



Advancing S3 :
concepts, design and
implementation

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S3 – what is different?

- Key ingredients of national/regional competitiveness & prosperity are innovation capacities...
- .. and innovation policies deal mainly with building, improving and orienting innovation capacities
- There are two ways to do that – both important and complementing each other

Building, improving and orienting innovation capacities

Generic & horizontal logic
Create some kind of cross-section in the innovation system (SMEs, start ups, universities, human capital) and *devise programs to support capacity building for such classes of 'agents'*

'Easy' policy
Neutral intervention – no big risk of mistakes – no too much of political stake and capture
No too high informational requirements
Monitoring and evaluation are relatively easy



Sector-specific & vertical logic
Target specific transformations concerning specific sectors and *devise programs to support capacity building for particular transformations in particular sectors*

Difficult policy
Preferential interventions – how to choose? Risk of mistakes, policy capture
Informational requirement is high
Monitoring and evaluation are difficult

S3 – what is different? *Cont.*

- Such sector-specific and vertical policies involve several difficulties which were poorly managed and solved until recently:
 - They involve high degree of intentionality, prioritization and preferential interventions – how to minimize possible mistakes and distortions?
 - They require so much information about the needs and requirements in terms of innovation capacities when these capacities and inputs are sector-specific – how to generate the needed information which will guide the policy programs?
- But it is worth to do it
 - Because in any economy - some sectors (not always the same across regions & countries) are more important than others, have more opportunities and potentials and require thus specific attention and effort to be transformed
- S3 represents both a general approach and a set of tools to address the usual problems of vertical policies
 - It stress the necessity to **choose** among too many potential priorities – such focus helps i) to reduce the informational problem and ii) to generate density and complementarity (as determinants of innovation and creativity)
 - It offers a method **to make explicit what sector(s) shall be transformed** and which transformation is aspired for this (these) sector(s)
 - It puts in place a mechanism (EDP) **to discover the transformational roadmap** as the process of change unfolds

The S3 trademark – 1 - combining two logics

S3 is marked by a **high level of intentionality, strategic focus and a high level of discovery and initiatives by the actors of the innovation process.**

There is a planning logic in S3 but the plan recognizes the existence of uncertainty – hence the other logic, that of EDP

It is the combination of the two policy logics (frequently opposed) - planning and entrepreneurial discovery - that constitutes the S3 trademark

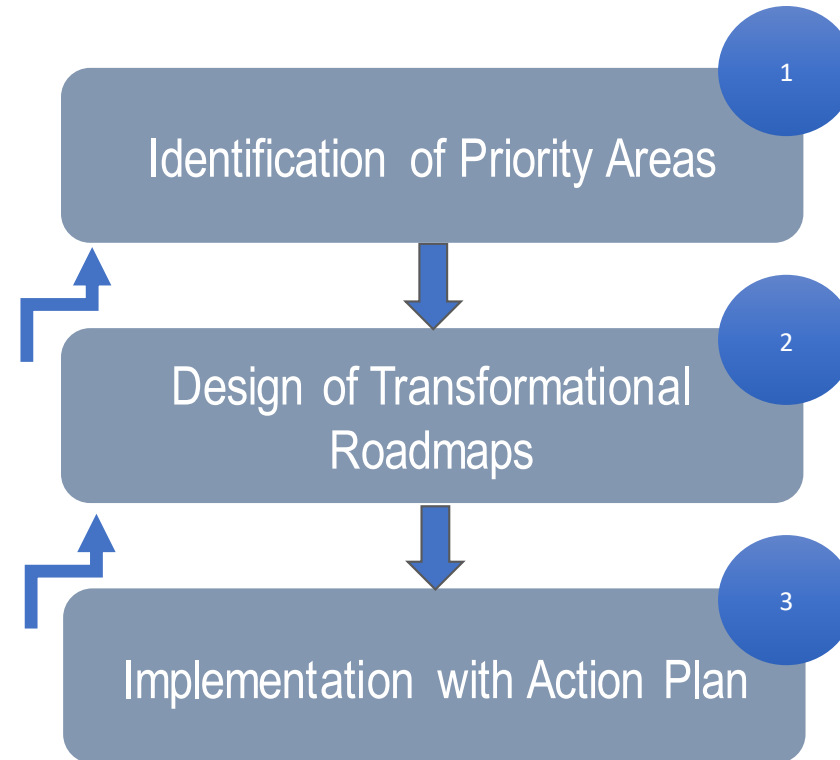
Neither absolute top down nor total bottom up - ***“It is rather an intermediate process aiming to enhance entrepreneurial coordination within a framework (a small number of priority areas) structured by the government” Paul A. David***

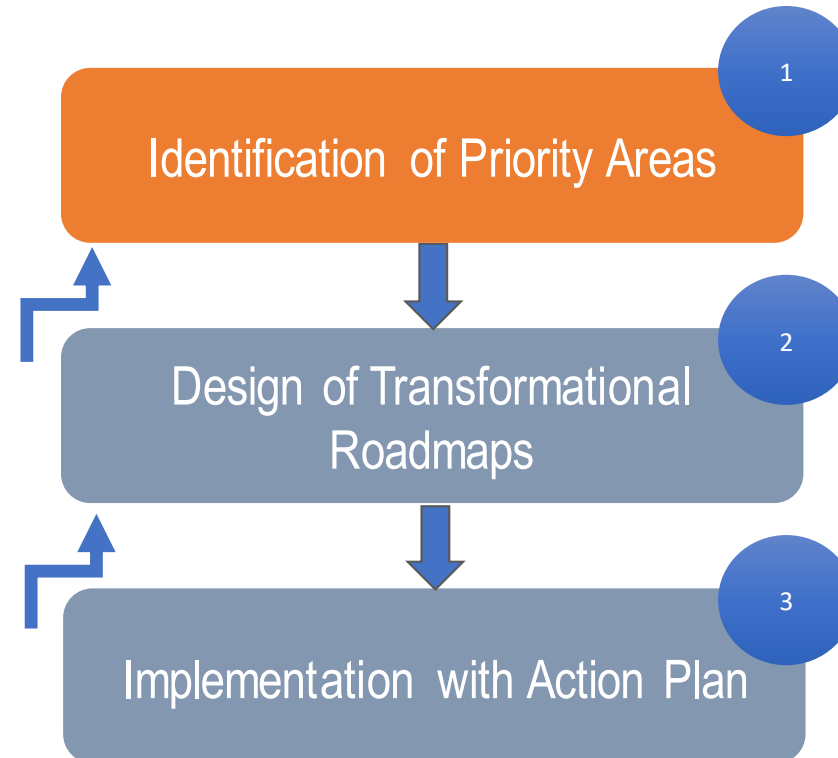
Geography matters twice!

To efficiently achieve structural transformations within sectors, S3 builds on the **logics of agglomeration effects and density of projects: proximity and local systems matter!**

Regional specificities: The priorities which are identified and above all the way they are achieved (the transformational roadmap) reflects **region-specific capacities, potentials, opportunities.**

The new framework - 1



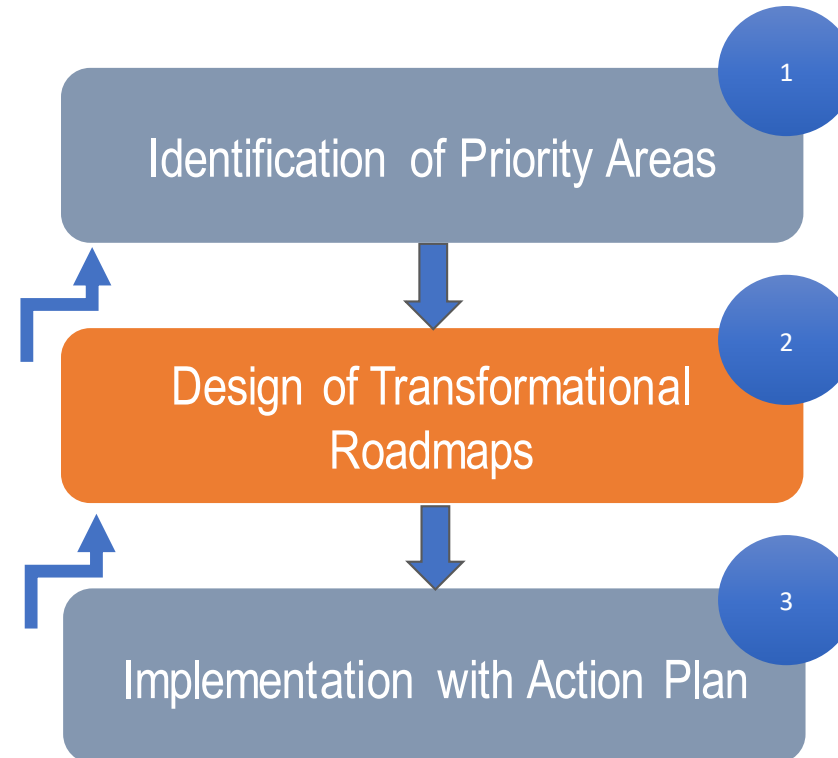


Step 1 – making explicit what transformational goal for what sector(s)

Not too broad, not too narrow
Reflect region specific potentials and opportunities
Inclusive

Main point – **prioritize – not sector - but the transformation of sector**

A small number of Priority Areas



A vision without execution is hallucination!
(M.Vetterli)

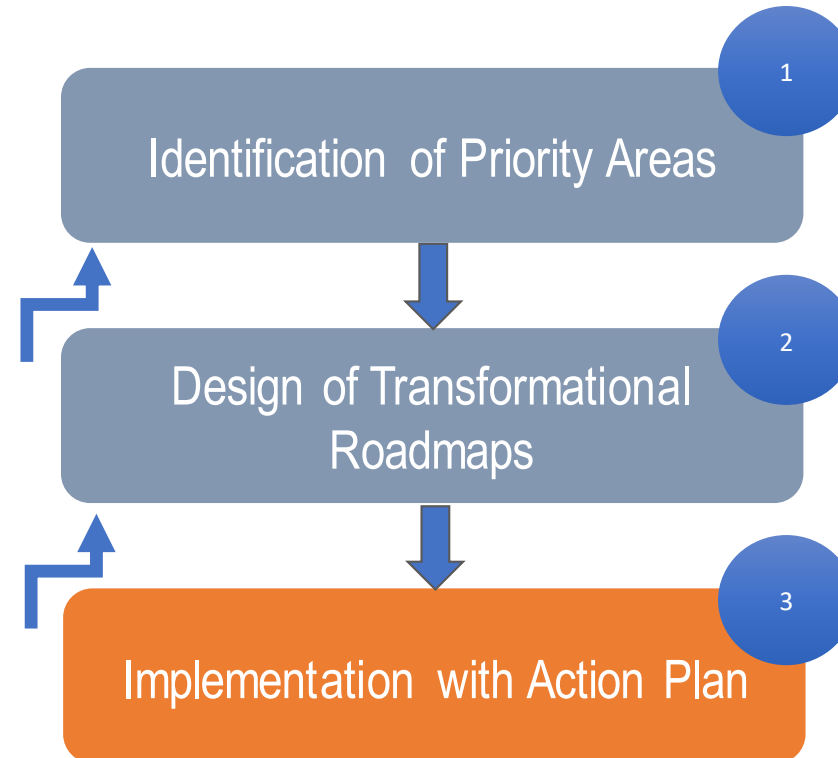
Conversion of each priority area into a concrete transformational roadmap

A collection of projects – all involved in the the transformational goal

Projects cover many issues – R&D, training, services, technology diffusion

Projects are related and complementary – forms a transformative activity

This is here that the **EDP** becomes absolutely essential – the outcome (a collection of projects – can't be predict ex ante



Mobilizing and coordinating funding instruments

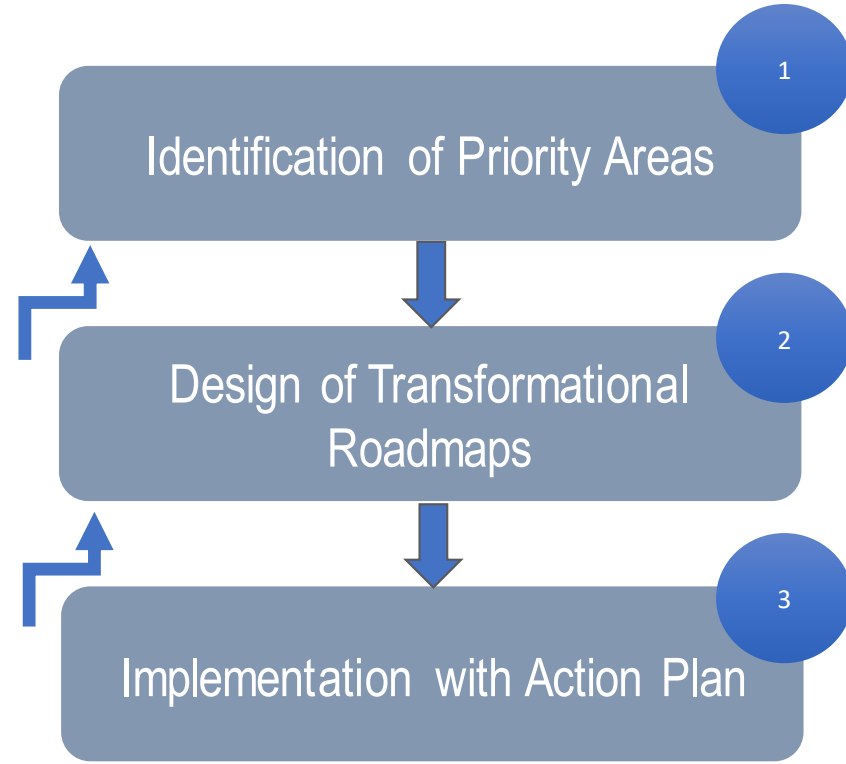
The plan should fit the profound logic of S3 – the value of a simultaneous support of related and complementary projects and investments

Monitoring, feedback and flexibility – the **EDP** never stops!

The new framework - 5

Similarities across regions

Regional differentiation



Planning component
Stability
Centralization

EDP
Change
Decentralization

EDP
Change
Decentralization

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

The new S3 is providing methodologies and guidelines for each step

Intermediary wrapping up

- Identification of priorities
 - not just sector but transformation goal,
 - reflects region specific potentials & opportunities
 - EDP not essential (*don't worry!*) – planning logic - evidence and stakeholders are critical
 - originality of priorities not essential (*don't worry!*)
- Transformational roadmap
 - if not done, nothing will happen
 - EDP is central as a unique mechanism to solve the information problem of the Government
 - if the process is well done, regional differentiation happens naturally
 - many types of projects
 - S3 materializes at the right level of granularity – neither the whole sector, nor an individual project but a transformative activity
- Action plan
 - strategic complementarity – monitoring and flexibility – EDP never stops

Current new S3s

Algarve

Digitalizing tourism –
data management,
diversification

Sfax region

Transforming medical
devices: digitalisation,
diversification and
certification

Slovakia

Decarbonizing mobility:
prepare the territory of
Slk for the wide
deployment of
transports with
alternative propulsion
and energy

Fribourg region

Establishing a bio-
economy in
construction, food and
materials sectors

Alentejo

Developing a
sustainable bio-
economy

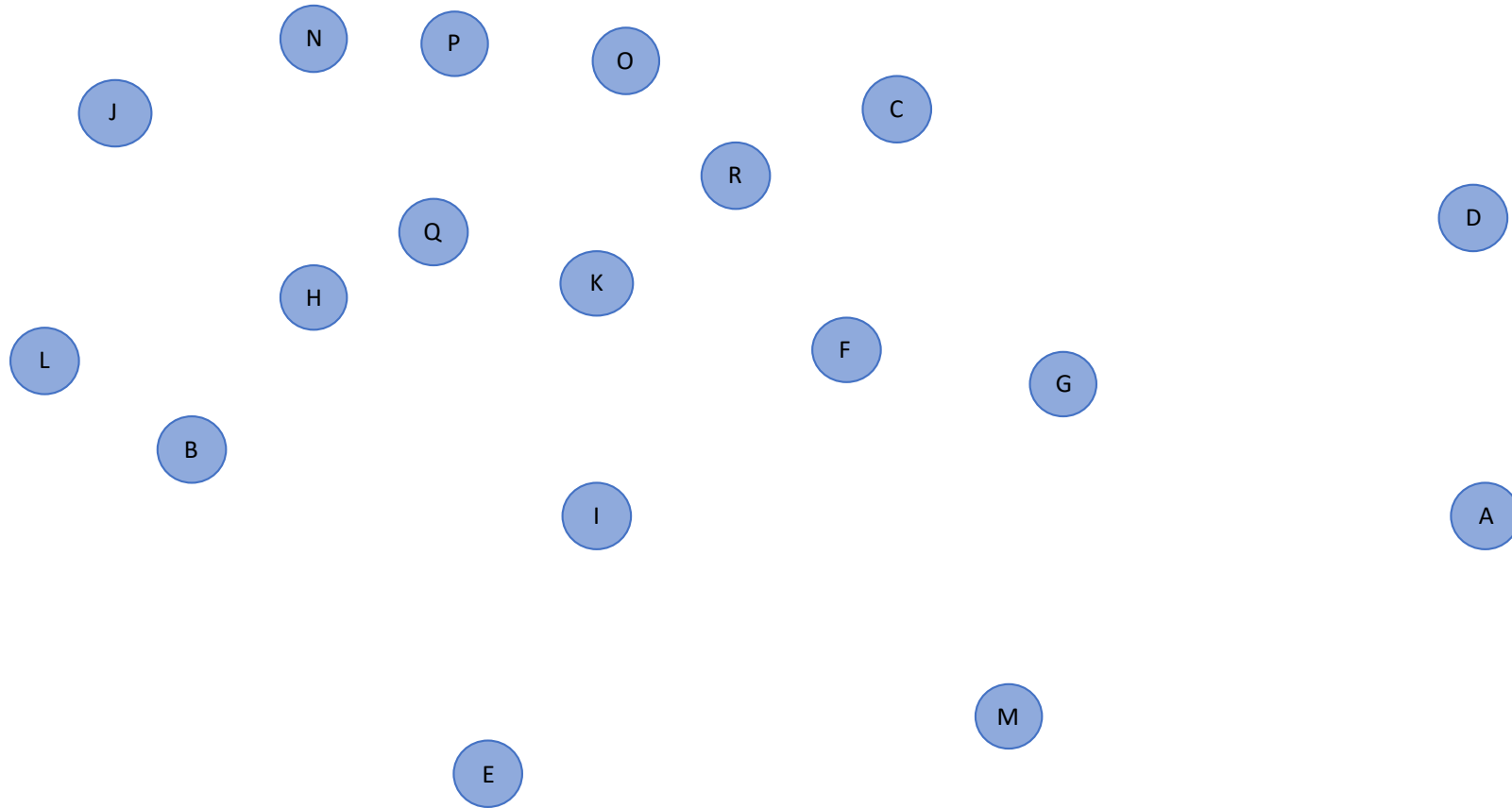
Crete

Digitalizing tourism and
the valorization of
cultural heritage

Feedback from the success stories

- A great move towards using and deploying the new concept and the associated tools
- Until recently – the prioritization was not well done in many European regions (too broad & no transformational goal) and the EDP was more viewed as a bureaucratic specification to be fulfilled on papers than an effective policy practice
- Various countries/regions are now advancing and improving along these two dimensions
- Of course the job is not (never) finished!
 - Priorities need to follow the logic of ‘vertical transformation’: what kind of transformation for what sector?
 - Then it is critical to translate these priorities into clear and relevant transformational roadmaps through an effective EDP
 - S3 is a living document – new projects can be identified at any time, priorities can be revised (marginally) – a strong EDP will necessarily generate additional.. *discoveries (!)* and learning – which will create the need for adaptation and change in the roadmaps. This implies continuous monitoring and flexibility - managed by decentralized boards supporting activities within each priority

Generate projects according to a priority area (towards a bioeconomy in agrofood, materials and construction)





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

- **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, ...)

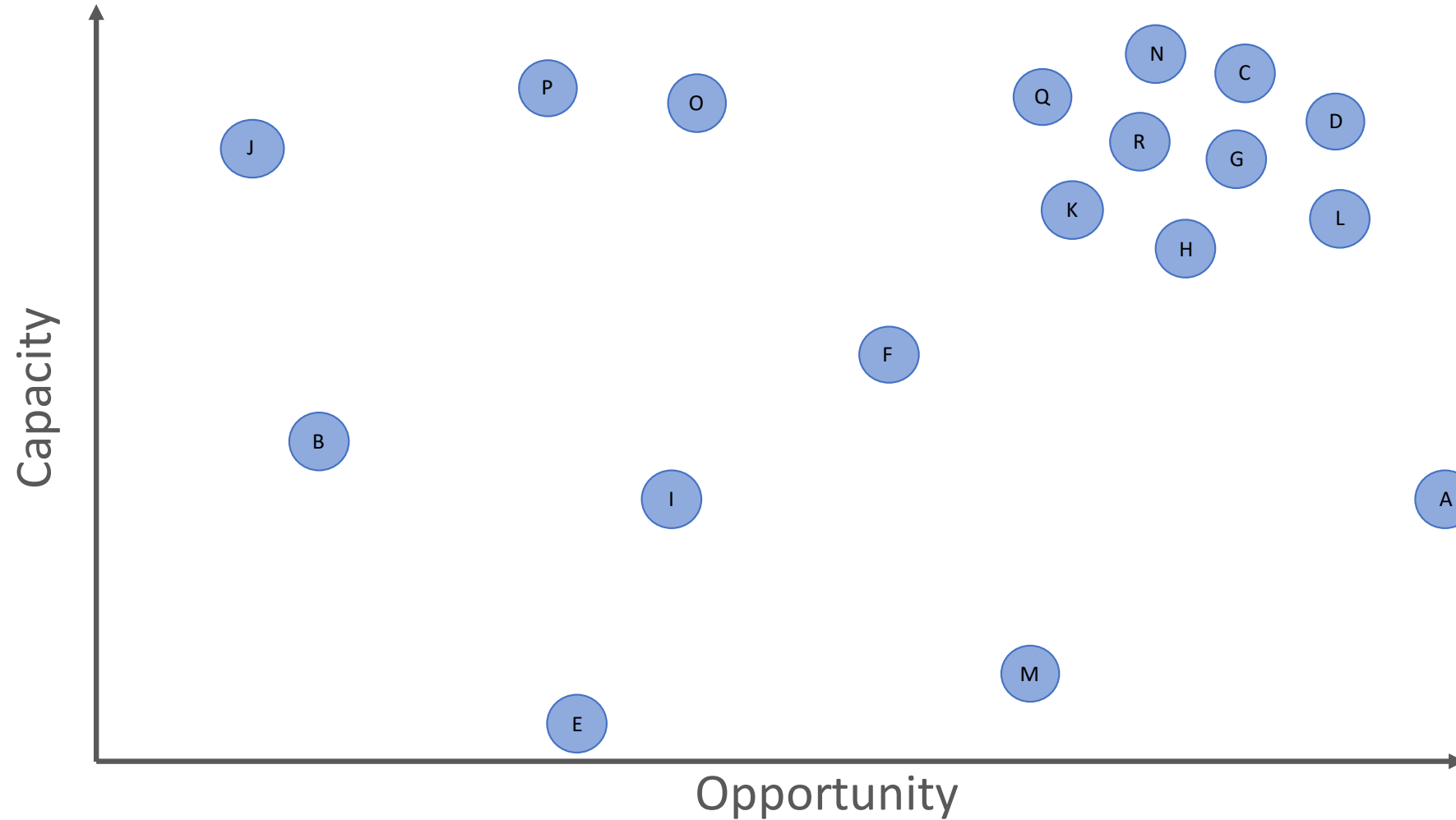
- **Relatedness**

- How many “points of contact” has the project with other projects in the map?

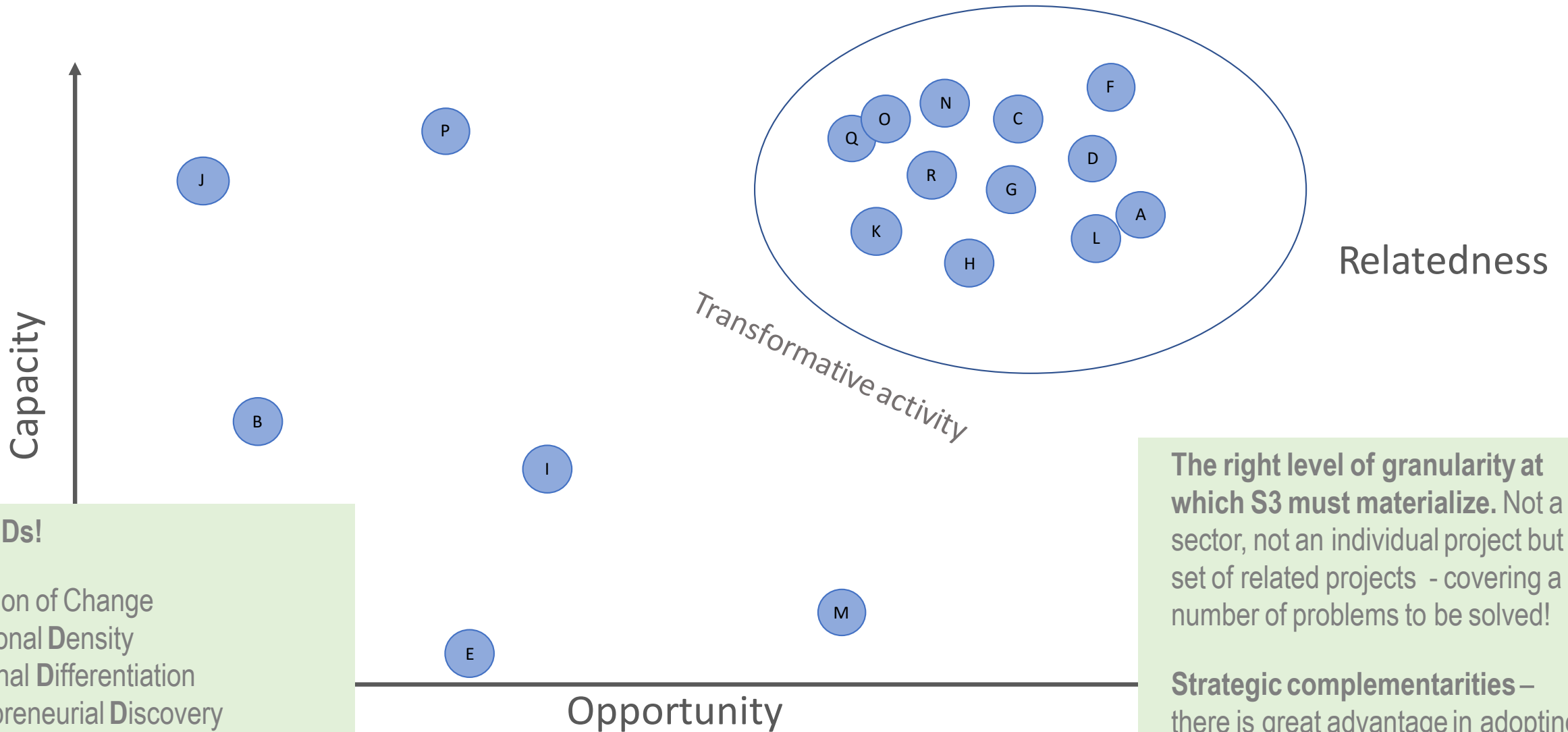
- **Support of transformation (here - towards a bioeconomy...)**

- How large is the potential of the project to initialize the aspired transformation? Is it consistent with the S3 goal?

Mapping



Relatedness



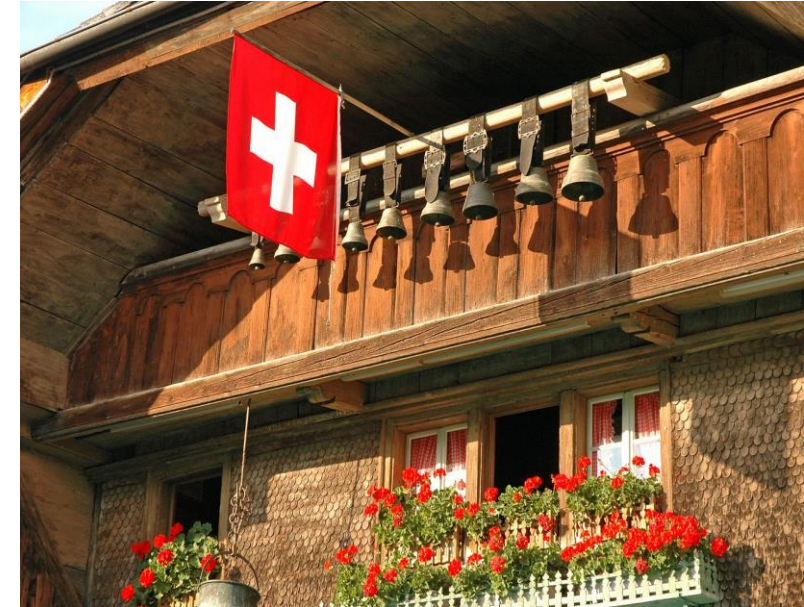
The 5 Ds!

- Direction of Change
- Relational **D**ensity
- Regional **D**ifferentiation
- Entrepreneurial **D**iscovery
- D**istributed Capacities

The right level of granularity at which S3 must materialize. Not a sector, not an individual project but a set of related projects - covering a number of problems to be solved!

Strategic complementarities – there is great advantage in adopting all these projects simultaneously

The example of Fribourg (Switzerland) – towards a bioeconomy in agrofood, materials and construction

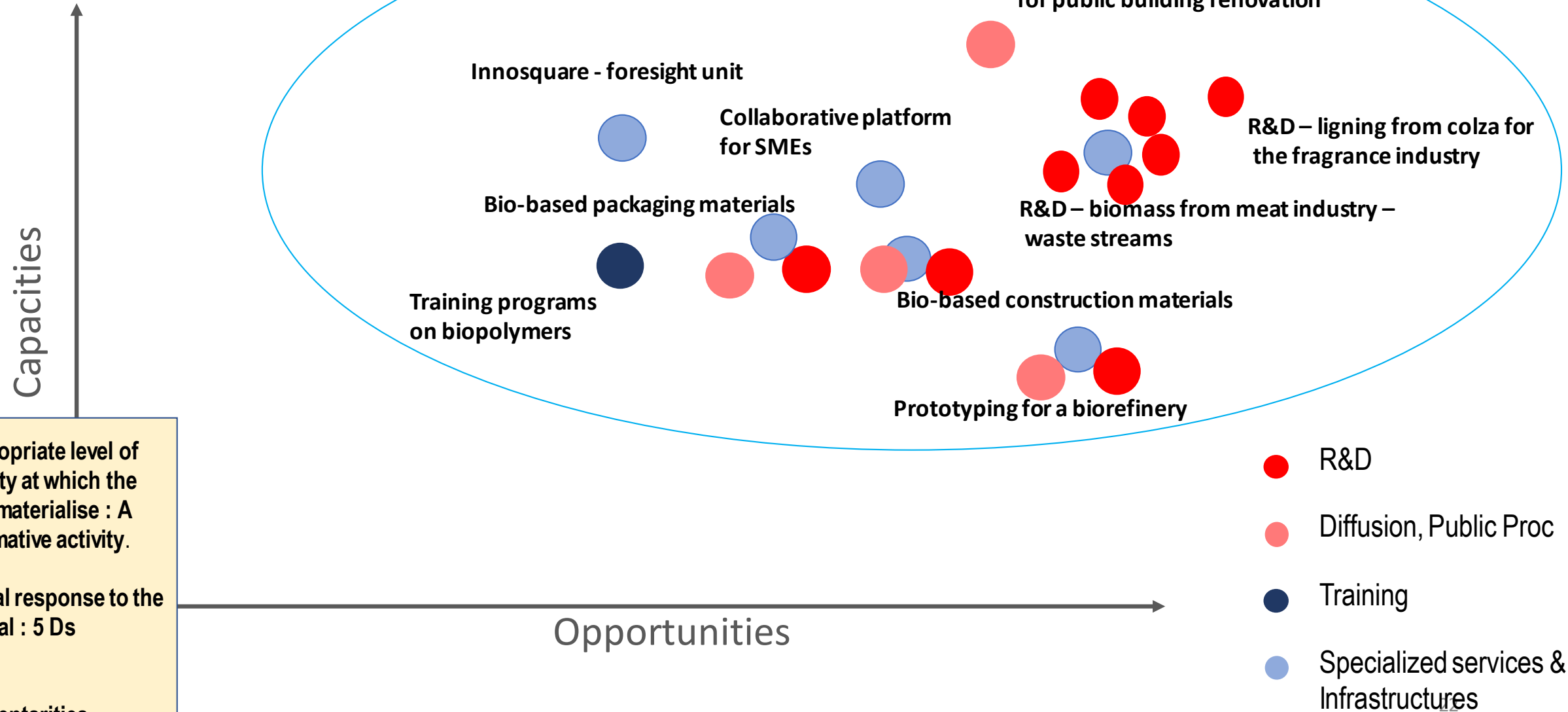


- The S3 methodology
- defining priority areas
 - translating priorities into a collection of projects
 - implementing action plans

Step 1 & step 2

- **Towards a bioeconomy – developing supply of bio-based inputs for regional key manufacturing industries (agrofood, construction, materials)**
- The priority is not only about a structure but it represents a direction of structural change, it reflects regional capacities and opportunities
- The definition of the priority area is the planning component of the whole approach – it provides a framework to enhance and stimulate entrepreneurial efforts and coordination
- **Translation of the priority area into a transformational roadmap and activity**
- Identifying and mapping projects in a bottom up way through an EDP – projects cover R&D, training, services, technology adoption, public procurement for innovation.
- Capacity, opportunity, relatedness and support of transformation
- The collection of projects forms the transformative activity

The transformative activity – bio-based inputs for regional key industries – December 2019 – *Source: Foray & Keller*



The appropriate level of granularity at which the S3 must materialise : A transformative activity.

A regional response to the Green deal : 5 Ds

Strategic complementarities

Take home

- It was needed to go beyond the formal aspects of « writing a strategy for the Commission » towards effective and efficient policy practices
- The S3 community of practice 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 through EDP is a critical phase
 - Alternating centralized and decentralized S3 governance is key
- S3 implementation remains difficult but we are better at doing S3 today and the next programming period should see it come to full fruition



Merci!