

## SMART SPECIALISATION EVALUATION: SETTING THE SCENE

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- It is important that evaluation exercises are focused on a few selected elements of the policy scheme; this facilitates identifying suitable evaluation questions and methodologies.
- Evaluation is meaningful only in the presence of well-specified evaluation questions, stemming from the specific information needs of the actors involved in Smart Specialisation Strategy.
- A well-defined intervention logic, linking clear ends with means, is essential for evaluation.
- Monitoring systems act as early-warning mechanisms signalling critical aspects in the implementation, which call for deeper assessment and understanding through evaluation exercises.
- To plan useful evaluations and increase the chances of their results being used require an ongoing commitment to develop a learning culture and build evaluation capabilities across institutions and stakeholders.

### 1. What this report is about

This report presents a set of preliminary conceptual and practical considerations on the evaluation of the Smart Specialisation policy. It opens a discussion that aims to set the scene for more articulated and detailed reflections.

The report was developed within the Territorial Development Unit of the JRC based on a long-standing line of work on monitoring Smart Specialisation which has been recently extended to evaluation.

### 2. Policy context

The European Cohesion policy 2014-2020 requires countries and regions to design and formally adopt a Smart Specialisation Strategy for research and innovation investment.

The core feature of Smart Specialisation is the definition of a limited set of priority areas for public investment which can best respond to social and economic challenges and offer opportunities for growth. Smart Specialisation is therefore distinctively selective as compared to horizontal policies aimed for instance to support entrepreneurship or improve business framework conditions.

Smart Specialisation is based on a multi-level governance in which the policy design and

implementation are carried out across different territorial scales. The EU establishes rules and general objectives for employing the funding it provides, leaving it to lower levels of government (national and regional) to implement policies according to specific objectives adapted to their socio-economic context. In return for this autonomy, countries and regions report regularly on their performance; they are expected to assess and revise goals, performance measures, and decision making processes on the basis of outputs and results.

The above characteristics define Smart Specialisation as a *place-based* and *experimentalist* policy. Territories are encouraged to invest in learning on how to navigate their own reality and discover policy options that can work in a specific context, rather than following universal recipes. This process is only sustainable if properly supported by the systematic production of information regarding actual policy developments through monitoring and evaluation.

### 3. Main insights

#### *Start from the logic of intervention*

In order to carry out any evaluation, it is necessary to start with a precise reconstruction of the way in which the policy is expected to function and of the results it is intended to achieve (logic of intervention or theory of change). One of the main purposes of any evaluation exercise is in fact to prove the soundness

of the logic of policy intervention and/or produce information supporting future improvements in the policy design and delivery mechanisms.

The evidence on Smart Specialisation implementation shows that the definition of clear objectives and logic of intervention is a weakness common to several strategies. In the planning phase most attention was placed on the definition of priority areas for intervention. Similar emphasis was not devoted to systematically define specific policy objectives explaining the nature of the socio-economic change the public interventions aim to achieve, and associate such specific objectives to the Smart Specialisation priorities.

The design of an evaluation plan is particularly challenging in presence of an intervention logic vaguely defined. Evaluators need to reconstruct ex-post the theory of change of public intervention. This must be done with, and endorsed by, relevant stakeholders to make sure that the reconstructed logic of intervention reflects the original intention of the policy makers.

### *A policy with different information needs*

In the Smart Specialisation multi-level governance framework, actors placed at a different territorial scale (EU, country, region) have quite different information needs on the policy progress, leading to diverse evaluation questions.

EU policy makers will be for instance interested in the impact of the whole bulk of Cohesion policy resources invested through Smart Specialisation Strategies on a few leading (macro)economic indicators such as GDP growth and job creation. Regional policy makers will instead need to gather detailed information on the implementation of the strategy and the effectiveness of the individual policy instruments in producing the expected results.

Given such differences, evaluation questions should be formulated according to the specific information needs, rather than be set in a top-down manner.

### *Focus on specific elements of the policy scheme*

Smart Specialisation Strategies are complex policy tools whose design comprises different elements: *objectives* to be achieved; expected *results* translating the objectives into measurable indicators and targets; *priority areas* for investment associated to specific objectives and results; *policy mixes* available for

implementation; *intervention measures* defining the exact match of objectives, priorities, instruments, the size and timing of the intervention, as well as procedural aspects; and expected *outputs* of the policy actions to be measured through appropriate indicators.

A good starting point for the design of an effective evaluation exercise is to focus on a few selected elements of the Smart Specialisation Strategy, for instance the impact of a given policy measure on a specific result variable, and hence on the achievement of the associated objective; or the development of a specific policy intervention in a given priority area and the factors that may have influenced its progress. No single evaluation can, nor should attempt to address simultaneously all the concerns and information needs regarding the strategy.

Investment priority areas are a defining feature and a fundamental component of Smart Specialisation, it is therefore particularly important for national and regional policy makers to evaluate their progress, assessing the delivery of policy measures within each priority and the achievement of the specific objectives associated to priorities.

### *Formulate meaningful and answerable evaluation questions*

Focusing on the individual components of Smart Specialisation Strategies facilitates the formulation of well-specified evaluation questions, which is the first defining feature of any evaluation plan.

Good evaluation questions address issues that are meaningful with respect to the nature and aims of the Smart Specialisation policy and relevant to key stakeholders. They focus on a specific dimension of the policy *performance* that can be credibly assessed. Such assessment, in turn, requires a noncontroversial definition and an accurate description of the performance dimension, and the identification of criteria by which that dimension can be judged.

In some cases, the evaluation questions can be easily defined based on the design of the strategy. The strategy's expected results are often a natural starting point for identifying suitable performance measures. Similarly, the policy output indicators may provide the performance measures for assessing policy delivery processes. In some other cases though, formulating the evaluation question is less

straightforward, and the performance measures need to be defined during or after policy implementation.

Ambiguous evaluation questions or questions that lack indication of the relevant criteria by which performance can be assessed, such as “Is the strategy successful?”, should be avoided.

The definition of the evaluation questions should not be an exclusive task for evaluators. Rather it should rely on the active contribution of policy makers and, potentially, relevant stakeholders. When formulated by professional evaluators alone, evaluation questions are likely to be far removed from the often more complex issues facing the governance bodies of Smart Specialisation Strategies. A strict collaboration between evaluators, policy makers, and stakeholders is thus extremely valuable in order to craft meaningful evaluation questions.

This interaction helps orient evaluation towards the most practical issues and support the effective use of the findings. For their part, evaluators should ensure that evaluation questions are structured in such a way that they can be answered based on existing research techniques and data.

### *Choose appropriate evaluation methods*

The second defining feature of an evaluation exercise is the choice of evaluation method, which will depend, among other things, on the nature of the evaluation question, the urgency of policy corrective action, the availability of data.

In this respect it is important to stress that there is no superior or perfect evaluation method. Methods and designs are fit for different purposes and all have strengths and weaknesses. A certain method should be selected only if it can properly answer the evaluation question. When feasible, triangulation of evidence derived by a variety of methods should be pursued.

Since some evaluation techniques are highly demanding in terms of data quality and collection, it is yet more advisable to involve evaluators early on in the policy design and implementation process. This is to ensure that data requirements are defined from the onset of the policy intervention and the collection process can start early, in turn allowing for quicker analyses and policy decisions.

### *Evaluate policy design, implementation, and effects*

Evaluation can be undertaken at different stages of the policy cycle. Whilst different typologies exist to categorise different evaluation exercises, it is useful to highlight here three types of evaluation.

**Ex-ante evaluation** can provide useful information to improve the logic of intervention of the strategy at the initial design stage. This type of evaluation addresses whether the goals of public intervention are clearly articulated, the implementation plan is complete and coherent, and the underlying logic for why public action should produce the intended changes is robust and justified.

In the design and later re-drafting of Smart Specialisation Strategies, this type of evaluation should be taken seriously as it can offer important suggestions on how to improve the quality and effectiveness of policy design.

**Process (implementation) evaluation** helps identifying a wide set of potential factors or contingencies which may have affected the policy delivery process, making it diverge from output targets, and therefore likely determining an impact on the final policy results.

This type of evaluation helps understand whether the intended support has been actually delivered to the target group of beneficiaries, and can thus provide timely information for designing and introducing corrective actions to overcome the obstacles emerged during implementation.

Process evaluation can provide useful insights on policy development to policy makers who are required to plan new interventions when the results of current actions are not yet available.

This type of evaluation helps reconstruct the policy causal chain, forming an important complement to impact evaluation.

**Impact evaluation** aims to identify the effect of the policy intervention on relevant socio-economic outcomes and is usually carried out at the conclusion of policy action. This type of evaluation may also provide information on the cost-effectiveness of public action and how the interaction of policy measures with the context influences policy results.

## Linking monitoring and evaluation

A well-designed monitoring system represents the starting point for process and impact evaluations. Policy makers should start by focusing on understanding the progress of the result and output variables recorded in the monitoring system.

The systematic information about policy delivery (output indicators) directly produced by the monitoring system, together with additional information regarding the policy implementation experience (e.g. preparation of calls, management of applications, project evaluation process, etc.) is the basis to perform process evaluations.

The role of monitoring information in this type of evaluation is central: monitoring systems act as early-warning mechanisms signalling critical aspects in the implementation which call for deeper assessment and understanding through evaluation exercises.

The information on policy results (result indicators) derived from the monitoring system helps defining impact evaluations.

Moreover, evaluation findings can help improve the monitoring system by providing information on the quality and consistency of the articulation of the logic of intervention and the chosen indicators.

## 4. Final remarks

The ultimate purpose of any evaluation is to produce answers that will be useful and used for improving policy making. For this to happen, however, it is necessary to develop a culture in which policymakers demand evaluation studies not because they have to comply with some administrative requirements, but because they are genuinely interested in, and committed to, learning.

Often, information needs on policy intervention are poorly articulated and evaluation is not adequately planned and left in the hands of external experts only.

In such circumstances, the risk that evaluation findings have no practical use or go unnoticed is rather high.

In order to plan useful evaluation and increase the chances of its findings being used, it is crucial to provide policy makers, implementing bodies and other relevant stakeholders with a sufficient understanding of evaluation so that they are able to assess for themselves what kinds of evaluation are most appropriate in relation to their strategies, to understand the results of evaluation studies and to judge the quality of the evaluation carried out by third parties.

Capacity building initiatives on evaluation should be strongly encouraged at different territorial levels. Stronger collaboration between public authorities and research institutions working on this theme, are also likely to be useful.

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## Read more

Imas, L.G. and Rist, R.C. (2009), *The Road to Results – Designing and Conducting Effective Development Evaluations*, The International Bank for Reconstruction and Development, Washington, DC.

Marinelli, E., Gianelle, C., Guzzo, F. and Guy, K. (2018), *Monitoring Smart Specialisation Strategies*, Massive Online Open Course, available at <https://iversity.org>.

Patton, M.Q. (2008), *Utilization-Focused Evaluation*, 4th edition, Sage Publications.

Rossi, P.H., Lipsey, M.W. and Freeman, H.E. (2004), *Evaluation, A Systematic Approach*, 7th edition, Sage Publications, Inc. Thousand Oaks, CA.

Stern, E., Stame, M., Mayne, J., Forss, K., Davies, R. and Befani, B. (2012), "Broadening the range of designs and methods for impact evaluations", DFID Working Paper 38, London.

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