



# *Peer eXchange & Learning*



## Monitoring Smart Specialisation Strategies

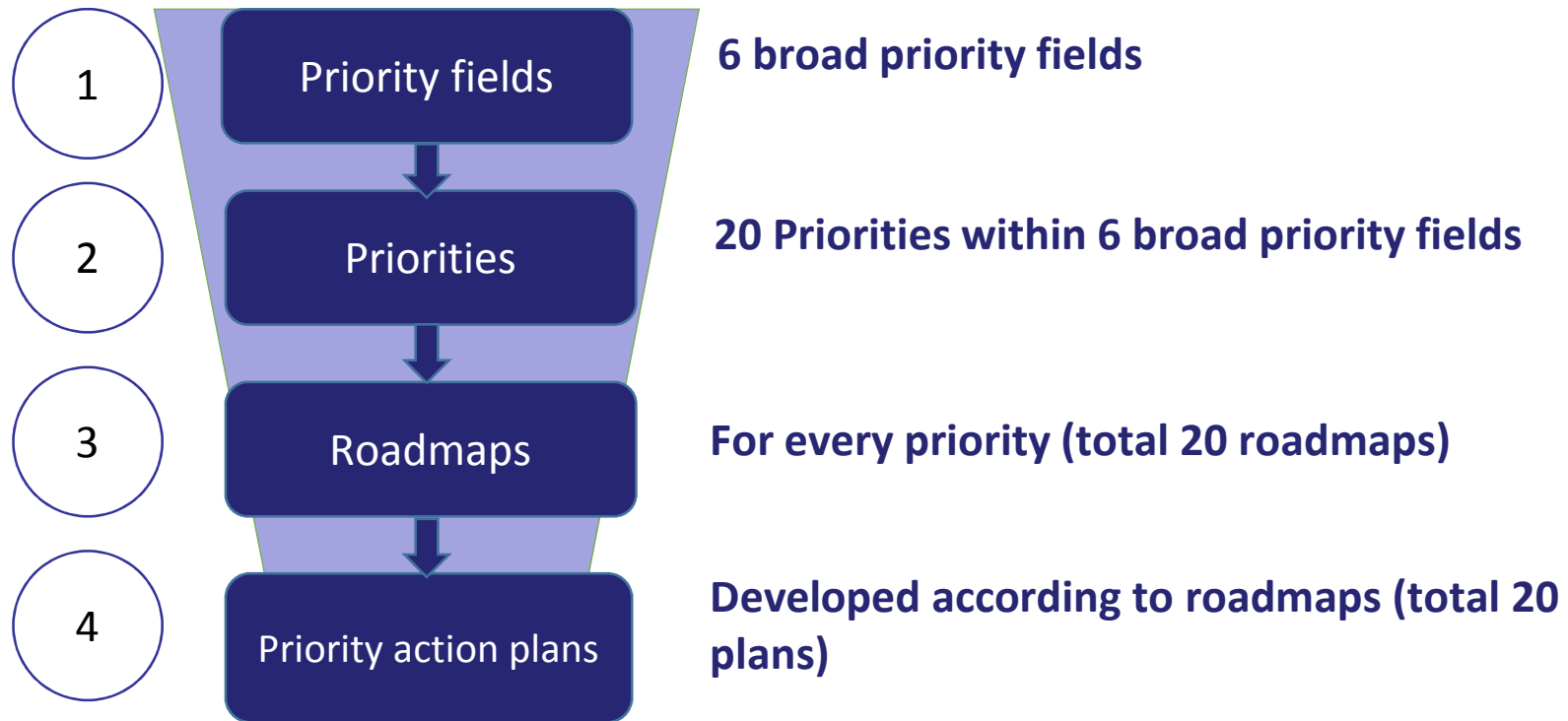
### Lithuania



Vilnius, 23 October 2018  
Ieva Penelytė

# Short description of Lithuanian RIS3 structure

S3 priorities, plans for their implementation were developed on a consensus building basis.



# Priorities

## **AGRO-INNOVATION AND FOOD TECHNOLOGIES**

- Safer food
- Functional food
- Biorefinery

## **ENERGY AND SUSTAINABLE ENVIRONMENT**

- Smart energy systems
- Energy from biomass, waste treatment
- Digital construction
- Solar energy

## **HEALTH TECHNOLOGIES AND BIOTECHNOLOGY**

- Molecular technologies
- Advanced technologies for health
- Advanced medical engineering

## **INCLUSIVE AND CREATIVE SOCIETY**

- Educational technologies
- Implementation of breakthrough innovations

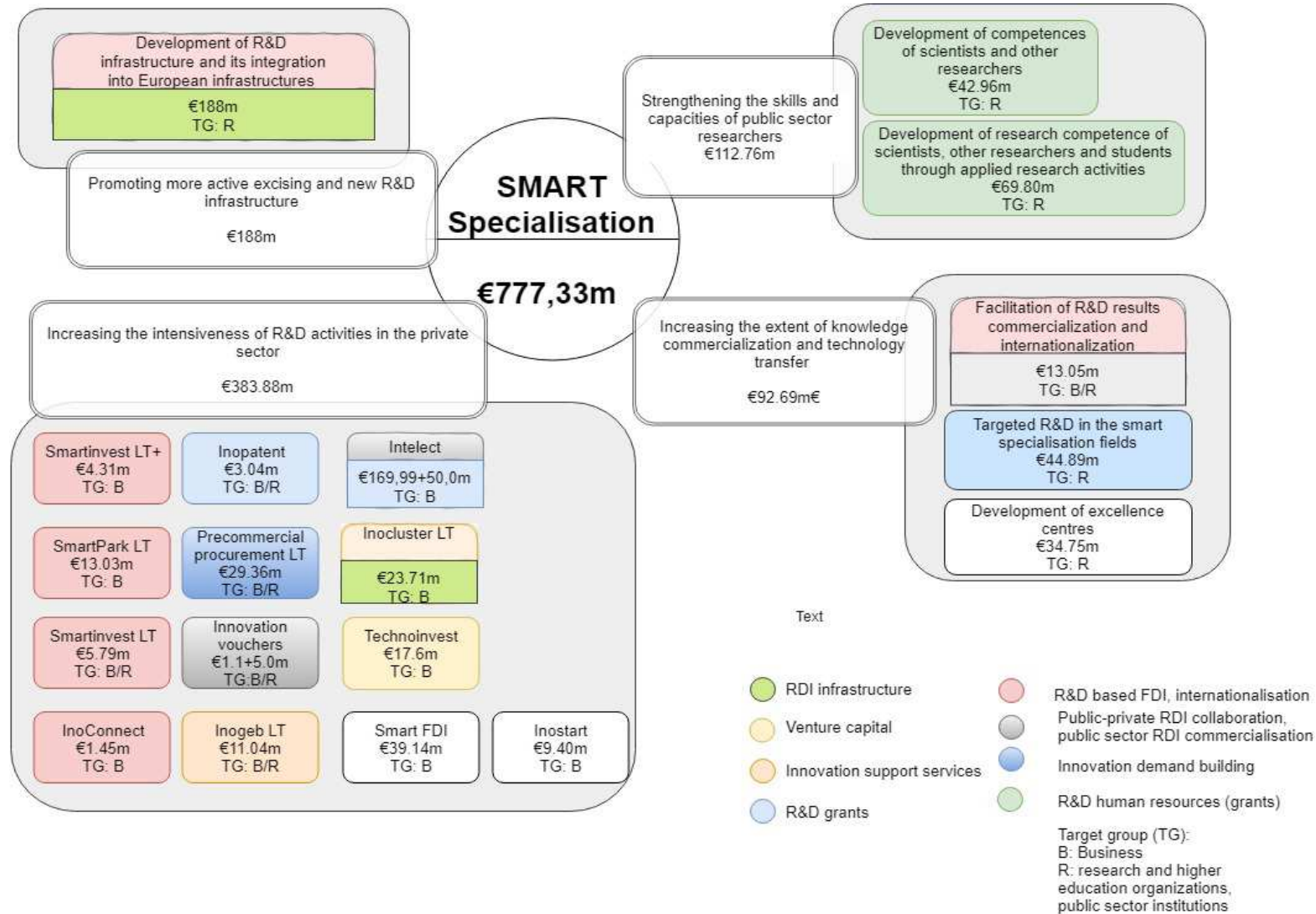
## **NOVEL PRODUCTION PROCESSES, MATERIALS AND TECHNOLOGIES**

- Photonic and laser technologies
- Functional materials and coatings
- Structural and composite materials
- Flexible production systems

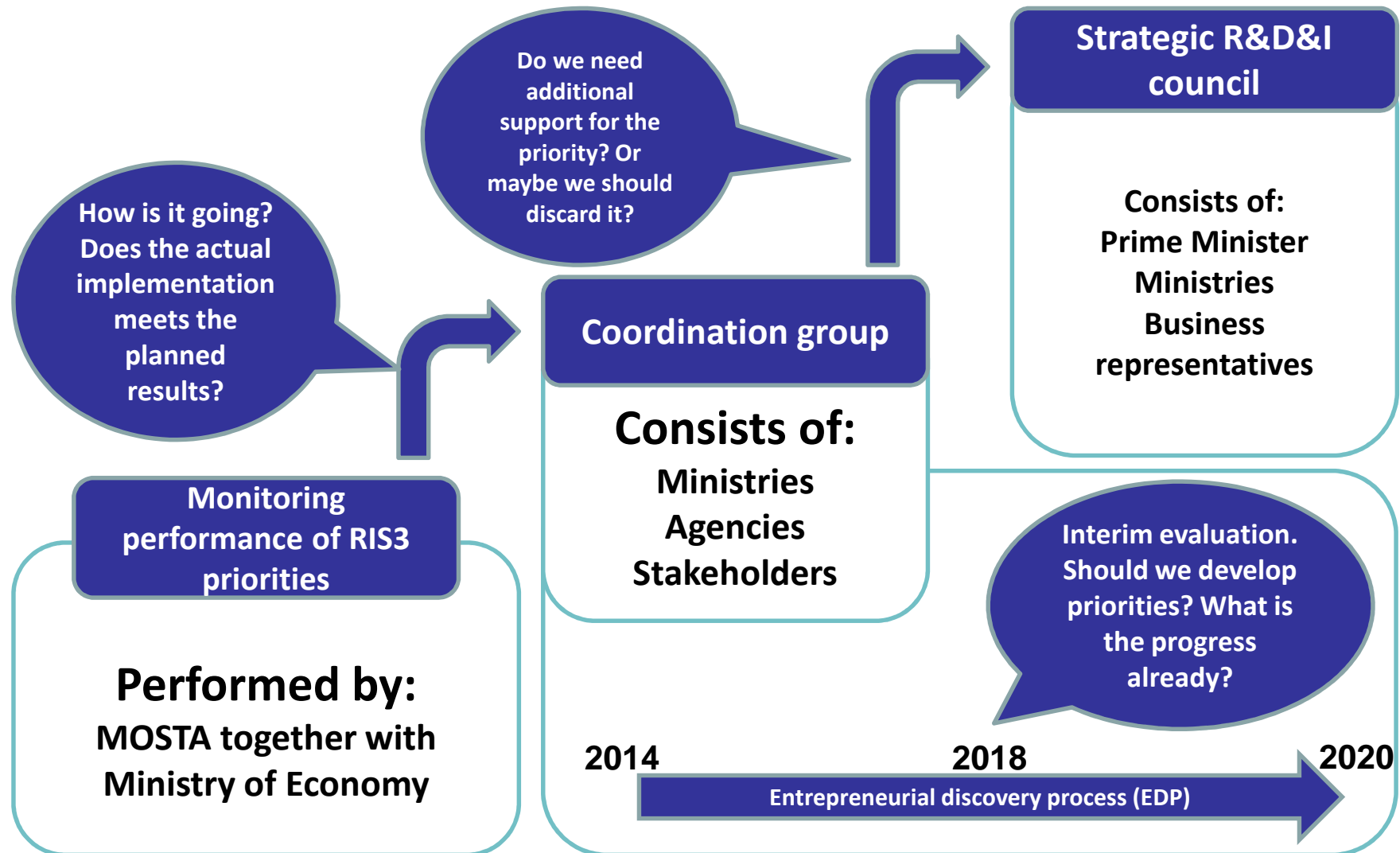
## **TRANSPORT, LOGISTICS AND INFORMATION AND COMMUNICATION TECHNOLOGIES**

- Smart transport systems and ICT
- International transport corridors
- Digital content
- Cloud computing and services

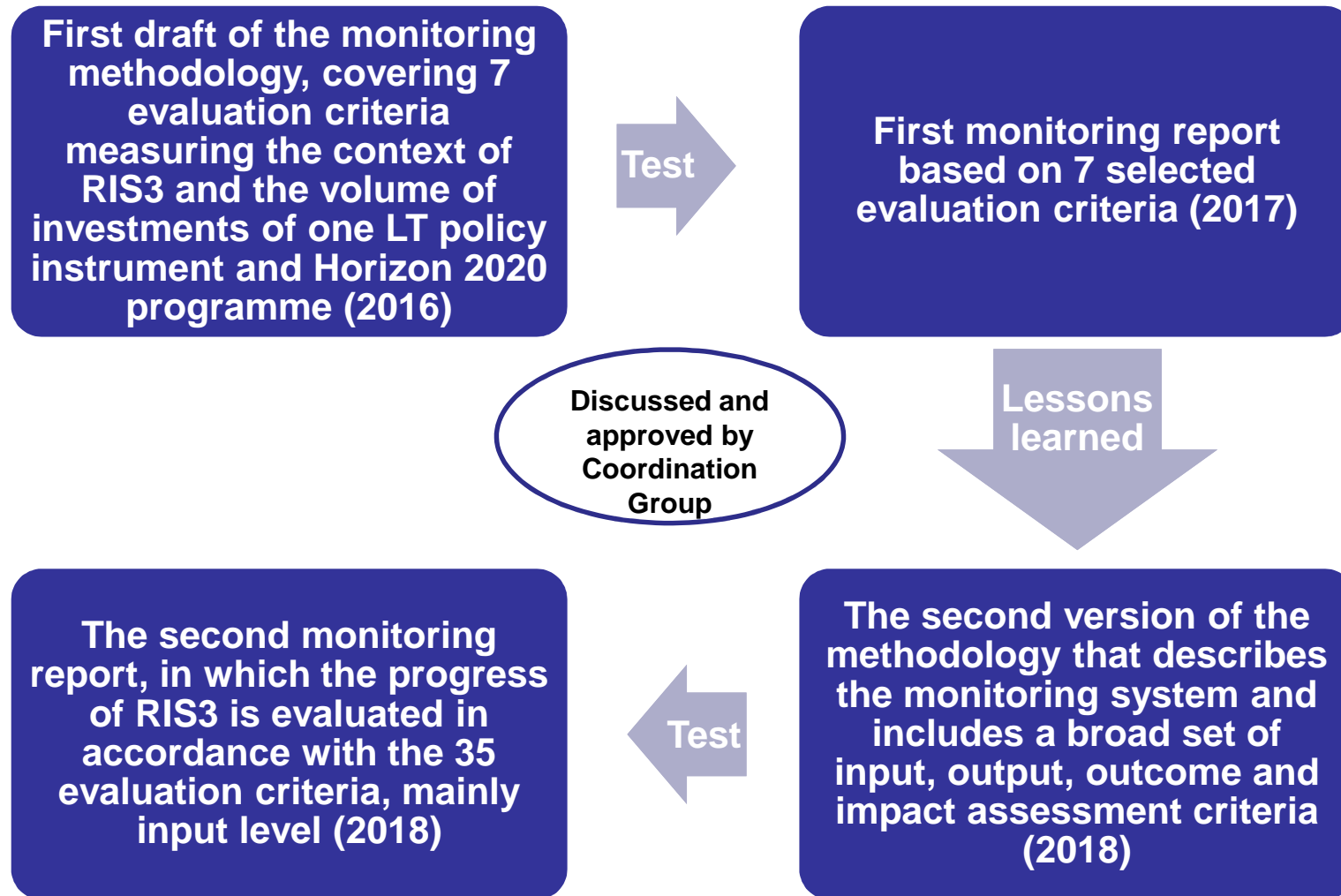
# Map of Lithuanian RIS3 policy instruments



# Short description of RIS3 governance



# Designing RIS3 monitoring system



# The logical basis for monitoring RIS3

RIS3 monitoring, as well as the RIS3 implementation, include the same logical basis and sequence



# Lithuanian RIS3 monitoring system, created by MOSTA and the Ministry of Economy (1)



## Monitoring

**Includes monitoring and evaluation of RIS3 indicators**

- Monitoring period - last 12 months
- 5 monitoring reports in total

## Interim Evaluation

**Includes evaluation of the RIS3 progress on relevance, effectiveness, efficiency aspects**

- The progress evaluation period is every 24 months
- 2 evaluation reports in total
- Entrepreneurial Discovery Process (EDP) applied

## Impact Assessment

**Includes RIS3 final impact assessment (as ex-post)**

- Impact assessment period is 5 years
- 1 evaluation report in total



# Lithuanian RIS3 monitoring system, created by MOSTA and the Ministry of Economy (2)

- Systematic data collection and analysis based on predefined evaluation criteria (indicators).
- The goal is to determine the state of implementation of the RIS3 priorities, priorities' action plans, policy instruments of action plans.

**Monitoring: What is going on?**



- Progress analysis to determine whether RIS3 priorities and etc. remain relevant, potential, whether the RIS3 will be implemented.
- The goal is to measure the relevance, efficiency and effectiveness of the RIS3.

**Evaluation of progress: is it good?**

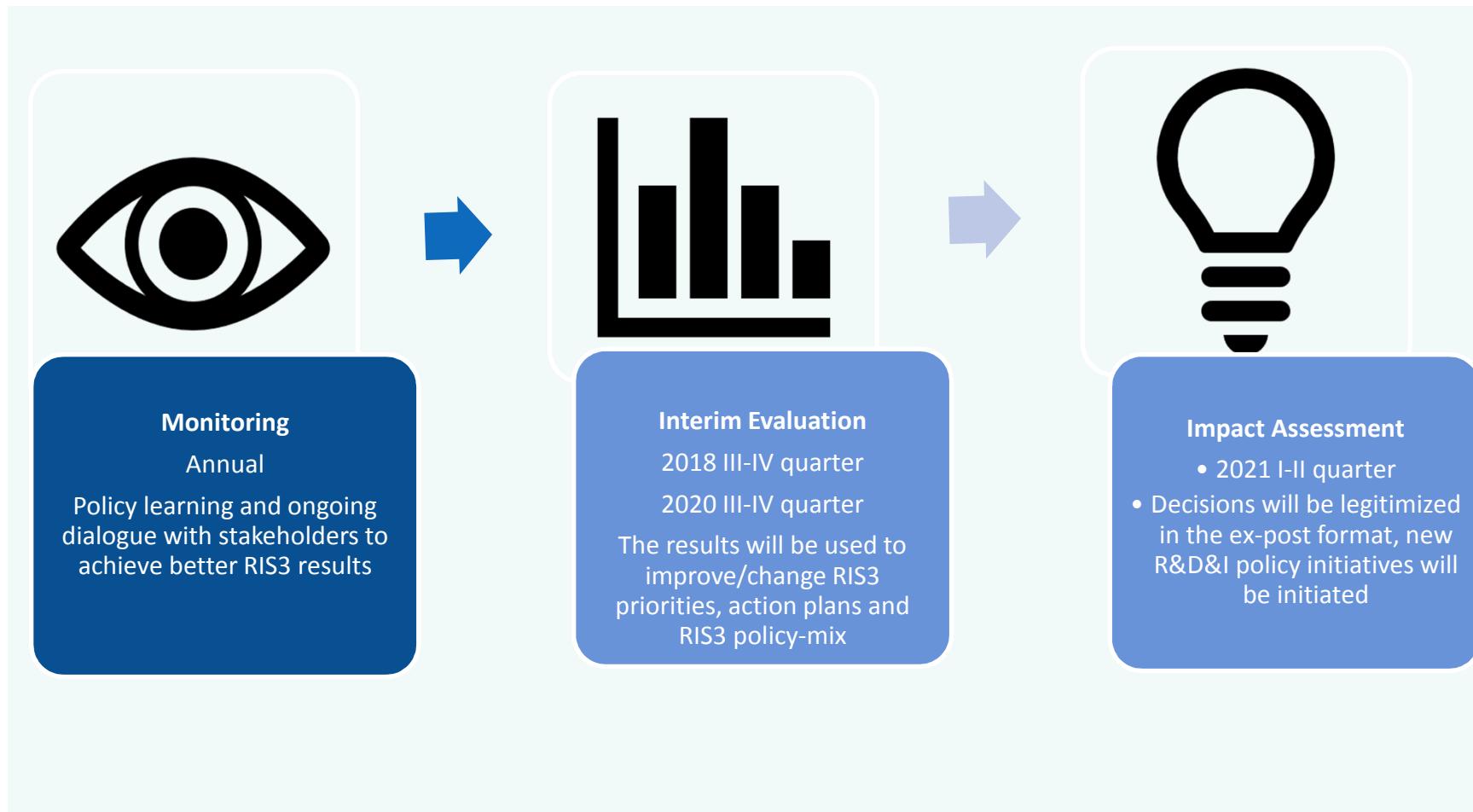


- Final evaluation of the RIS3 to assess the benefits and impact of the RIS3 intervention.
- The goal is to determine if the investment has paid off, what impact the RIS3 has made.

**Impact assessment: what is the benefit?**



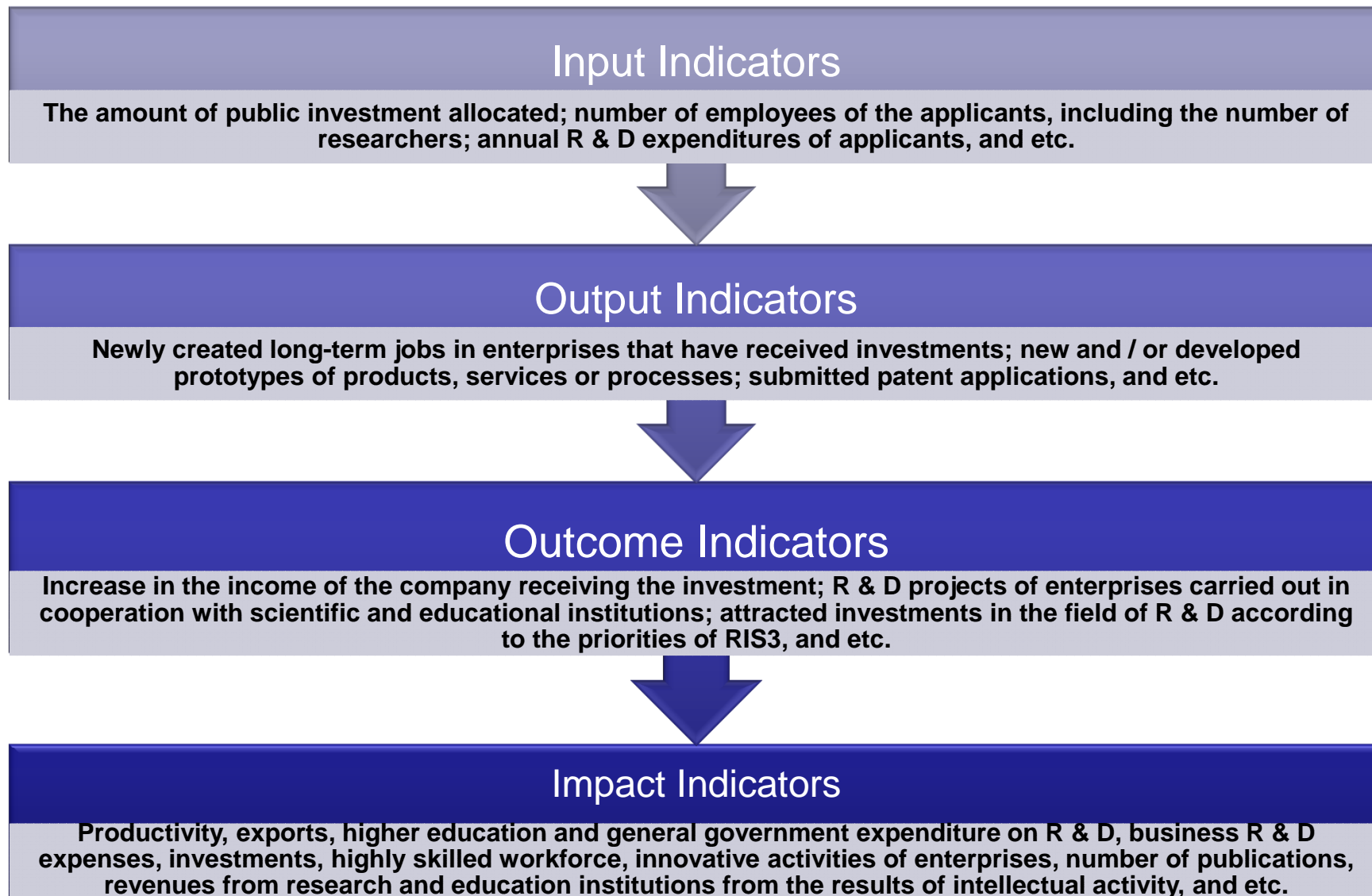
# Lithuanian RIS3 monitoring system, created by MOSTA and the Ministry of Economy (3)



# Indicators of Lithuanian RIS3 monitoring system

		Monitoring	Interim Evaluation	Impact Assessment
<b>EVALUATION CRITERIA (INDICATORS)</b>	<b>Indicators of input level</b>	Measures RIS3 human, physical, financial, etc. <b>resources / costs</b> .	Measuring whether <b>adequate</b> human, physical, financial, etc. <b>resources</b> allocated to implement RIS3.	During the impact assessment, indicators are used to measure: the <b>benefits</b> of the RIS3 and the net <b>impact</b> of the RIS3 (primary and secondary, such as the economic impact of the RIS3, new investments in R & D).
	<b>Indicators of output level</b>	Measures <b>products</b> created directly during the RIS3 implementation.	Measuring whether changes are being made (product creation, knowledge dissemination) has a <b>significant potential</b> .	
	<b>Indicators of outcome level</b>	Measures the <b>progress</b> that has been made in terms of specific policy interventions.	Measuring what is the <b>return on planned investments</b> compared with the target value; measuring <b>behaviour changes</b> of the stakeholders.	
	<b>Indicators of impact level</b>	During the monitoring, interim evaluation, indicators that allow us to assess the context of the RIS3.		
	<b>APPEAL OF INFORMATION, KNOWLEDGE OF EVERY EVALUATION STAGE</b>			

# Indicators to monitor Lithuanian RIS3



# Main sources and challenges of data

Institutions are relatively autonomous in deciding on the interpretation, treatment and accounting of the RIS3 indicators; therefore, **sharing data is a problematic, long process**

Institutions are reluctant to expedite the availability of data, the **process for coordinating data transfers takes a lot of time** each evaluation (about 2 months before each assessment)

**Data collection is not automated**; as well as **correcting and encoding the data provided is a time-consuming procedure**

Significant RIS3 indicators, such as business spending on R&D, **is impossible to analyze on the priority level**



**PROJECT APPLICATIONS, PROJECT BUSINESS PLANS**



**SURVEY DATA**



**BIBLIOMETRIC DATA**



**STATISTICS DEPARTMENT**



**INFORMATION PROVIDED BY APPLICANTS IN THE EU STRUCTURAL ASSISTANCE INFORMATION MANAGEMENT AND MONITORING SYSTEM (SFMIS)**



**EDP**



**INSIGHTS FROM INDEPENDENT EXPERTS**

# Monitoring No. 1 results

- Priorities were evaluated using the concept of "critical mass" (i.e. a set of evaluation criteria measuring the priority potential)
- In the first monitoring report priorities were evaluated using 8 evaluation criteria, and in the second report 35 criteria were used
- The first report was baseline, in the second report 6 full policy instruments and some results of the two instruments were analysed
- First report was more focused on the contextual assessment, the second report focuses on the intensity and scope of the RIS3 activities

**Critical mass**

**Molecular technologies**  
**Advanced technologies for health**  
**Photonic and laser technologies**  
**Functional materials and coatings**

**Inventors**

**Advanced medical engineering**  
**Smart energy systems**  
**Solar energy**

**Publishers**

**Energy from biomass, waste treatment**  
**Smart transport systems and ICT**  
**Digital construction**  
**Safer food**

**Moderate results**

**Flexible production systems**  
**Functional food**  
**Cloud computing and services**  
**Digital content**  
**Implementation of breakthrough innovations**  
**Educational technologies**  
**International transport corridors**  
**Biorefinery**

# Monitoring No. 2 results



7 priorities have a **significant potential**. It is a heterogeneous group with critical mass in separate areas. These are:

- Energy from biomass, waste treatment**
- Solar energy**
- Functional materials and coatings**
- Molecular technologies**
- Advanced technologies for health**
- Cloud computing and services**
- Implementation of breakthrough innovations**

The four **weakest** priorities are:

- Digital construction**
- Biorefinery** (the weakest priority, recorded in the second monitoring report in a row)
- Smart transport systems and ICT**
- International transport corridors**

# Main monitoring challenges

- The absence of evidence and result based policy in innovation field
- Systematic data collection and meaningful data aggregation at RIS3 priority level
- The complexity and limitations of methods for impact assessment of large-scale policy-mix
- Inclusion of stakeholders in the policy making and evaluation process, when it is important to ensure impartiality
- The problem of ensuring the meaningful cycle of policy assessment: how to deliver timely evaluations and ensure the success of the policy development and learning process





## Question 1: How to Evaluate Progress at RIS3 priority level?

- **Why:** *RIS3 is a strategy for regional priority areas for R&D&I. In order to assess the progress of RIS3, the subject of evaluation becomes the priority or priorities chosen by the region.*
- **What has been done:** *Lithuania has developed a monitoring and evaluation system for RIS3, which includes assessing the progress of RIS3 at the priority level.*
- **What worked:** *At the level of priorities, RIS3 analysis is possible, where a successful attribution of RIS3 projects for a specific priority is performed.*
- **What did not work:** *Significant RIS3 indicators, such as business spending on R&D, is impossible to analyze on the priority level. This undermines the RIS3 analysis at the impact analysis level.*

## Question 2: How to Evaluate RIS3 ROI and Direct Effect?

- **Why:** *The expected return on investment of the RIS3 policy tool must be sufficient to create the macroeconomic RIS3 effect. The RIS3 impact should be positive, otherwise RIS3 intervention will not only be ineffective, but even distorting the natural processes of the region's R&D.*
- **What has been done:** *Lithuania has incorporated into the RIS3 monitoring and evaluation system ROI assessment indicators and collects data from RIS3 project business plans.*
- **What worked:** *An ROI analysis is available if RIS3 projects ask applicants to prepare a business plan with an analysis of the expected return on investment. Business plans in Lithuania are organized only under one policy instrument.*
- **What did not work:** *The return on investment is measured during the planning and design phase of the project, but will not be investigated at the end of the project, as the project applicants do not provide such information.*

## Question 3: How to promote stakeholder participation in policy evaluation processes, and, how to ensure impartiality?

- **Why:** *RIS3 is based on EDP and the constant involvement of stakeholders.*
- **What has been done:** *Lithuania has involved stakeholders in the process of developing, coordinating and evaluating RIS3.*
- **What worked:** *RIS3 stakeholders are willing to engage in the process at its inception. Lithuania has managed to attract about 130 EDP experts.*
- **What did not work:** *During the EDP, stakeholders were not able to ensure sustainable participation and ongoing engagement. This is especially true for the business sector, for whom the RIS3 processes in general seem to be bureaucratic and exaggerated. Most of the RIS3 process involved science and public sector audiences, which distorted the main idea of EDP and did not follow EDP's vision. After all, EDP participants were biased in terms of their priorities.*

# Thank you!

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