority area) is the right basis for writing calls for proposals or establish inter-regional (international) collaborations

Strategic complementarities – there is a great advantage to adop all projects simultaneously

When properly done – the EDP delivers the 5 Ds

Direction of change, **E**ntrepreneurial **d**iscovery, regional **d**ifferentiation, relational **d**ensity, **d**istributed capacity

Conclusion

What should S3 bring to regional policy?

- The S3 approach is very flexible – can accommodate a large range of socio-economic situations
- Reflecting on potential areas where new competitive advantages might be produced – where the rules of the game can be changed
- Translating a priority into a transformational roadmap which will drive implementation
 - Involving relevant stakeholders
 - Supporting a wide range of actions and capacities– not only R&D
- Only moving from **vision** to **execution** will make a difference

EU 2021 to 2027: The future of smart specialization

The Multiannual Financial Framework 2021-2027 stresses the centrality of a good governance of smart specialization as an enabling condition.

Activities which were not eligible for funding in the former ERDF will be able to be supported by the new ERDF:

- technology diffusion
- training and life-long learning

This is perfectly aligned with the concept of transformative activity as the essential building block of S3.



Conclusion

- S3 is more than « writing a strategy» but the focus is on effective and efficient policy practices
- The S3 community has developed a design & implementation concept which is ambitious and whose feasibility is now demonstrated in various cases
 - Identifying priority areas requires a careful planning exercise
 - Building transformational roadmaps for each priority is a critical phase
 - Implementing the roadmap through an action plan is necessary



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The BAK S3 Association

an initiative of



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