2nd LEARNING JOURNEY

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Outline

❖ Short recall on our Policy Mix

❖ General Introduction to the Policy Mix Evaluation
  ▪ Model and objectives

❖ Type of evaluation and timeline
  ▪ Focus on each instrument

❖ Decision making process
  ▪ Effects of the evaluation on decision making
  ▪ Examples of evaluation-based modifications
Piedmont Policy Mix

RECALL ON OUR POLICY MIX
Piemonte policy mix

TOTAL PUBLIC FUNDING ALLOCATION of 236 M€ approx in the currently managed instruments/calls of the policy mix

- **IR2 – Industrialisation of research results**
- **Poli d'innovazione (innovation clusters)**
- **Fabbrica Intelligente (Technology Platform)**
- **ERANET projects (MANUNET)**
- **Innovazione MPMI**

**TIMELINE: From the call opening to the end of the funded projects**

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Rolling application deadline.
Project duration: max 12 months.
# Piemonte policy mix at a glance

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<tr>
<th>INSTRUMENT</th>
<th>POLICY OBJECTIVE</th>
<th>TRL</th>
<th>OBJECTIVE</th>
<th>TARGET GROUP</th>
<th>Geographical Scope</th>
<th>SECTORAL SCOPE</th>
<th>YEAR OF LAUNCH</th>
<th>ANNUAL BUDGET</th>
<th>Minimum Project Size</th>
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<tbody>
<tr>
<td>IR2 – Industrializzazioni e risultati della ricerca- (Grant)</td>
<td>Increase business innovation</td>
<td>5 to 8</td>
<td>Strategic and close to market R&amp;D projects, able to connect R&amp;D results with economic exploitation, on a pre-industrialization / pre-commercial phase</td>
<td>LEs &amp; MEs RTOs are eligible with minor role</td>
<td>Regional</td>
<td>Horizontal (wide impact on AM)</td>
<td>2016</td>
<td>Open call</td>
<td>63M€ (increase budget up to 68M€)</td>
</tr>
<tr>
<td>POLI DI INNOVAZIONE innovation clusters (Grant)</td>
<td>Increase technology transfer from RTOs to companies</td>
<td>4 to 7</td>
<td>R&amp;D projects concerning the specific innovation clusters topics (Agrifood, Energy and Clean Technologies, Life Sciences, ICT, Textile, Green Chemistry, Smart Products and Manufacturing) and their own innovation &quot;agenda&quot;.</td>
<td>LEs &amp; SMEs associated to the innovation clusters. RTOs as subcontractors</td>
<td>Regional (Companies)</td>
<td>Regional &amp; extra regional RTOs</td>
<td>2016</td>
<td>(partially in continuity with previous ROP 2007-2013) Fixed call</td>
<td>50M€ Of which approx 11M€ provisionally destined to &quot;Smart Products and A.M.&quot; (increase budget is under assessment)</td>
</tr>
<tr>
<td>FABBRICA INTELLIGENTE – Technology Platform (Grant + Soft Loan)</td>
<td>Increase collaborative R&amp;D activity</td>
<td>4 to 7</td>
<td>Complex R&amp;D projects (mature) in A.M</td>
<td>Large consortia led by LE with SMEs, RTOs, foundations and other public and private bodies in the field of R&amp;D and technology transfer.</td>
<td>Regional Valle d’Aosta companies</td>
<td>A.M</td>
<td>2015</td>
<td>Fixed call</td>
<td>39 M€ (22 M€ grant + 14.6 M€ soft loan + 2 M€ grant for education) + 14,3 M€ grant</td>
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<tr>
<td>PROGETTI ERANET – MANUNET (Grant)</td>
<td>Increase collaborative R&amp;D in EU</td>
<td>4,5,6</td>
<td>MANUNET: R&amp;D projects on specific topics in the manufacturing field</td>
<td>SMEs, RTOs, start-ups</td>
<td>Regional (ERANET framework)</td>
<td>A.M.</td>
<td>2016 (in continuity with previous ROP 2007-2013)</td>
<td>Fixed call (yearly)</td>
<td>MANUNET: up to 2 M€ in each annual call</td>
</tr>
<tr>
<td>INNOVAZIONE MPMI (Loan)</td>
<td>Increase fixed investments for technologica l innovation of process and products</td>
<td></td>
<td>Aid for investments in machinery, equipment and intangible assets</td>
<td>MSMEs</td>
<td>Regional (wide impact on AM)</td>
<td>Horizontal (partially in continuity with previous ROP 2007-2013)</td>
<td>Open call</td>
<td>60 M€</td>
<td>50 K€ MSE 250 K€ ME</td>
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Piemonte study visit – Why & Who

Piedmont’s manufacturing is the most important and developed in Italy (with Lombardia and Emilia Romagna), thanks to the localization in the region of several international leaders (e.g. General Electric –Avio, FCA, Comau, Magneti Marelli, Thales Alenia Space, Bitron, Prima Industrie, Pirelli, SKF, Alstom), and to the presence of a large number of mid-caps and SMEs specialized in “high tech” manufacturing, including some clusters of firms specialized in advanced manufacturing equipment such as robotics, laser-based technologies.

The leadership of Piedmont on the Italian manufacturing scenario is particularly evident in laser-based manufacturing, since in this region both technology leaders and lead users are located. Many applications were experimented and developed in this Region, like 3D laser cutting or the remote laser welding for automotive and additive manufacturing for aerospace, texturing, laser metrology.

The study visit will involve two Large Enterprises (Prima and SPEA) and one Small Enterprise (IRIS):

❖ **PRIMA Industrie** (Large Enterprise) [https://www.primaindustrie.com/](https://www.primaindustrie.com/) is one of the leaders at the European level in laser sources and laser systems and have primarily developed their specialization on laser applications for the automotive and the aerospace industry.

❖ **IRIS** (Small Enterprise) [http://www.irissrl.org/](http://www.irissrl.org/) is one of many SMEs developing and using laser-based technologies, mainly job shop and tier-1 suppliers of aerospace and automotive companies.

❖ **SPEA** (Large Enterprise) [http://www.spea.com/Home/tabid/38/language/en-US/Default.aspx](http://www.spea.com/Home/tabid/38/language/en-US/Default.aspx) instead, has combined distinctive competencies in automation, robotics and probe testing to develop high speed machines for MEMS & sensors testing, semiconductor testing, board testing. SPEA is today the undisputed leader in Europe and second in the world in testing electronic boards, and No. 1 in the world of MEMS inertial testing.
# Piemonte study visit – Who & instruments

<table>
<thead>
<tr>
<th>INSTRUMENT</th>
<th>SPEA (L.E.)</th>
<th>PRIMA INDUSTRIE (L. E.)</th>
<th>IRIS (S. E.)</th>
</tr>
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<tbody>
<tr>
<td>IR2 – Industrializzazione risultati della ricerca - (Grant)</td>
<td>Yes</td>
<td>Yes</td>
<td>NO</td>
</tr>
<tr>
<td>POLI DI INNOVAZIONE (innovation cluster) – progetti per imprese aggregate e non aggregate (Grant)</td>
<td>Yes</td>
<td>NO</td>
<td>Yes</td>
</tr>
<tr>
<td>FABBRICA INTELLIGENTE – Technology Platform (Grant + Soft Loan)</td>
<td>Project Leader</td>
<td>Project Leader</td>
<td>Yes</td>
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<tr>
<td>PROGETTI MANUNET (Grant)</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>INNOVAZIONE MPMI (Loan)</td>
<td>N.A.</td>
<td>N. A.</td>
<td>NO</td>
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Piedmont Policy Mix Evaluation

GENERAL INTRODUCTION TO THE POLICY MIX EVALUATION
Evaluation model and objectives

Aimed to provide information and data to policy makers about the effects of policies and the effectiveness of single instruments.

- Respond to information needs of the Managing Authorities and Stakeholders
- Focusing on results of policies and on generated impacts, still taking in due considerations the analysis of management/implementation processes
- Analyse the level of integration and coordination among the funding measures /instruments activated by ERDF and other Structural Funds
- Build information systems suitable for analysing the effectiveness of the policies
Type of evaluation

**ON-GOING and EX-POST evaluation**

- **IR2** – Industrialisation of research results
- Fabbrica Intelligente (Technology Platform)
- Poli d'innovazione (innovation clusters)

**EX-POST Evaluation**
(based on period 2007-2013)

- ERANET projects (MANUNET)
- Innovazione MPMI

**EX-ANTE Evaluation for Financial Instruments**
(prescribed by the regulation)
General Introduction to the Policy Mix Evaluation

TYPE OF EVALUATION AND TIMELINE
Type of evaluation

Evidence-based approach, articulated into 2 modalities:

1) **Analysis of the implementation process** or Implementation research: it aims at verifying the functioning of the implementation mechanisms and is target to identify the obstacles that slow the process down.

ON-GOING
and EX-POST

2) **Analysis of results** (and Counterfactual Impact Analysis): it aims at verifying the implemented activities and the results achieved, with the objective to check if the actions have generated effects on the targeted phenomenon.
Type of evaluation

1) **Analysis of the implementation process** or Implementation research:

It verifies the functioning of the implementation process by addressing the following questions:

- **Q:** To which extent the funding measure is corresponding to the initial design of the interventions?
- **Q:** What criticalities in terms of delays, interruptions, deviations from the planned path have emerged?
- **Q:** What are the main reasons?
- **Q:** What remedies have been used OR what remedies could be used?

**Sources of information:** Several. E.g. Data from the monitoring system, in depth interviews, structured/unstructured questionnaires to actors involved in the implementation of the action.
Type of evaluation

2) Analysis of results (and Counterfactual Impact Analysis):

The analysis focuses on the adopted strategies of action, the reasons behind, the implemented activities, the achieved results, the impression and judgement of the involved actors (beneficiaries and others), the effect of the adopted measures.

The aim is to verify the ability of the funding measures to induce a change.

Also a counterfactual approach will be used, which is the most challenging aspect of this evaluation, due to the complexity of reproducing the situation like: “what would have happened if the intervention never took place?”.
**Evaluation timeline**

1) **Analysis of the implementation process**

**PHASE 1**: data analysis from the monitoring system and through information collected by regional administration bodies and Finpiemonte

**PHASE 2**: analysis of existing data from secondary data banks

**PHASE 3**: Reporting

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**Estimated duration**: 7 months

- **PHASE 1**: documental analysis
- **PHASE 2**: database analysis
- **PHASE 3**: reporting

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**IR2 – Industrialisation of research results**

- **Oct. 2017 – Apr. 2018**

**Fabbrica Intelligente (Technology Platform)**

- **Oct. 2017 – Apr. 2018**

**Poli d'innovazione (innovation clusters)**

- **Apr. 2018 – Oct. 2018**
Evaluation timeline

PHASE 1: Analysis of documentation and identification of cases
PHASE 2: Collection and analysis of data and information
PHASE 3: Reporting

Estimated duration: 7 months

2) Analysis of results
or Counterfactual Impact Analysis

IR2 – Industrialisation of research results
Oct. 2017 – Apr. 2018

Fabbrica Intelligente (Technology Platform)
Apr. 2018 – Oct. 2018

Poli d'innovazione (innovation clusters)
Apr. 2018 – Oct. 2018

Poli d'innovazione (innovation clusters)
Mar. 2018 – Nov. 2018

ROP 07-13
General Introduction to the Policy Mix Evaluation

FOCUS ON EACH INSTRUMENT
FOCUS on IR2 – Industrialisation of research results

Question to be addressed:

Q1:
- Which kind of companies have replied to the call?
- What are the key aspects of the selected and funded projects? (financial size, workplan and implementation phases, investment downstream the project)?

When: on-going, since the start up of the measure

Methodology: Implementation analysis; Study of cases

Questions to be addressed:

Q2:
- Was the project (industrial research and experimental development) completed or it failed during the deployment?
- Was the foreseen investment plan downstream the project actuated?

Q3:
- To which extent the funding received by the company was crucial (would the investment have been actuated anyway, even without such contribution)?
- To which extent the investment accelerated the access to market of goods and services deriving from the research results?
- To which extent the project has contributed to the competitiveness of the company? What are the territorial returns of the investment or its spillover effects, direct or indirect (in terms of technological skills, production, labour market)? What kind of effect this funding instrument had in keeping based in the regional territory companies of medium-large size and multinational corporations?
- To which extent this investment reinforces the competitiveness of the regional specialisation areas?

When: at the end of the measure deployment (ex-post)

Methodology: qualitative-quantitative techniques (possibly counterfactual methods, qualitative analysis)

Questions to be addressed:

Q1: What companies were funded and for which thematic field?
   When: on-going, since the start up of the measure
   Methodology: implementation analysis mainly with qualitative research instruments (questionnaire, interviews, focus groups) and quantitative (data from administrative and statistical sources); case studies.

Q2: What kind of incentive effect the Platform “Fabbrica Intelligente” had for projects including large companies?
   When: at the end of the measure deployment (ex-post)
   Methodology: counterfactual analysis

Q3: What activities where implemented and which results achieved, and to which extent they are far from the original work plan? What is the perception of the involved actors?
   To which extent the participation to the research projects has increased the number of employees allocated to research activities in the companies that were funded?
   What academic/specialization paths enabled to activate an increase in the number of new employment?
   When: at the end of the measure deployment (ex-post)
   Methodology: analysis of results (mainly of effects) using both counterfactual approach and other quantitative research tools (e.g. a survey on beneficiaries)

Deliverables:
Final report: “Implementation process and first results. Criticalities and policy recommendations”.
Period: Oct 2017 – Apr 2018
Report on case studies from the 1st phase of the funding measure. Period: Apr 2018 – Oct 2018
FOCUS on Poli d'innovazione (innovation clusters)

Questions to be addressed, referring to the previous programming period 2007-2013:

Q1:
- When the financial support ended, what happened to the feasibility studies and R&I projects? Did they continue in other initiatives or projects (public or private)? Are there differences on type of companies and innovation clusters?

Q2:
- To which extent the availability of companies associated in clusters and/or beneficiaries of funding has increased regarding cooperation on R&I projects?

Q3:
- To which extent have the performances of companies associated in clusters improved (turnover, occupation, etc)? The fact of cooperating among multiple actors has somehow influenced the market success of the funded initiatives? What is the impact on the location and the specialization of companies?

When: since the start up of the measure, but referring to the previous programming period 2007-2013

Methodology: Analysis of results without qualitative evaluation (Q1); Q2 and A3 could be used for both quantities analysis (Q2: study on the networks) and for counterfactual analysis and Spatial descriptive statistics (Q3).


Deliverable (programming period 2014-2020): an implementation analysis will be conducted, that will produce a report with first evidences. Period: April 2018 – October 2018.
These instruments were not included in the main evaluation activity, since:

- Have a smaller allocated budget
- Are rather traditional measures
- Are consolidated and derive from previous programming period

To support decision making for the programming period 2014-2020, these funding measures went through the following **quantitative counterfactual researches** on the results of the previous programming (2007-2013)
1) Evaluation on effectiveness, impact and “administrative quality” of funding measures incentivising innovation in SMEs (Call MPMI and call ERANET)

A questionnaire was set-up, including:

- A specific section dedicated to beneficiaries
- A section dedicated to both beneficiaries and SMEs from a reference sample

Main findings:

- Incentives are directly related to growth in revenues of SMEs
- Improvements were identified on bureaucracy workload and IT platform
2) **Evaluation of impact on turnover, investments, labour productivity and occupation** (Funding measure “Innovazione e PMI”)

A sophisticated methodology was applied, in order to be able to highlight the additional effects produced by the public incentive.

**Main findings:**
- Regarding turnover, 0,31 € of public funding have generated 1€ as additional turnover
- Regarding investments (tangible assets), 0,59€ of public funding have generated 1€ as additional investment
- The average impact on occupation was of approx. 1 additional employee per company (compared to the counterfactual scenario)
3) **Ex-ante evaluation**: as prescribed by art. 37 of Reg. (UE) n. 1303/2013 referring to the set-up of Financial Instruments, it is has to include:

- An evaluation on added value of the FI and its consistency with other public interventions addressed to the same market
- Estimation of public resources and additional private ones that the FI has the possibility to collect (foreseen multiplier effect)
- Analysis of lessons learnt on similar FIs
- Qualitative and quantitative analysis of the FI
Piedmont Policy Mix Evaluation

DECISION-MAKING PROCESS
S3 monitoring and evaluation

Together with the evaluation of each funding measure, also the monitoring and evaluation of the S3 is a key component of the activities supporting the policy design in the framework of the ERDF ROP, since it refers to **monitoring the evolving regional system in its structural aspects**.

S3 monitoring and evaluation activities should also address each specialization area, in order to highlight their positioning toward the set objectives and toward the evolving competing context, thus providing the policy makers with a comprehensive knowledge and vision, on which the revision of the S3 can be based.
The revision process of the S3 involves the following governance structure, aimed to include and create synergies among all actors promoting innovation in Piedmont.

**THEMATICAL WORKING GROUPS**

- **Variable composition** as to enable the involvement of stakeholders: companies, academia, innovation clusters, beneficiaries of regional funding, trade associations, and in some cases the wider civil society.

- Called to check the consensus on the S3 implementation and to **study in depth specific sectors** and topics, collect data and information, identify good practices, elaborate proposals of actions.

- Provide the Technical Team with indications and data, thus **contributing to the monitoring activity.**
S3 monitoring and evaluation

S3 governance steps:

❖ **Analysis of indicators** included in the monitoring system

❖ **Analysis of specialisation indicators**

❖ **Analysis of variations** in the national and international context

❖ **Consultation** of partners for the sharing and possible modification of the “proposal of revision” (meeting with stakeholders, online consultation >> as in the initial phase of the S3 set-up)

❖ **Final version** of the “**proposal of revision** of the S3”

❖ **Opinion** of the Evaluation Committee

❖ **Decision** of the Political decision making body
S3 monitoring and evaluation

Where are we on the deployment of this participative process?

Previous ways of participative decision making were put in place in the initial phase of the S3, also through online consultations of the wider community.

This participative approach will be reinforced in the upcoming phases of monitoring and evaluation of the S3: the revision process of S3 will start from 2018.

Currently, 2 working groups are operating:

- “Fabbrica intelligente”, finalised to the implementation of the Technology Platform on advanced manufacturing
- “Poli di Innovazione” finalised to identify and elaborate proposals of revision of the funding measure in consistency with S3
Decision-Making Process

EXAMPLES OF EVALUATION-BASED MODIFICATIONS TO THE POLICY MIX
TRANSITION from ROP 07-13 to 14-20

Poli d’innovazione (innovation clusters)

The technological domains covered by the regional clusters were condensed and reshaped in accordance with the S3 specialization areas: consequently they were reduced from 12 (period 2007-2013) to 7 (period 2014-2020).

Innovazione MPMI

The implementation analysis run on the programming period 2007-2013 was included in the decision making process related to the MPMI funding measure, that was re-proposed in the period 2014-2020.

ERANET projects (MANUNET)

The perception of a low awareness on the ERANET funding measures induced to increase activities aimed to achieve a wider involvement of potential beneficiaries.
ROP 14-20: Modifications

In May 2017 the Managing authority proposed some modifications to the ERDF ROP 2014-2020

Conditions on which such modifications were based:

❖ Variations in the regional socio-economic context
❖ Information and input collected in the first years of deployment of the programmed instruments (from beneficiaries, programme manager, etc)
❖ Obligation to fulfil the spending targets imposed by the ERDF ROP (Performance management)
❖ A critical analysis in-itinere (settled practice of Finpiemonte) on the running calls, aimed to pick information and elements on the operational deployment of each funding measure in relation to the spending targets

Modifications apply to:

▪ Funding allocation on Axis and Actions
▪ The policy interventions/policy mix (introduction of new actions to increase/replace those originally planned)
▪ Output indicator of the Operational Programme
▪ the Performance Framework referring to each Axis
ROP 14-20: Modifications

Innovazione MPMI

The funding allocation in the ROP axis in which Innovazione MPMI is comprised was reduced.

The interest of beneficiaries towards the instrument Innovazione MPMI was not as high as expected, and this was also due to two other actions running in parallel at national level (legge Sabatini and Iperammortamento), that were supporting the same type of investments.

Modifications/improvements in Innovazione MPMI will be introduce in order to increase the attractiveness of this call. Funding allocations reductions might also be envisaged.

IR2 – Industrialisation of research results

In order to further increase the attractiveness of this call (already very successful), the selection criteria might be modified in the future and simplification in formal procedures might be introduces, with the aim to enlarge the number of beneficiaries.

Consequently this funding measure will probably see an increase of public funding allocation.
Thank you!

Questions welcome