



Specificity and comparability in S3 strategies monitoring

María Álvarez
European Commission, JRC-IPTS
S3 Platform

Foro RIS3- Axencia Galega de Innovación
Santiago de Compostela, 17 Decembro 2015

Outline

1. S3 Platform work on monitoring
2. Why a monitoring system for S3?
3. Monitoring results and monitoring output
4. Regional examples
5. Conclusions



S3 Platform work on monitoring

Support to regions & Member States

- Monitoring system = crystallisation of the intervention logic
- Monitoring results and policy output for each S3 priority! (≠ OP monitoring)
- Legal requirement based on ESIF Regulation 1303/2013, ANNEX XI

Methodological note & policy brief

"Monitoring Mechanisms for Smart Specialisation" → Collects input from S3 Platform, DG REGIO & expert workshop "Monitoring S3"

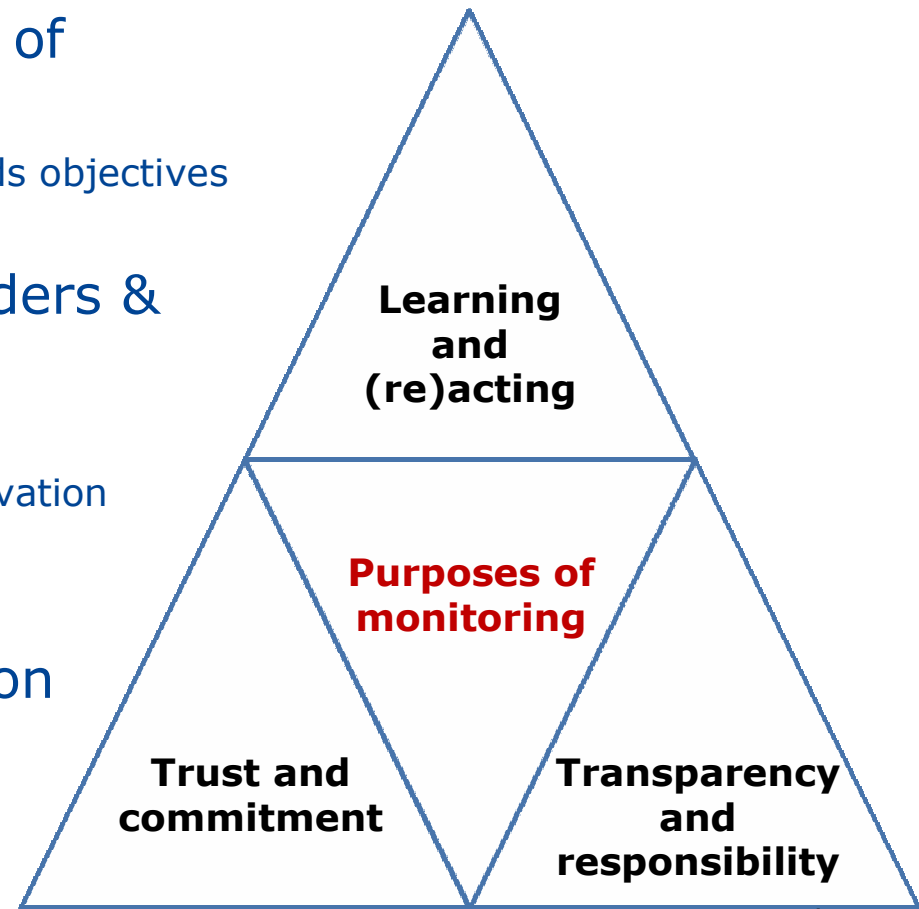
Dedicated website & survey

<http://s3platform.jrc.ec.europa.eu/monitoring>

- Methods, case studies, good practices & data sources
 - Survey to gather information on processes and better target our activities
- May/June 2015 → results to be published**

Why a monitoring system for S3?

1. Inform on development & effects of transformation processes
 - Early warning to steer policy measures towards objectives
2. Support participation of stakeholders & promote trust
 - Drive entrepreneurial discovery
 - Provide the basis for causal narratives of innovation processes that can be easily communicated
3. Condense & clarify the intervention logic of the strategy
 - Help people understand the meaning and the effects of strategic actions

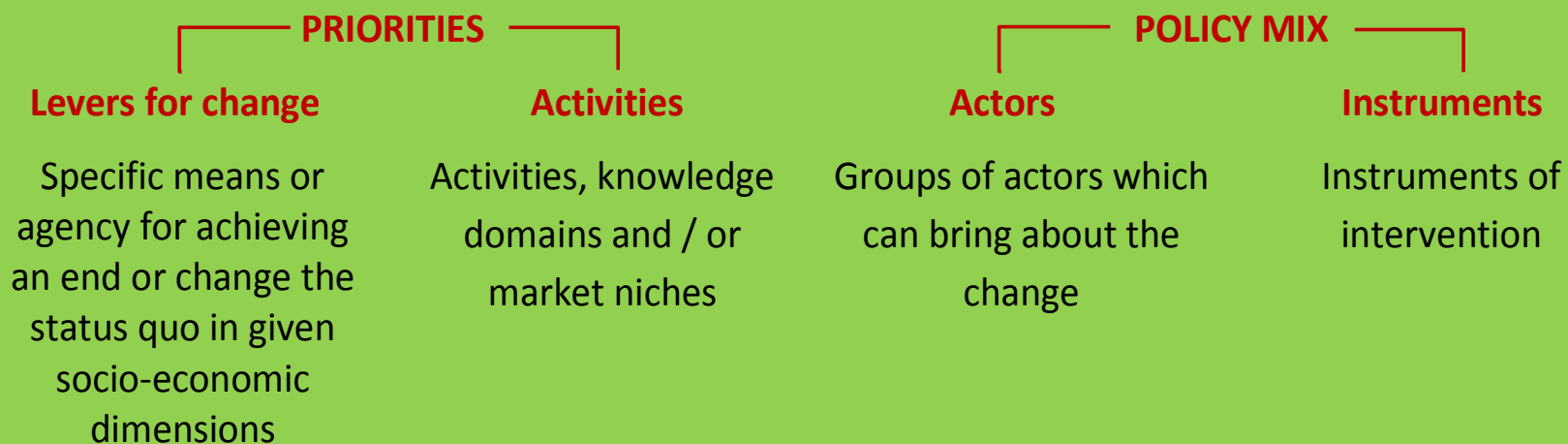


S3 logic of intervention

Phase 1 – Recognition of challenges and needs

Phase 2 – Formulation of strategic objectives - vision

Phase 3 – Selection of elements to meet the objectives





Monitoring and evaluation systems of regional OPs ≠ monitoring and evaluation systems of S3s.

Why?

- **S3 is a top regional innovation system** dealing with broader scope of issues.
- **Several OPs and sources of funds** (regional, national, inter-regional, and EU – public and private).

And

- **OPs** should consider **actions** to reach the **S3 strategic objectives** seriously.
- The **OP monitoring** system should be also considered as a **source of monitoring and evaluation information for S3**.



Monitoring results

Identify explicitly **expected changes** for each S3 priority

Define a result variable & a corresponding **result indicator** for each expected change

- Promote use of survey-based indicators or alternative sources (ethnography, focus groups, etc.) if no official data are available
- A result indicator is defined by three elements: (i) result variable, (ii) baseline value, (iii) target value

Expected changes, result variables & indicators should be co-defined with the stakeholders participating to the EDP



Monitoring results

Clear objectives and selection of **result indicator** :

- **Responsive to policy**: closely linked to the policy interventions supported.
- **Normative**: clear and accepted
- **Robust**: reliable, statistically validated;
- **Timely collection of data**: available when needed
- **Each result indicator requires a baseline value**



Monitoring output

Identify explicitly **output indicators** for each combination of policy instruments

Link output indicators to specific results

- Difficulty: identify output targeted to a specific expected change
→ Instruments in a policy mix can act towards several priorities!
- In order to properly reconstruct the policy causal chain, it is recommended to follow the indicators for each priority
- For each indicator, target values should be defined

Appropriate targets for output indicators should be **co-defined with the stakeholders** participating to the EDP

Dashboard for integrated visualisation

Priorities	Expected changes	Result indicators	Policy mix	Output indicators
Priority 1 Process innovation in agrofood	Increase adoption among SMEs of advanced technologies for the conservation of fresh products (expected adoption rate of 30% in 5 years)	# SMEs introduced innovative processes for fresh products	Mix 1 Vouchers for R&I	# SME financed for technological transfer (# and % of SMEs actually financed; # and % of grants received)
		- Targets - Timeframe		- Target values - Timeframes

Policy instruments may serve several priorities. Recommended to break down output indicators by priority in order to properly reconstruct the cause-effect chain



Output indicators shall cover all investment priorities of a programme: derived from the intervention logic of the programme,

Output indicators from the list of common indicators may be insufficient to reflect the actions of a certain programme; in this case it is necessary to identify programme specific output indicators.

Common indicators are designed to aggregate information in MS and across MS. They reflect frequently used investments of the ERDF and the Cohesion Fund.

Common indicators reflect the actions, not the objectives of a programme or of regional policy. Actions reflected in common indicators are not more important than others.



Regional examples

- **LOWER AUSTRIA:** integration of monitoring and evaluation mechanism through the scorecard methodology.
- **GALICIA:** result indicators and output indicators
- **EMILIA-ROMAGNA:** Change in indicators for specialization and for transition

Shortcomings:

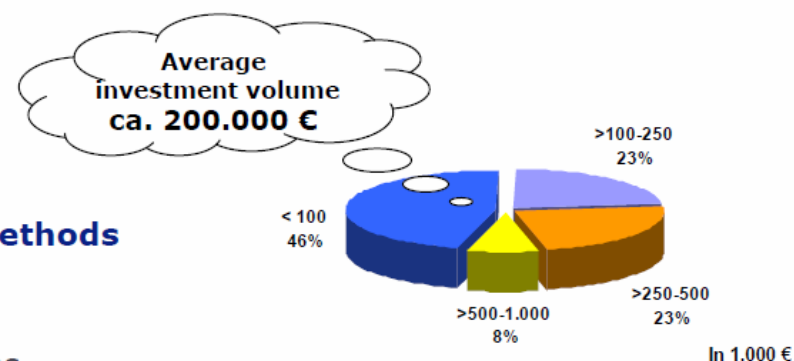
- Most of the Regions apparently **did not run a baseline survey**
- **Monitoring and evaluation are often seen as a single and mixed exercise.** Monitoring is different from evaluation and they have to be considered separately and implemented at their respective level of operation (continuous monitoring versus scheduled evaluations).
- The **selection of experts** is not always clear. Who are the experts and how they are selected.
- How experts rank and evaluate the applications of projects
How these experts are substituted in the process?

LOWER AUSTRIA

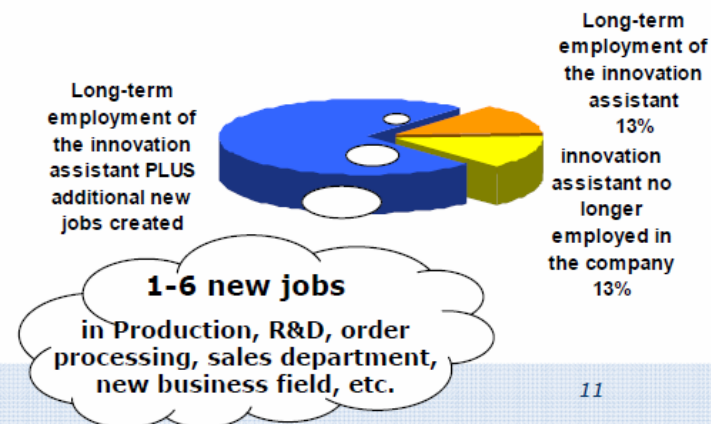
Monitoring and evaluation – some results:

- ▶ **Strengthening of competitiveness**
 - ca. 80 % innovative products / ca. 20 % innovative processes created during funding project
 - ca. 80 % significant technological improvements
- ▶ **Introduction of modern management methods**
 - More than 90 % improved their project management
 - Ca. 80 % organisational change activities
- ▶ **Stimulation of cooperation culture and know how transfer**
 - More than 50% established new long term cooperations, 50% improved collaboration with RTD and/or universities
- ▶ **Growth of the companies funded**
 - More than 85 % created new jobs
 - More than 70 % with rising sales
 - More than 50 % with rising earnings

Companies' investments stimulated by the funding programme









Employment effect





European
Commission

GALICIA

CADRO DE MANDO			
INDICADORES	Indicadores de EXECUCIÓN	Indicadores de RESULTADO	Indicadores de IMPACTO
	Seguimento dos indicadores asociados a cada INSTRUMENTO	Seguimento dos indicadores asociados a cada PRIORIDADE	Seguimento dos indicadores asociados o RETOS e a VISIÓN GALICIA 2020
INDICADORES TIPO	<ul style="list-style-type: none"> Nº de axudas outorgadas por cada sector prioritario Nº entidades beneficiarias (empresas, centros de investigación, etc) nos sectores priorizados Nº de novas patentes por cada sector prioritario % Do orzamento executado polo sector público % Do orzamento privado capturado por sector 	<ul style="list-style-type: none"> Indicadores especialización CIENTÍFICA (producción científica) Indicadores especialización TECNOLÓGICA (capacidad que tiene un territorio para rentabilizar la inversión en investigación y desarrollo) Indicadores especialización ECONÓMICA (impacto económico de las actividades de investigación) 	<p>Indicadores INPUTS</p> <ul style="list-style-type: none"> Educación Inversión en I+D+i <p>Indicadores OUPUTS</p> <ul style="list-style-type: none"> Especialización Científica Especialización Tecnológica Especialización Económica <p>Indicadores IMPACTO ECONÓMICO</p> <ul style="list-style-type: none"> Empleo Valor añadido Innovación Empresarial
VALORES OBXECTIVO	Valor Obxectivo (2018; 2020)	Valor Orixe (2013) Valor Obxectivo (2018; 2020)	Valor Orixe (2013) Valor Obxectivo (2018; 2020)
FERRAMENTAS DE SEGUIMENTO	 Plataforma de innovación	 Plataforma de innovación	 Plataforma de innovación
		 - Outras entidades Rexionais e/ou Nacionais	 - Outras entidades....

Emilia-Romagna



European
Commission

ID	Expected change	Specialization indicator	Unit	Reference year	Baseline	Source
Co1s	Growth of regional innovative potential	Patents per AS	N.	2013	tbd	EPO
Co2s		Patents in the selected OT per AS	%	2013	tbd	EPO
Co3s	Growth of R&I in public research system	Research grants in regional universities per AS	N.	2013	tbd	MIUR-CINECA
Co4s		Research grants in regional universities in the selected OT, per AS	%	2013	tbd	MIUR-CINECA
Co5s	Reinforcement of research-business relations	Number/value of research-business contracts per AS/OT	N./k€	2016	tbd	Research dashboard - ASTER
Co6s		Percentage on total of Number/value of research-business contracts per AS/OT	%	2016	tbd	Research dashboard - ASTER
Co7s	Innovative regional entrepreneurship	Innovative startup per AS	N.	2013	143	Registro imprese
Co8s		Percentage on total of innovative startup in the selected OT per AS	%	2013	tbd	Registro imprese
Co9s		Number of innovative SMEs per AS	N.	2015	Na (*)	Registro imprese
C10s		Percentage on total of innovative startup in the selected OT, per AS	%	2015	Na (*)	Registro imprese

CHANGE INDICATORS - SPECIALIZATION

(*) National law 33/2015

	Agrifood	Building and construction	Mechatronics and transport
Sustainable development	Energy from biomass	Certification LEED Leadership in Energy and Environmental Design	Intensity of climate alterant emission in manufacturing
	Certifications EMAS/ISO 14001	Number of energetic certification (ACE)	Producers of machines with sustainable quality label
	Energetic intensity in agrifood companies		
	Percentage of organic production		
	Organic producers		
Healty and active life	Companies active in dietary food		
	Number of dietary foods		
Information society		Buildings connected via ultra-wideband	Robots produced and installed yearly

CHANGE INDICATORS - TRANSITION

Conclusions

- **Monitoring is a sine qua non element** of a genuine S3 process, however **neglected from its inception**
- **weakness in ex-ante conditionality** assessment (>80% of the EU regional strategies)
- **Monitoring** has been gaining **relevance in peer review** discussions
- Acknowledged in many action plans

Conclusions

- Indicators are very **different among regions** depending on priorities.
- **Monitoring does not consist on a table of indicators**, but a tool to **streamline the logic of intervention of S3** and a way to enhance mutual learning and collaboration
- An opportunity to go into the granularity of S3 priorities



Thank you!



<http://s3platform.jrc.ec.europa.eu>



@S3Platform

JRC-IPTS-S3PLATFORM@ec.europa.eu

JRC-IPTS-S3EVENTS@ec.europa.eu