



Evaluation of the National R&I Strategy on Smart Specialisation (RIS3) 2014 – 2020

A critical view



www.gsri.gov.gr

Evaluation of the National R&I Strategy on Smart Specialisation (RIS3) 2014 – 2020

A critical view





Address

by the Secretary General for Research and Innovation

Mr. Athanasios Kyriazis



The General Secretariat for Research and Innovation having always attached great importance to the value and benefits of any form of evaluation, launched an open, international call for tenders for the "Evaluation of the National R&I Strategy for the Smart Specialisation (RIS3) 2014 – 2020", aiming at investigating the contribution of the Strategy to the intended structural and development changes in the field of Research and Innovation of the country. The goal of the above action was also to detect, highlight and interpret the causes of success or deviation from the expected outcomes of the implemented Smart Specialisation Strategy in the field of Research & Innovation, so that in the future the most appropriate improvement interventions can be integrated in the best possible way.

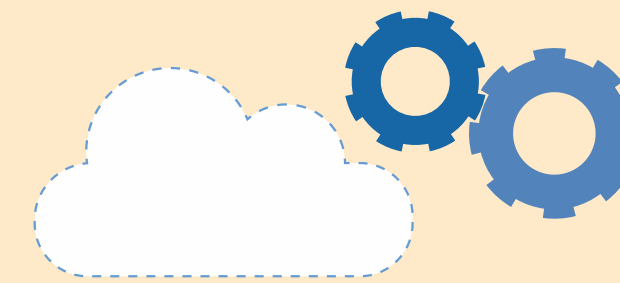
The evaluation was carried out and completed by the Contractor PLANET S.A. and its collaborators, under the guidance and in close cooperation with the executives of GSRI's Department B – Impact Assessment and Evaluation, of the Research and Innovation Policy Planning and Programming Directorate. Congratulations and thanks are due to these executives, as well as to the executives of the Contractor, who worked diligently for the successful completion of this study. Thanks must also be given to all the active members of the RIS3 ecosystem (Planning, Support & RIS3 Support and Monitoring Bodies, Action Management System Bodies, Regions), who have contributed substantially and in various ways towards this effort. Through detailed scientific analysis and processing of the data collected by the working group, the evaluation study led to important findings, drew useful conclusions and provided recommendations for improvement, which will be utilized by the GSRI in the forthcoming programming periods.

Scope and methodology of the evaluation

1. Objective of the evaluation

The evaluation of the National Research and Innovation Strategy for Smart Specialisation 2014 – 2020 (RIS3), aimed at:

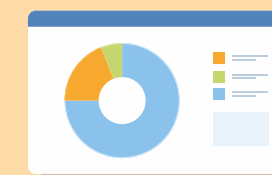
- ▶ the overall assessment of the necessity, the targeting, the priorities, the actions and the proposed governance structure of the Strategy
- ▶ the study of the contribution of the Actions to the objectives and results of the Strategy by the end of the programming period 2014 – 2020.
- ▶ the interpretation of the reasons for the success or deviation from the objectives of the implementation of the Strategy and the determination of the necessary corrective intervention



2. Evaluation Criteria

- ▶ Relevance
- ▶ Cohesion
- ▶ Effectiveness
- ▶ Efficiency
- ▶ Added value
- ▶ Impact

Evaluation Questions



3. Methods & Tools

- ▶ Literature review and secondary analysis
- ▶ Multicriteria analysis
- ▶ Primary field research (qualitative and quantitative)
- ▶ Logical Framework Analysis
- ▶ Indicators

Evaluation Framework

Methods and Tools

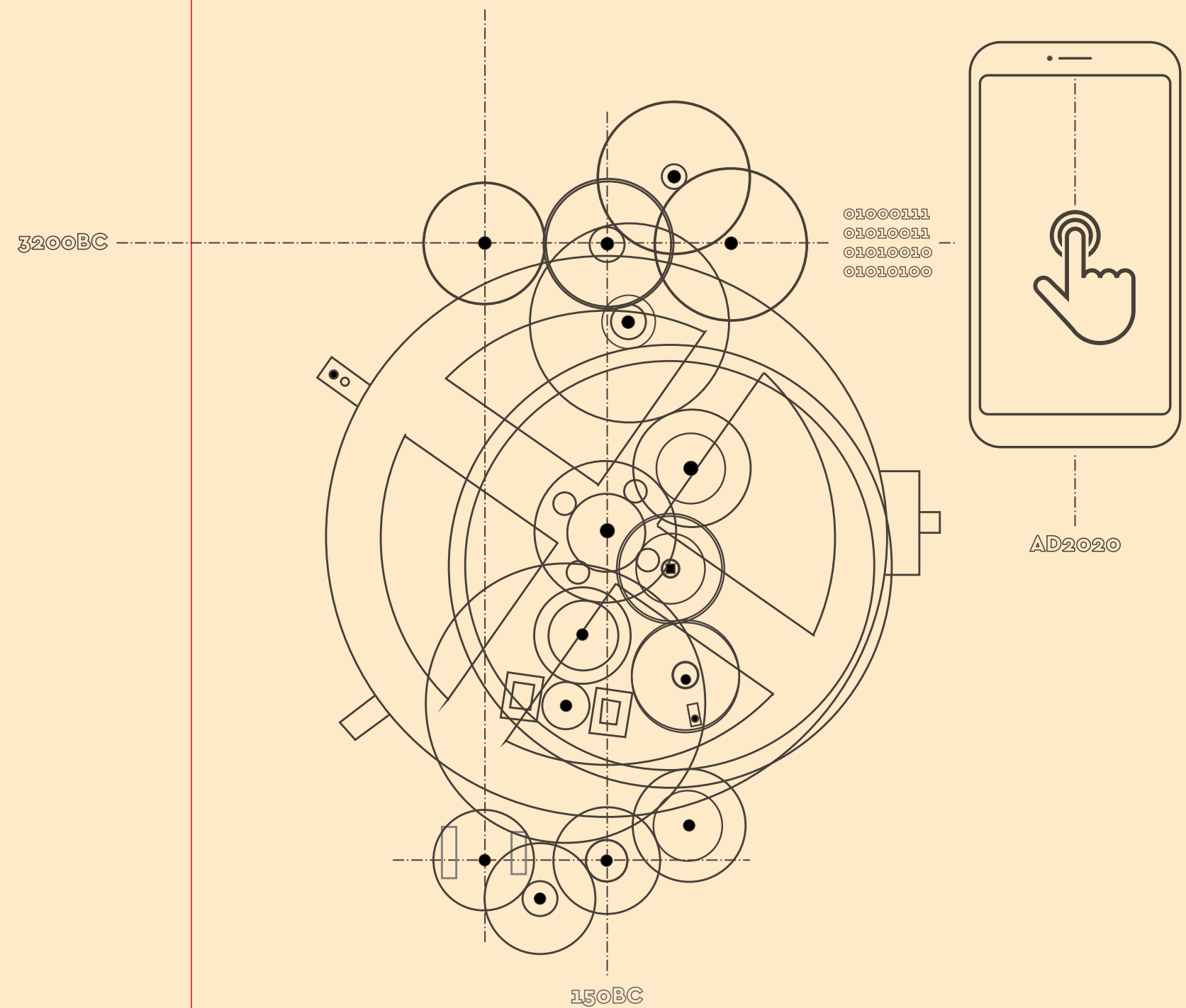
Criteria



The project "Evaluation of the National R&I Strategy for Smart Specialisation (RIS3) 2014 – 2020" was implemented during May 2023 – November 2023 by the contractor company Planet S.A. It was implemented under the Act: "INSTALLATION OF A MONITORING MECHANISM FOR THE IMPLEMENTATION OF THE NATIONAL STRATEGY RIS3 - COLLECTION & PROCESSING OF INDICATORS" which is funded by the Operational Program "Competitiveness, Entrepreneurship and Innovation 2014-2020" (MIS code 5008067).

Smart specialisation

means identifying the unique characteristics and means of each country and region, highlighting their comparative competitive advantages and bringing together local actors and resources around a vision for their future, based on excellence and extroversion

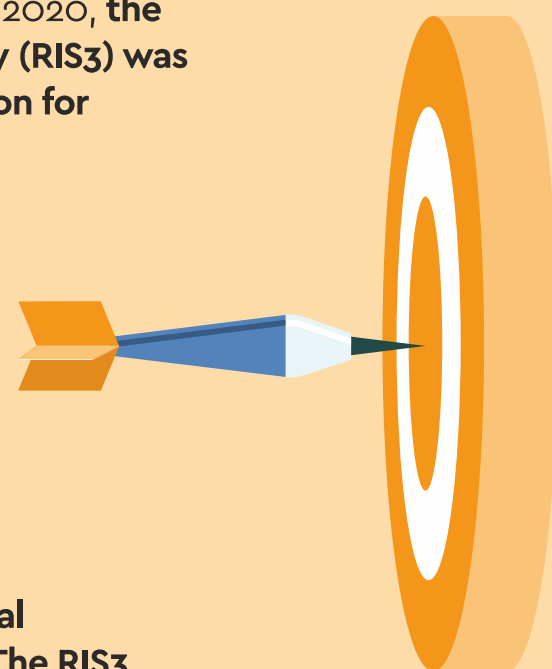


Basic Principles and Objectives

of the RIS3 2014-2020

For the Programming Period (PP) 2014-2020, the **National Smart Specialisation Strategy (RIS3)** was introduced by the EU as a key condition for **Member States to receive financial support** for investments in research and innovation through the European Structural and Investment Funds (ESIF).

The RIS3 2014-2020 was developed at both national and regional level (one National Smart Specialisation Strategy and 13 Regional ones) during the period 2013 – 2015. The RIS3 2014-2020 was adopted on 4 August 2015.



The RIS3 2014-2020 was structured on the basis of three Strategic Pillars and four National Intervention Axes that "cross-cut" the Strategic Pillars

		Strategic Pillars			
		1	2	3	
		Investing in the creation and diffusion of New Knowledge	Investing in Research and Innovation	Developing innovative mindsets, institutions and linking RTDI interfaces with Society	
Axes of Intervention	A	Capacity building	1A Development of RTDI capacity in the areas of specialisation	2A Emergence of new business players	3A Strengthening mechanisms and institutional framework
	B	Strengthening RTDI activities	1B Reinforcing RTDI activities and niches of excellence	2B Strengthening endogenous research and innovation in businesses	3B Strengthening public administration's demand for innovation
	C	Support mechanisms and structures	1C Strengthening networking (infra)structures	2C Infrastructures and mechanisms to support innovative entrepreneurship	3C Entrepreneurial Discovery and Documentation Mechanisms
	D	Extroversion and networking	1D Interconnection and cooperation in RTDI	2D Business extroversion	3D Development of Innovative Culture



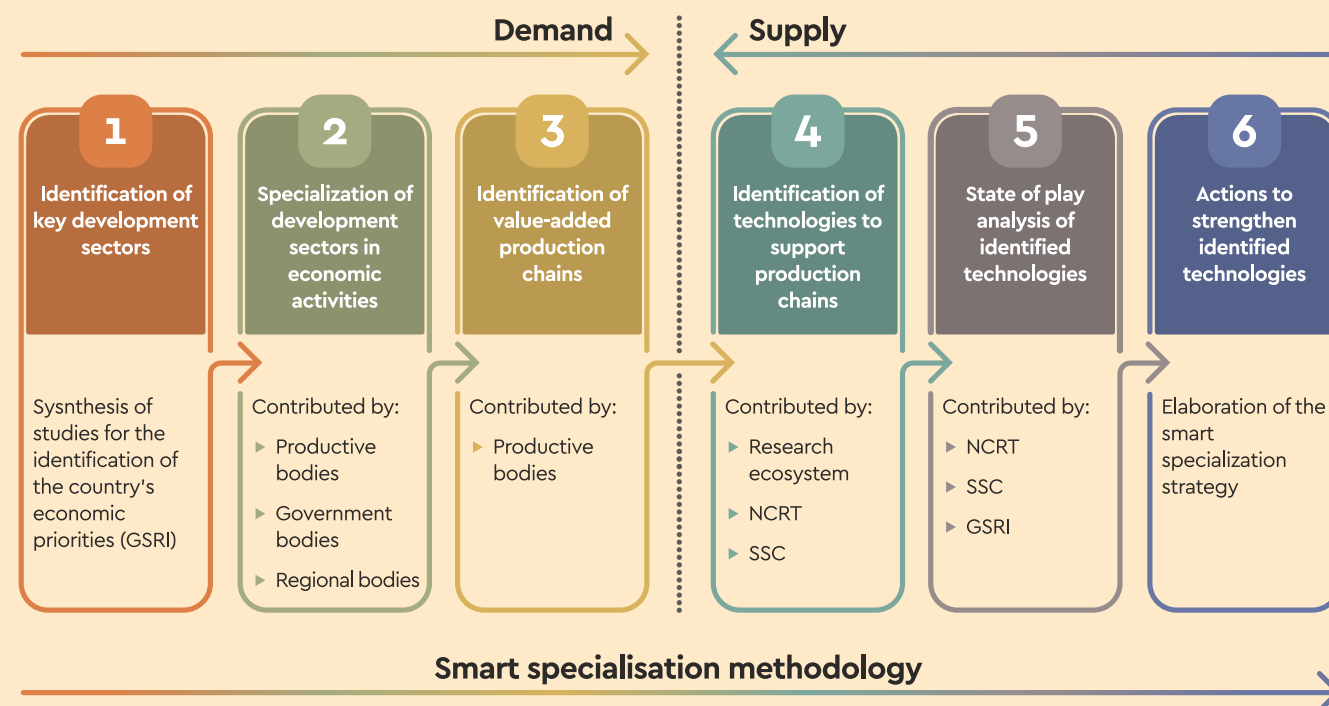
The Entrepreneurial Discovery Process (EDP)

as an intrinsic element of Strategy

The **Entrepreneurial Discovery Process (EDP)** was adopted by the GSRI during the programming period 2014-2020, as a **systematic tool whereby the interaction of participants was used to identify new areas of technological and market opportunities and to feed into central and regional decision-making mechanisms.**

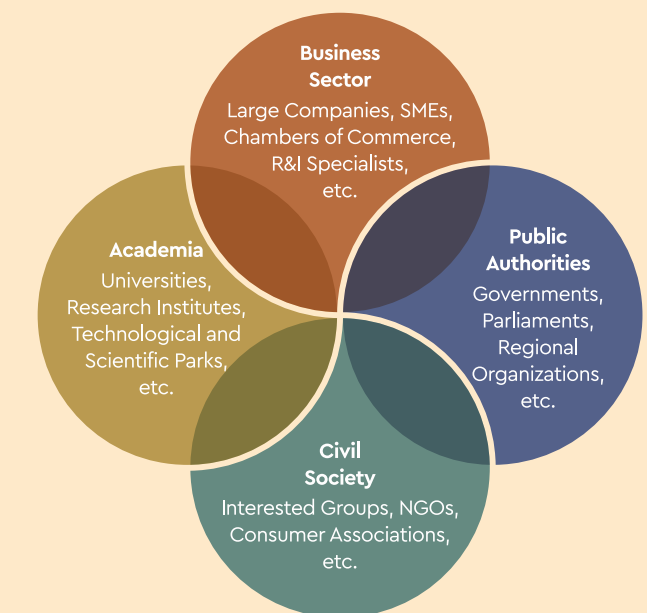
The **objectives of the EDP** were:

- ▶ Setting priorities based on rational choices: knowledge, skills and interests
- ▶ Improving the implementation and monitoring of Smart Specialisation Strategies: strengthening process feedback mechanisms
- ▶ Empowering regions by creating strong networks, harnessing social capital and reshaping regional innovation policy by using a broad governance base.

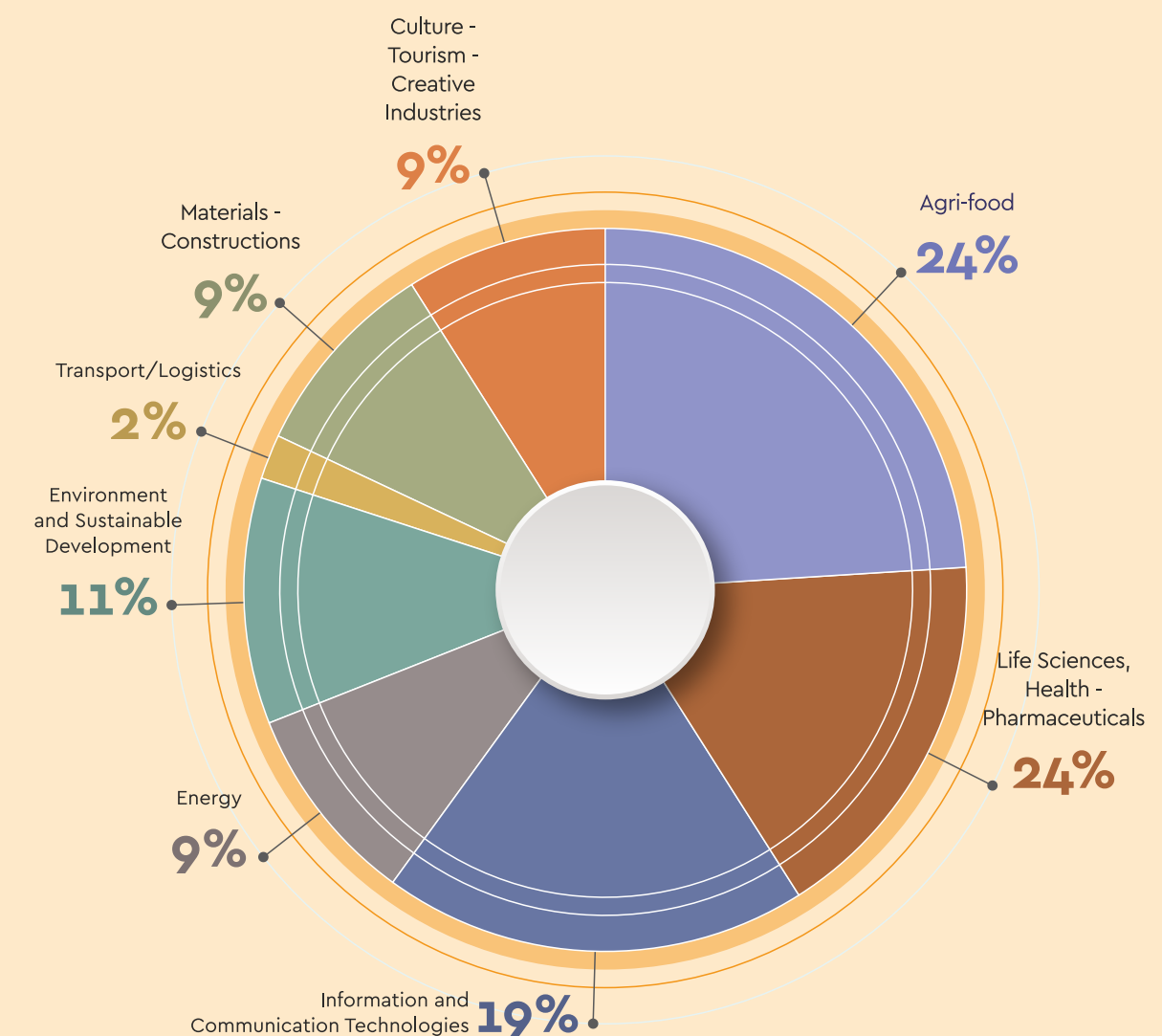


EDP is a process with a steep learning curve involving quadruple helix representatives, which includes:

- ▶ the business sector,
- ▶ research / academic centres,
- ▶ the public sector, and
- ▶ civil society organisations.



As a result of this whole process, the following priority areas were identified:



The interconnection of the National RIS3 with the Regional Smart Specialisation Strategies

At national level, the methodology used shall consist of:

- ▶ The identification of **dynamic thematic sectors or industries** that contribute to the country's growth potential
- ▶ Further **specialisation of the above sectors/industries and the identification of activities** that can generate structural changes in enterprises, utilizing Research, Technology and Innovation
- ▶ The identification of **critical research fields/technologies and appropriate policy tools** that should be included in the National RTDI Strategy, taking into account also the Regional RIS3 Strategies

At regional level:

- ▶ Regions are invited to identify, structure and exploit their competitive advantages, support innovation and focus investments in order to achieve the desired local economic transformation.
- ▶ The whole approach is bottom up, with particular **emphasis on companies** which create new, innovative activities and their corresponding technological needs. The above constitutes the target of the **Entrepreneurial Discovery Process**
- ▶ The results of the consultation in each Region and the respective regional RIS3 strategies which emerged so far, are "interconnected" with the National Smart Specialisation Strategies.

- ▶ Smart Specialisation Strategies at national level (GSRI) takes into account regional S3
- ▶ Ensures their coherence
- ▶ Complements research/technology gaps
- ▶ Promotes synergies with the European RTDI policy (HORIZON 2020)
- ▶ Formulates the strategy for large Research Infrastructure
- ▶ Supports Basic research – training of researchers

Smart Specialisation Strategies
at Region 1 level

Smart Specialisation Strategies
at Region 2 level

Smart Specialisation Strategies
at Region 3 level

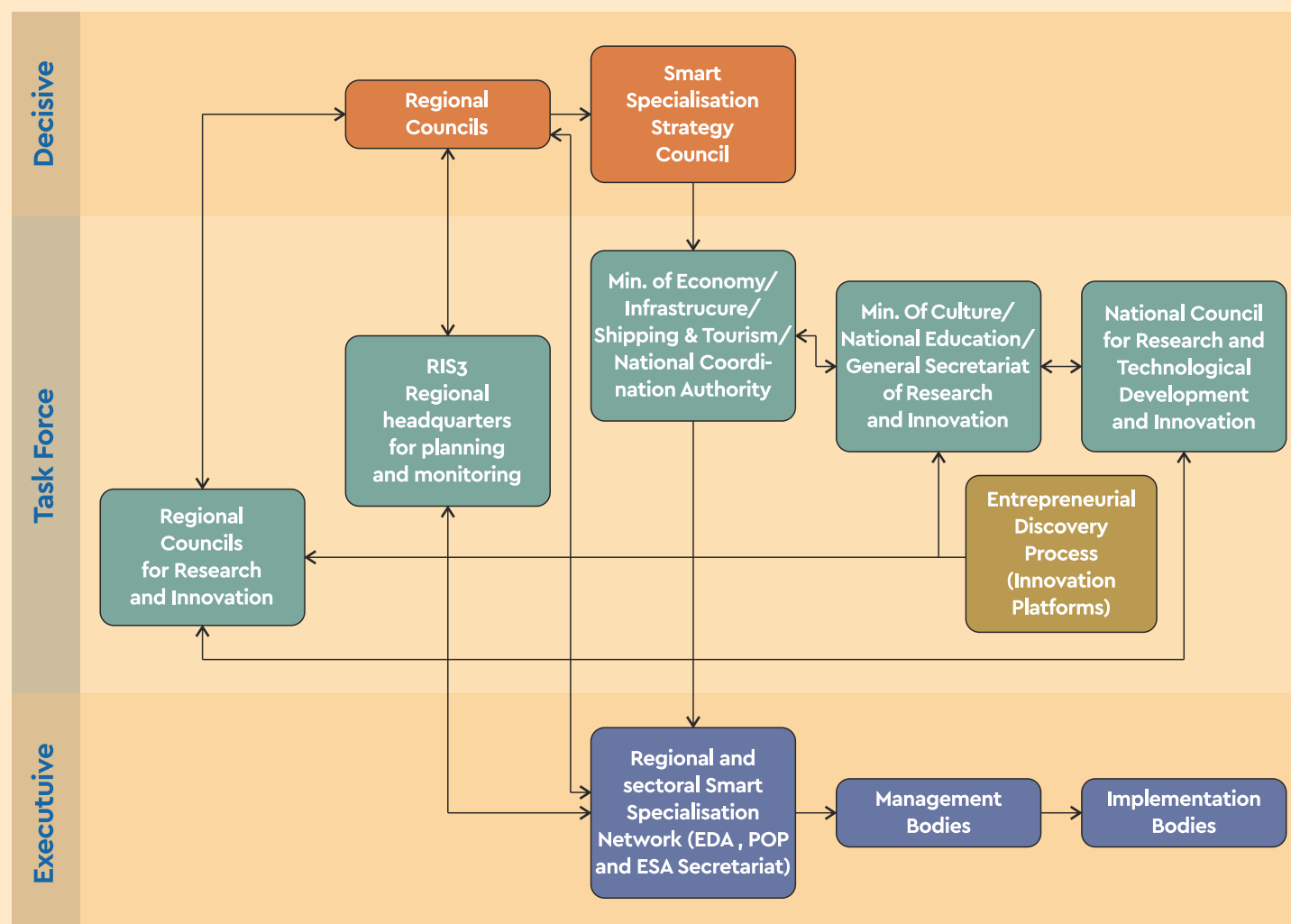


Governance System of the National Strategy

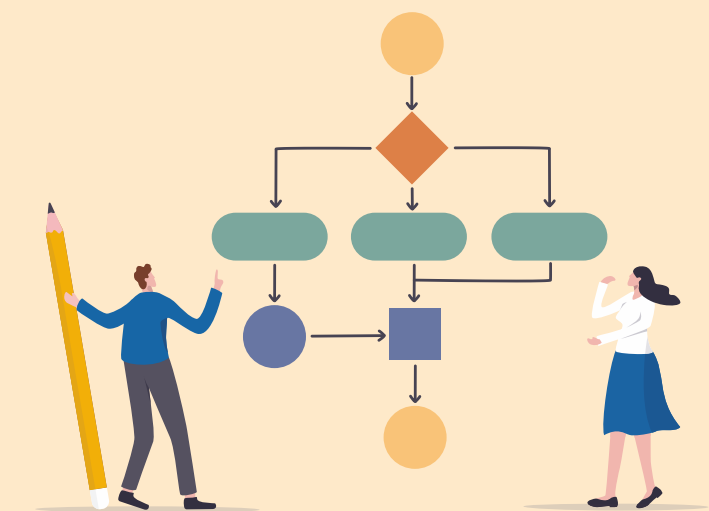
The multilevel governance and the operation of the quadruple helix

- ▶ The Governance System was designed to interconnect with the Regional Smart Specialisation Strategies, in order to achieve the RIS3 2014-2020 objectives
- ▶ Hence, the Regional Smart Specialisation Strategies interact with the National Strategy on research, technological development and innovation priorities and specify the planning, according to the results of the EDP

The stakeholders' roles



Source: National Smart Specialisation Strategy, p. 143



The allocation of roles and responsibilities of the stakeholders in the planning of the RIS3 Governance System 2014-2020 includes three levels of responsibilities:

1. Decision Making Level – Institutions/Bodies

- ▶ The Smart Specialisation Strategy Council
- ▶ Regional Councils in the 13 Regions of the Country

2. Task Force (Executive) Level – Institutions/Bodies

Central Level

- ▶ National Coordination Authority (NCA)
- ▶ General Secretariat for Research and Innovation (GSRI)
- ▶ National Council for Research and Innovation (NECP)

Regional level

- ▶ Executive bodies, units or services for the planning and monitoring of regional Smart Specialisation Strategies
- ▶ Regional Council of Research and Innovation Councils (RCRI)

3. Executive (Enforcement) Level – Institutions/Bodies

- ▶ Sectoral and Regional OP and MIP Network for RIS3
- ▶ Management Bodies
- ▶ Implementing organisations

The planning of the governance system was quite complex and multilevel, in light of the lack of any substantial institutional framework for the governance of Smart Specialisation in Greece, contrary to the usual governance practice for the NSRF Operational Programmes.

The Action Plan of the National Strategy:

The Actions at a glance

		Strategic Pillars		
		1. Investing in the creation and diffusion of New Knowledge	2. Investing in Research and Innovation	3. Developing innovative mindsets, institutions and linking RTDI interfaces with Society
Axes of Intervention	A. Capacity building	1A Development of RTDI capacity in the areas of specialisation <ul style="list-style-type: none"> 1.a.1 Reinforcement of research infrastructures according to the National Roadmap for Research Infrastructures 1.a.2 Specialised competence centres 1.a.3 Development of professional knowledge and skills in intellectual property, innovation and technology management, exports, etc. 	2A Emergence of new business players <ul style="list-style-type: none"> 2.a.1 Reinforcement of business groups at the incubation stage 2.a.2 Reinforcement of the establishment and development of start-ups 2.a.3 Exploitation of research results (proof-of-concept) 2.a.4 Spin off/out development 2.a.5 Reinforcement of existing and establishing innovative clusters 	3A Strengthening mechanisms and institutional framework <ul style="list-style-type: none"> 3.a.1 Establishment and reinforcement of new financial instruments 3.a.2 Patent Pool Fund 3.a.3 Register of consultants for issues on intellectual and industrial property
	B. Strengthening RTDI activities	1B Reinforcing RTDI activities and islands of excellence <ul style="list-style-type: none"> 1.b.1 Reinforcement of human research capacity through the implementation of doctoral research) 1.b.2 Supporting the research dimension of higher education 1.b.3 Support for postdoctoral researchers 1.b.4 Funding of proposals that were positively evaluated in the ERC Grant Schemes, but were not funded 1.b.5 RTDI collaborative initiatives 1.b.6 Development of innovative products/services proposed by companies, etc. (customer- driven) 1.b.7 Reinforcement for performing tests of products and services 1.b.8 Strategic Plans of Research Institutions 1.b.9 Integrated HEI Research Strategies 	2B Strengthening endogenous research and innovation in businesses <ul style="list-style-type: none"> 2.b.1 Single Action of State RTDI Aids: RESEARCH-INNOVATE-CREATE <ul style="list-style-type: none"> i. Emerging research firms ii. Small and medium-sized enterprises iii.1 Partnerships of businesses with other institutions (Small collaborations) iii.2 Partnerships of groups of businesses with other institutions (Large collaborations) iv. Integration of research results into the production process 2.b.2 Reinforcement of the development of ICT products and services 2.b.3 Development of e-business applications by individual companies or groups of companies 2.b.4 Reinforcement of investments to existing firms for introducing new products and services to the market and for developing and applying modern production methods 2.b.5 Support of businesses for creating and expanding of advanced capacities for product and service development in new areas 2.b.6 Funding proposals that passed the EU SME Instrument score threshold but were not funded 	3B Strengthening public administration's demand for innovation <ul style="list-style-type: none"> 3.b.1 Innovative pre-commercial procurement (PCPs) TO 2,4,5,6,7 3.b.2 Development and implementation of "protocols" or signals



		Strategic Pillars		
		1. Investing in the creation and diffusion of New Knowledge	2. Investing in Research and Innovation	3. Developing innovative mindsets, institutions and linking RTDI interfaces with Society
Axes of Intervention	C. Support mechanisms and structures	1C Strengthening networking (Infra)structures <ul style="list-style-type: none"> 1.c.1 Setup and operation of digital research and innovation platforms 1.c.2 Technology Validation Offices 1.c.3 Reinforcement and expansion of the activity and the role of the Units for Innovation and Entrepreneurship 1.c.4 Modernisation of the internal network infrastructures of all HEIs and RCs in the country) 1.c.5 Integration of Hospital Units in the national academic network GRNET for supporting research and clinical activities in medicine and biology, in a cloud computing environment - extension to the remaining five regions of the country 	2C Infrastructures and mechanisms to support innovative entrepreneurship <ul style="list-style-type: none"> 2.c.1 Reinforcement of the development of digital platforms for business transactions and cooperation between businesses, between businesses and consumers and between businesses and public sector bodies 	3C Entrepreneurial Discovery and Documentation Mechanisms <ul style="list-style-type: none"> 3.c.1 Entrepreneurial Discovery Mechanism 3.c.2 Installation of Monitoring Mechanism for the implementation of the national RIS3 strategy
	D. Extroversion and networking	1D Interconnection and cooperation in RTDI <ul style="list-style-type: none"> 1.d.1 Reinforcement of participation in transnational / trans-European networks, programs and initiatives - ERANETS-FETs 1.d.2 Actions of bilateral and transnational cooperation 	2D Business extroversion <ul style="list-style-type: none"> 2.d.1 Preparation, implementation and evaluation of sectoral or industrial plans of extroversion* 2.d.2 Specialized studies for targeting markets (market analysis), products and benchmarking of competition* 	3D Development of innovative culture <ul style="list-style-type: none"> 3.d.1 Development of demonstration projects and pilot projects; implementation of research results 3.d.2 Reinforcement of the participation in international scientific events, competitions etc. 3.d.3 Promotion of the social importance of RTDI project

Monitoring Mechanism

for the implementation
of RIS3 Actions 2014-2020

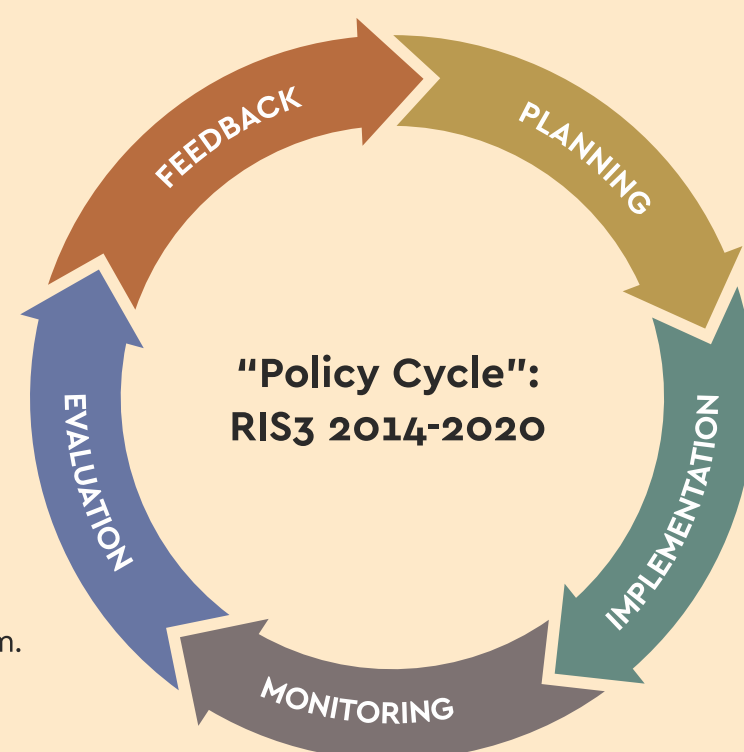
The purpose of the **Monitoring and Evaluation Mechanism** is:

- ▶ Monitor the progress of each Smart Specialisation priority and the effectiveness of its actions,
- ▶ Verify the appropriate use of resources for the implementation of the planned actions in accordance with the programming;
- ▶ Monitor the indicators to determine whether the desired results of the implementation of the actions are being achieved.

The monitoring and evaluation of the RIS3 2014-2020 are two complementary processes and constitute a key step in the planning and implementation of the National Smart Specialisation Strategy.

The competent body for the monitoring of the RIS3 2014-2020 is the GSRI. The monitoring is carried out on an annual basis, while the submission of final reports to the NBA takes place every two years.

The indicators foreseen by the RIS3 2014-2020 and the 'Single System of Monitoring Indicators of the NSRF 2014-2020' have been the necessary and basic source for the formation of the Monitoring System.



Through the Mechanism

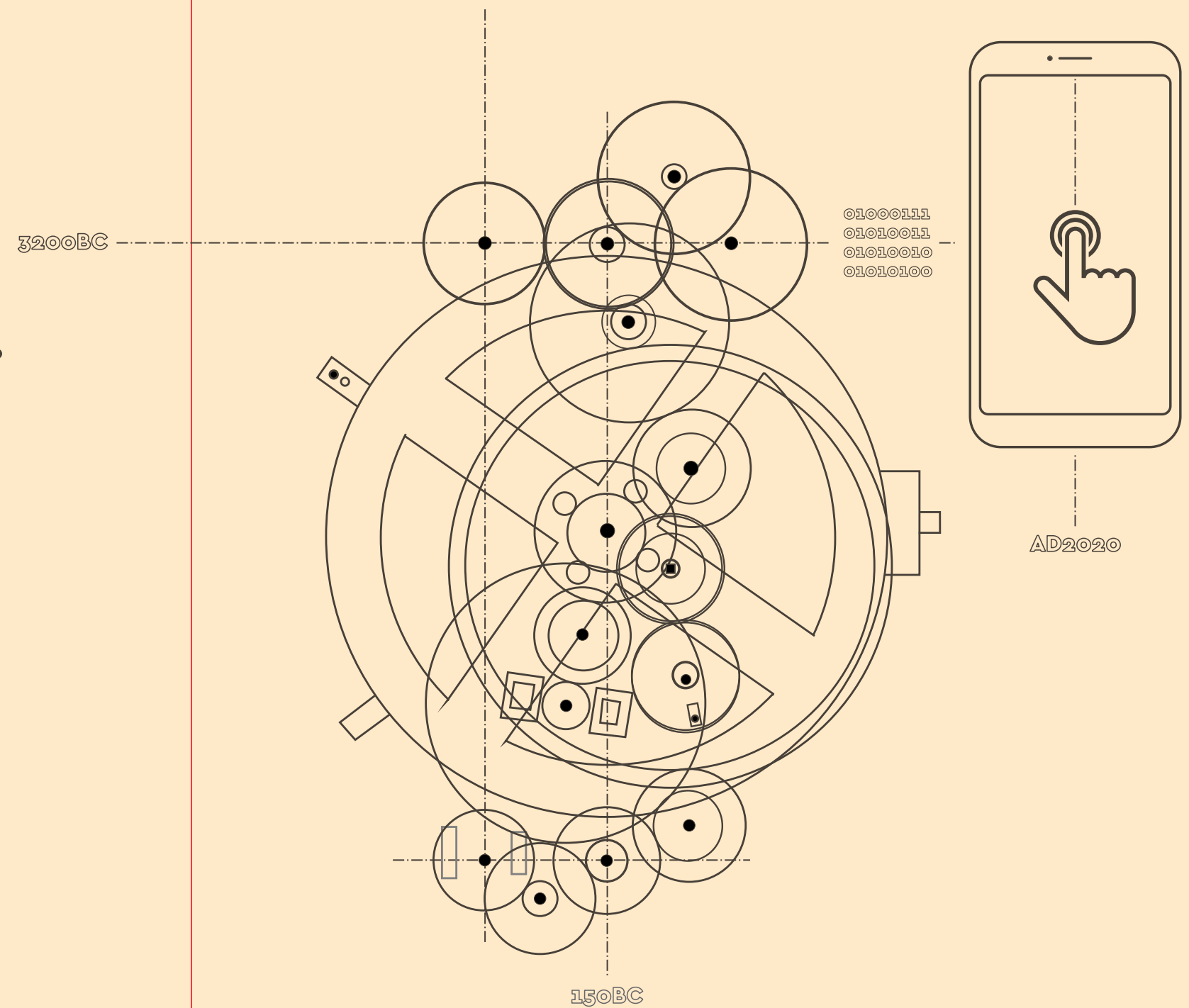
- ▶ In particular, the following are monitored:
 - ▶ the actions of Thematic Objective 1 of EPANEC's Operational Program "Competitiveness, Entrepreneurship, Innovation"
 - ▶ the implementation of the action "Research-Creat-Innovate"
 - ▶ the implementation of the actions "Strengthening Research and Innovation Infrastructures", "Regional Excellence" and "Action for the Strategic Development of Research and Technological Institutions"
 - ▶ a series of other actions of responsibility of the GSRI
 - ▶ actions taken by other policy actors
- ▶ Participation in other R&D programmes (HORIZON 2020, COSME, EUREKA, other National Programmes) that interact with the RIS3 2014-2020 is also monitored
- ▶ The study 'Evaluation of RTDI Actions of GSRI during the Programming Period 2007-2013' has been implemented
- ▶ The organisation of the Entrepreneurial Discovery Process (29 meetings of the Advisory Working Groups, 8 plenary meetings of the innovation platforms, 6 plenary meetings of the eight priority areas) was supported
- ▶ Studies for the preparation of the 2021-2027 Programming Period were funded
- ▶ The Evaluation of the RIS3 2014-2020 was funded
- ▶ A System of R&D indicators, at national and regional level, for the monitoring of the RIS3 for the years 2016-2023 was developed by the National Documentation Centre

RIS3 2014-2020

A critical view

The areas evaluated

- The planning of the Strategy and the implementation of the EDP
- The implementation of the Strategy and the execution of its Actions
- The Governance System and the Monitoring Mechanism
- The interconnection between the National and the Regional Smart Specialisation Strategies



Planning of RIS3 2014-2020 and Policy Framework-Findings

The planning of RIS3 was based on the **implementation of the quadruple helix and the way of its planning highlights the innovation in the project itself** (co-planning).

The **planning was fully aligned with the steps of the "central" methodology and the basic specifications set by the EU**, namely:

- ▶ Analysis of the geographical context and the potential for innovation
- ▶ Creating a sound and inclusive governance structure
- ▶ Elaboration of a common vision for the future of the geographical area (country / region)
- ▶ Selection of a limited number of priorities for development
- ▶ Establishment of the appropriate policy mixture



Although the Strategy did not develop a clear Intervention Logic, with a correlation of needs>objectives>result indicators, it **formed synergies and coherence with other policies and strategies. Thus, the RIS3 was smoothly integrated into all the efforts of the country and of the EU to exploit innovation as a means for the economic development of the country.**



The **active participation of the GSRI's executives in the planning of the Strategy was successful**, creating know-how, highlighting the coordinating role of GSRI and providing the guarantee for the proper implementation, and the ability to identify and correct any planning failures.

To meet EU requirements a significant effort took place to:

- ▶ understand the planning framework of a completely new approach and define the relevant procedures for its management
- ▶ develop the reference base for planning and specialisation (formulation based on texts, policy proposals, studies of GSRI and other bodies, etc.)
- ▶ set up and operate the quadruple helix mechanism,
- ▶ quickly overcome the initial character of experimentation (learning by doing) and gain experience
- ▶ ultimately finalise the key sectors of the economy and the very large number of priorities of the Strategy

The planning and implementation process laid the essential foundations for the development of the innovation ecosystem in the country and the planning of RIS3 2021-2027. It used a mixed approach:

- ▶ top-down for the identification of sectors and the formulation of policy papers and
- ▶ bottom-up evidence-based feedback from business and research bodies

to identify the needs and dynamics developed by the economy in the selected sectors.

The Entrepreneurial Discovery Process (EDP)

as a planning tool of RIS3 2014-2020

Strengths recorded by EDP implementation:

- ▶ the needs analysis, the active SWOT analysis and the foresight as techniques used in the process of co-shaping priority areas
- ▶ the implementation of the mechanism as a commonly exploitable practice
- ▶ the functioning of the Advisory Groups
- ▶ the establishment of a mechanism for monitoring trends in the selected sectors, which further assisted in the dynamic specialisation of priority sub-sectors
- ▶ the homogeneous planning employed at regional level
- ▶ the highlighting of the role and the capacity of the GSRI, both at the level of planning the monitoring and evaluation mechanism of the RIS3 and its priorities, as well as at the level of the operation of the said mechanism

The initial difficulties
were overcome with
the implementation of:

evidence-based analysis

open dialogue and participation

systematic
methodological
approach

allocation of significant
resources by those involved



Difficulties recorded in the implementation of the EDP:

- ▶ at methodological level: the development of procedures and criteria for "priority detection". A major challenge has been to highlight both the cross-section and the regional aspect.
- ▶ the requirement of significantly increased resources by the GSRI for the development of reference texts and the support of further consultation and specialisation
- ▶ the participation of a large number of stakeholders and therefore the need to create "thematic groups" aiming at specialisation
- ▶ the Sectoral Scientific Councils (SSCs) which consisted of representatives of Universities and Research Institutions without an originally planned target
- ▶ the greater representation of institutions from the research/academic community that initially directed and strengthened the target towards research
- ▶ the difficulty in achieving the mobilisation and the balanced active participation of entities from all stakeholders of the quadruple helix
- ▶ the tight timetable for the approval of the RIS3 2014-2020
- ▶ the formation of non-personal connections between stakeholders for the creation of networks and the development of relationships of trust towards the common project
- ▶ the lack of substantial deepening concerning the regional dimension
- ▶ maintaining the interest of the business sector active, particularly in relation to delays recorded in the issuance of relevant Calls

The Strategy's Action Plan



- ▶ During the EDP, the Strategic Pillars and the Axes of Intervention emerged, which formed the basis for specialisation in actions and intervention categories
- ▶ The actions of the Plan are highly relevant to the elements of the needs analysis (SWOT analysis) of the Strategy
- ▶ The actions of the Plan mainly concern the support of enterprises, research institutions, clusters of such institutions and other eligible stakeholders through competitive, open and merit-based procedures based on international evaluation standards (direct grants).
- ▶ The budget of the Action Plan is mainly financed by the Operational Program Competitiveness, Entrepreneurship and Innovation (EPANEK) 2014 – 2020

The RIS3 Action Plan 2014-2020 in numbers

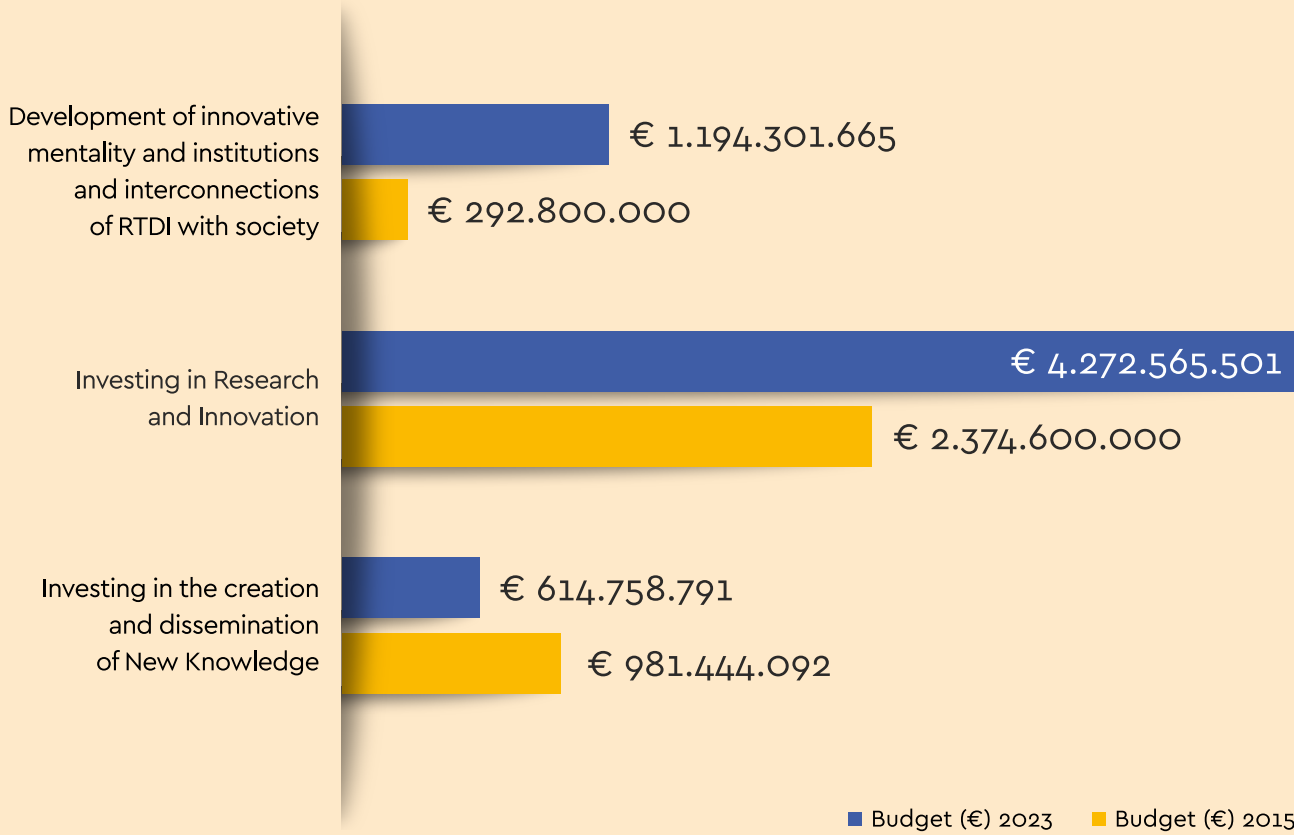
Supported business creation projects	1.075
Number of enterprises supported	5.193
Increasing employment in enterprises receiving aid	16.044
Number of enterprises supported to introduce new products	1.418
Number of researchers working in improved research centre facilities	2.614
Number of beneficiaries of actions to support research in higher education	4.262
Number of women benefiting from actions to support research in higher education	2.254
Number of Technology Transfer Offices	11
Number of inventories of inventions	193
Number of spin-offs	17
Research Infrastructures supported	28
Private investment corresponding to public support to enterprises (non-grants) (ongoing)	409.000.405 €

The budget of the Action Plan

The total initial budget of the RIS3 Action Plan 2014-2020 was € 3.648.844.092.

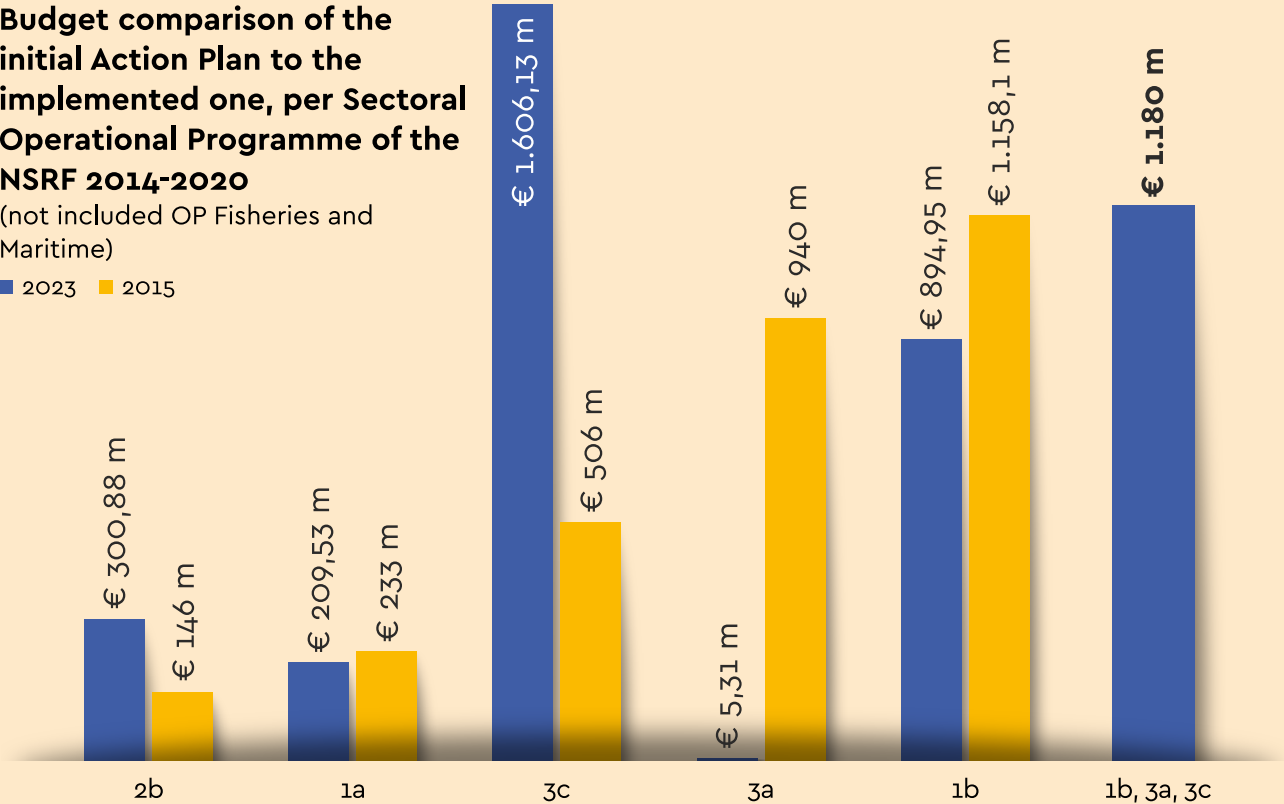
During the implementation of the Action Plan, the budget of the investments amounted to € 6,081,625,957, indicating a 66.67% increase of the initial plan.

Strategic Pillars' Budget change between 2015 and 2023



- The analysis of the budget of the implemented actions of the Action Plan illustrates:
- ▶ the significant activation of Strategic Pillars 2 and 3
 - ▶ the need to ensure a larger overall budget for the implementation of actions
 - ▶ the correctness of the initial assessment of the financial weight of Investment Priorities 1b, 3a, 3c
 - ▶ the need for the allocation of increased resources in Investment Priorities 1b, 3a, 3c, which keep their dominant position in the budget allocation, even after the budget's increase

Budget comparison of the initial Action Plan to the implemented one, per Sectoral Operational Programme of the NSRF 2014-2020 (not included OP Fisheries and Maritime)



The main problems identified by the business sector

Factors affecting the effectiveness and efficiency of the management system:

- ▶ delays in the implementation of the RIS3 2014-2020 Action Plan,
- ▶ limited budget
- ▶ restriction on expenditure eligibility of business plans
- ▶ administrative workload during implementation

1 Significant administrative burden in monitoring project implementation in terms of management instructions

2 Limited budget to cover the needs of the business plan

3 Delay in certifying verification requests

4 Restrictive eligibility of expenditure

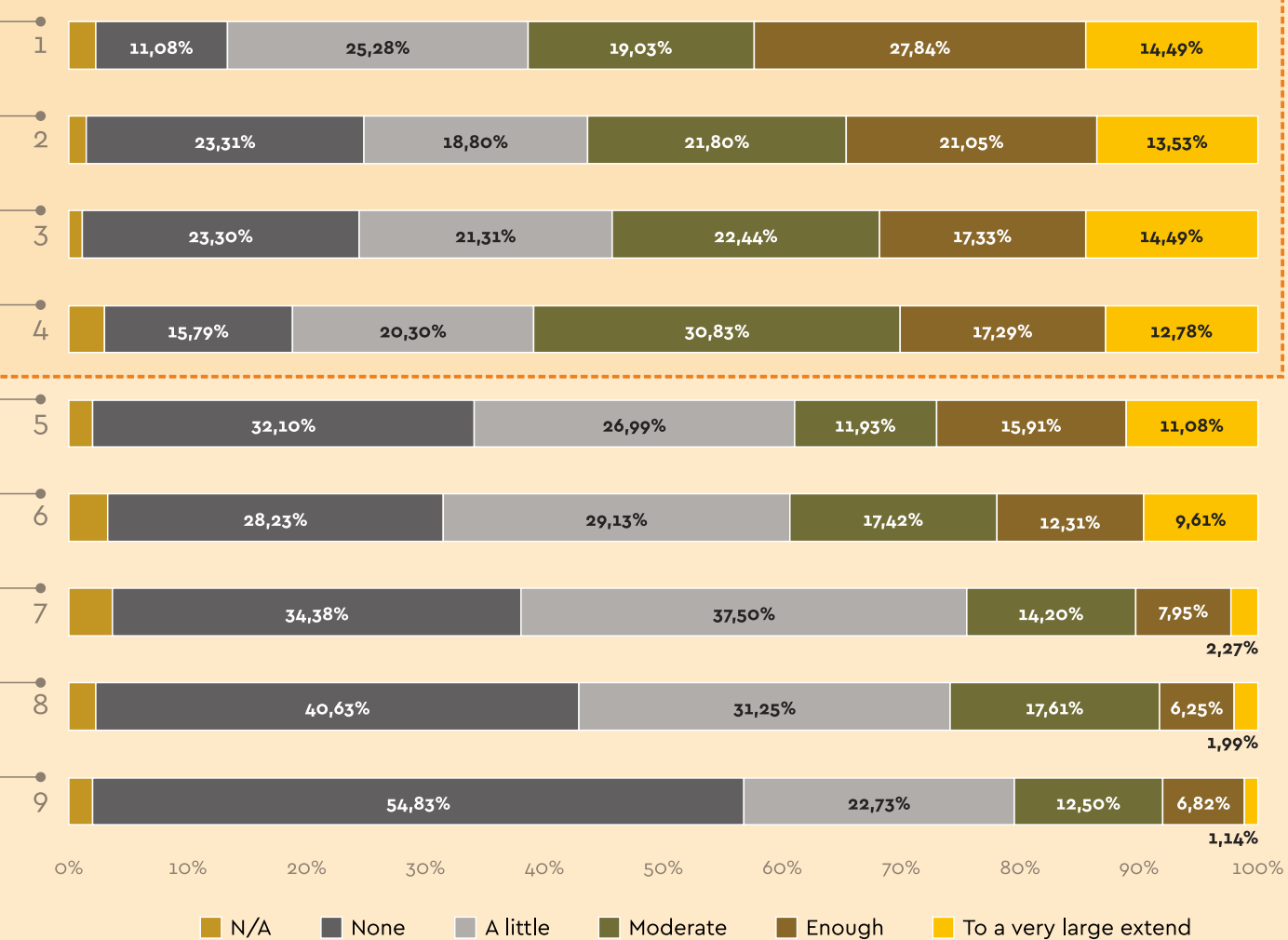
5 Delay in payment of the aid

6 Issues related to the functionality of the Information System

7 Difficulties in meeting the obligations of the Programme during the implementation of the project

8 Planning weaknesses leading to implementation problems

9 Difficulties in communicating with the Management Body

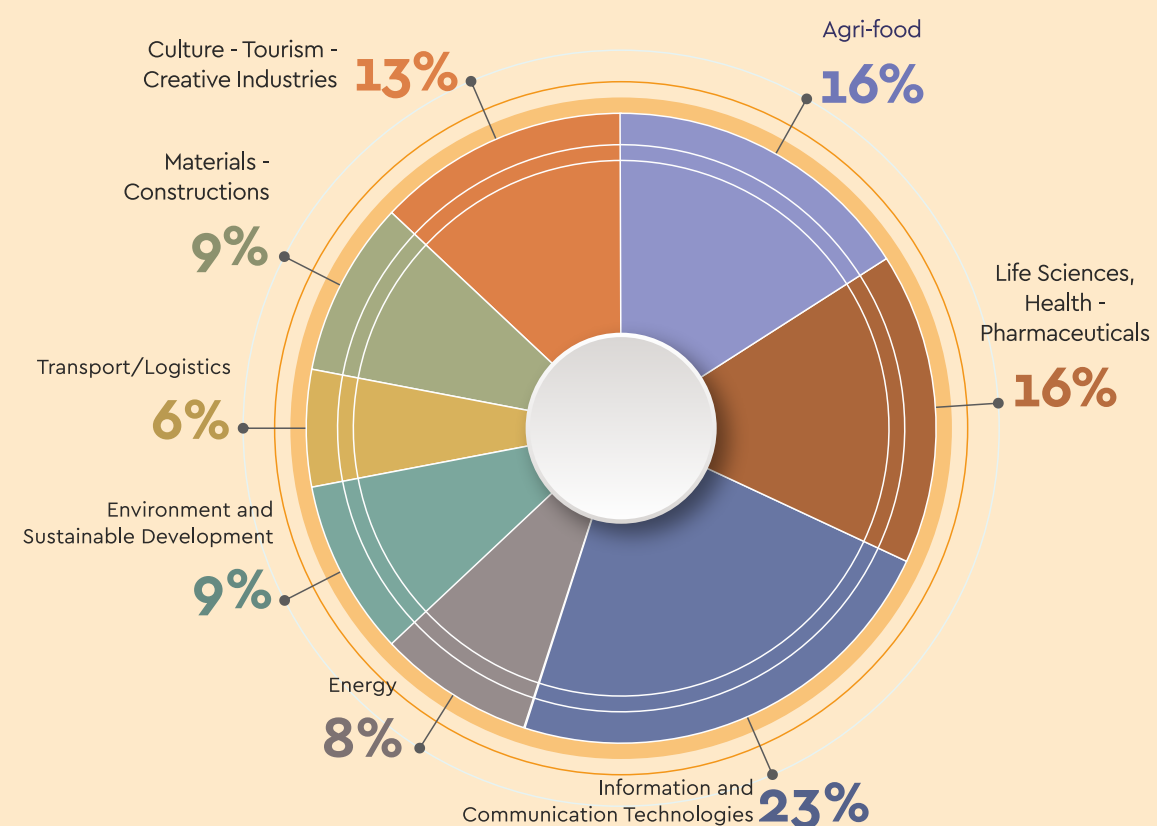


The results

The sectors with the highest demand for public funding (in %) were Agri-food, ICT and Life Sciences-Health and Pharmaceuticals.

Key factors in prioritising these areas were:

- ▶ the significant performance both at business level activity and exporting, as well as at research level
- ▶ the volume of investments in RTDI at global level, which can offer:
 - ▶ opportunities for Greek innovative companies to join international value chains
 - ▶ networking opportunities for the Greek research community with European and international scientific networks



In relation to the results, and since many actions are still ongoing, the estimated impact from the implementation of the Action Plan is summarized as follows:

- 1 Significant productive investment in knowledge-intensive sectors
- 2 Improving the quality of products and services of innovative SMEs
- 3 Development of "transversal" collaborative and creative skills
- 4 Strengthening the resilience and the competitive advantage of innovative enterprises
- 5 Ability to react quickly, adapt to change and manage challenges
- 6 Strengthening the capacity to seize opportunities
- 7 Promoting cooperation between SMEs
- 8 Developing a collaborative innovation ecosystem



The contribution of the Action Plan to the country's R&D ecosystem in numbers



Indicator	Unit of measurement		Regions	Target Price	Achievement value	Change
RTDI expenditure of enterprises as a percentage of GDP	%		Less Developed Regions-LDRs	0,24	0,36	▲
			Regions in Transition-RT (except Central Greece)	0,12	0,21	▲
			Attica	0,60	0,96	▲
			Central Greece	0,51	0,68	▲
			S. Aegean	0,01	0,01	▲
Number of PCT patents	number		All	99	52	▲
Share of innovative SMEs in total	%		Less Developed Regions-LDRs	53,6	75,8	▲
			Regions in Transition-RT (except Central Greece)	57,4	69,3	▲
			Attica	59	72,2	▲
			Central Greece	60,6	68,3	▲
			S. Aegean	53,1	59,9	▲
Gross Value Added (GVA) of the 9 strategic sectors of the country	M €		All	119.633,48	139.414,84	▲
Exports of Greek companies to the 9 strategic sectors of the country	M €		All	23.682,00	35.666,10	▲
Share of RES in Gross Final Energy Consumption	%		All	20,00	21,93	▲
Average citations per publication by Greek researchers (Impact Index)	number		Less Developed Regions-LDRs	5,65	8,89	▲
			Regions in Transition-RT (except Central Greece)	6,60	7,39	▲
			Attica	6,62	9,89	▲
			S. Aegean	3,40	9,57	▲
Next generation broadband coverage rate*	%		All	100,00	91,66	▼
Annual final energy savings*	ktoe / year		All	902,00	894,75	▼
Number of visitors to archaeological sites and museums*	Number of visitors in million		All	15,97	15,60	▼

Governance System and Monitoring Mechanism-scheme

The country has designed a sound Governance System, in line with the practices of other European countries

- ▶ the planning of the Governance System has been quite complex and multi-layered
- ▶ there were no clear and sufficiently specific procedures

The active participation and cooperation of all stakeholders involved was not particularly high. The following were observed:

- ▶ inability to coordinate in a timely and continuous manner with all involved Ministries and insufficient coordination between the centre and the region during implementation
- ▶ time-consuming process of defining the Regional Councils of Research & Innovation

The Monitoring and Evaluation Mechanism provided for the update/revision of the ESEE

- ▶ it was limited only to updating the Smart Specialisation areas through the EDP

The RIS3 2014-2020 Monitoring Mechanism did not foresee the development of specific indicators

- ▶ in most cases, monitoring indicators are identical to those of the NSRF Operational Programmes
- ▶ therefore, the progress of the RIS3 2014-2020 is deduced from the progress of the implementation of the projects and actions of these Programmes



In addition, **especially for result indicators**, there was:

- ▶ lack of quantified targets, hence difficulty in monitoring
- ▶ absence of an indicator system structured to reflect the objectives of the RIS3 2014-2020

The Smart Specialisation Council was not activated concerning the monitoring/revision of the Smart Specialisation Strategy

The speed of implementation of the Mechanism was low and was slow in the starting phase

The link between the National and Regional Dimensions

1 The planning of Regional Plans for Smart Specialisation:

- ▶ on the one hand, it did not follow the same path of actions and steps,
- ▶ on the other hand, the Logic of Intervention and the architecture of the Plans varied by Region

2 The degree of synergy and complementarity of the Governance Mechanism with the Regional Governance Bodies

- ▶ was particularly high at the planning stage, but less at the implementation stage

3 The Regional approach in planning the Smart Specialisation Strategy performed quite well

- ▶ led some Regions to create useful mechanisms and tools to support the Smart Specialisation Strategy

4 As a result of the Regional EDP

- ▶ a critical mass of enterprises was formed in specific priority areas defined by the Smart Specialisation Strategy
- ▶ clusters of enterprises and technology startups were created, which contribute to local / regional employment and attracts investments

5 The creation and operation of a "RIS/Innovation Structure", in the relevant Regions:

- ▶ has been a catalyst in ensuring the implementation, coordination and the integration of the monitoring mechanism of the Regional RIS



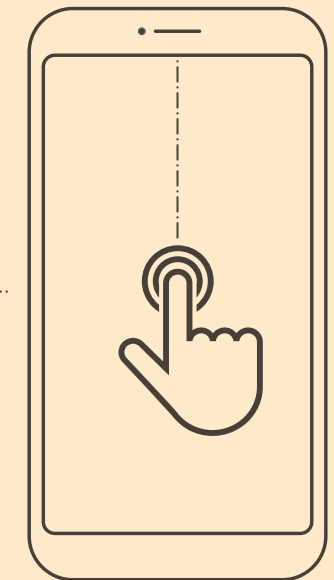
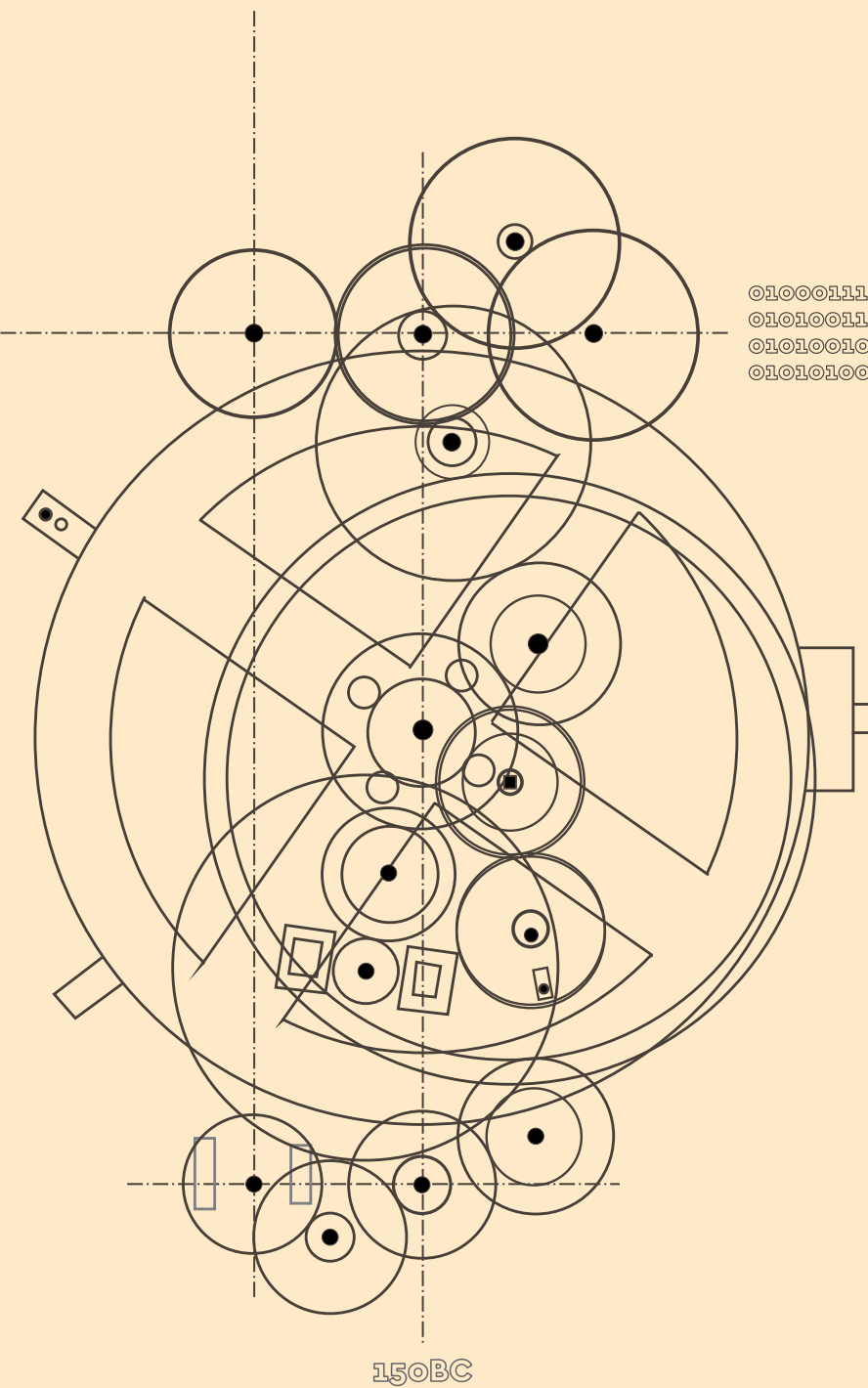
Weaknesses identified

- ▶ Lack of coordination between the National and the Regional organisations involved in the planning of the Smart Specialisation Strategy
- ▶ The participation of many stakeholders' representatives in the Smart Specialisation Council, which delays decision-making
- ▶ Lack of a unified picture of the implementation of the National and Regional Smart Specialisation Strategies
- ▶ Non-use of common monitoring indicators between National and Regional Smart Specialisation Strategies
- ▶ Non-activation of the Smart Specialisation Council
- ▶ No mid-term evaluation of Smart Specialisation Strategies
- ▶ Lack of systematic and timely evaluation of Smart Specialisation Strategy actions
- ▶ Inadequate representation of the business community in the Regional Councils of Research & Innovation
- ▶ Ineffective operation of RCRIIs, with few exceptions in specific Regions
- ▶ Insufficient representation of civil society in the Entrepreneurial discovery Process
- ▶ Weaknesses in the effective operation of the Regional Governance System of Smart Specialisation Strategies
- ▶ Weak link between the planning and implementation levels of Regional Smart Specialisation Strategies

RIS3 2014-2020 Total evaluation Suggestions for Improvement



3200BC



AD2020

For the Planning and Policy Framework

- 1 **Shape a Strategy more aligned with the "product" approach** based on the existence of a critical mass of enterprises
- 2 **Development of a Strategy with a clear Intervention Logic** through the development of a structured system of indicators and the quantification on the contribution of actions
- 3 **Institutionalization of EDP as a systematic and systemic dynamic process** at the epicentre of economic and social development policies
- 4 **Upgrade the framework for optimal "prioritization"** in relation to the financial needs and capabilities of enterprises
- 5 **Review the multitude of priorities** with the aim of reducing it by achieving a balance between specialisation and supporting more "open" innovation
- 6 **During the Programming Period Periodical and continuous systematic implementation of SWOT analysis** together with EDP as basic monitoring tools and link them with an appropriate indicator system
- 7 **Development of a mechanism for the utilization and assurance of knowledge derived from the experience of the private sector**
- 8 **Ensure balanced mobilisation and active participation of actors in the quadruple helix in the RIS3 Governance System and in the EDP**, by activating the Civil Society and the participation of Enterprises
- 9 **Possible establishment of a Central Unit responsible for the overall coordination and the interoperability of all individual monitoring mechanisms of the Strategy**
- 10 **Upgrade the role of GSRI as coordinator of the Governance System of EDP**, through the strengthening of its operational capacity (personnel, technical means, tools, operation of a "secretariat" mechanism)

For the elaboration, implementation and coordination of actions

- 1 **Strengthen synergy and coordination with other programmes to leverage additional available resources** considering the trends which are expected to affect the Greek economy in the coming decades
- 2 **Exploit the results of the action "Research>Create-Innovate" in order to reconsider the third-degree specialisation**, by combining sub-sector while establishing the ICT sector as a horizontal priority
- 3 **Review the range of research infrastructures**, with a continuous assessment of their capacity and their networking with other structure
- 4 **Coordination of Calls between national and regional levels** through horizontal national and vertical regional programming and the implementation of priorities
- 5 **Adoption of repeated, rolling Calls for expression of interest for investment**
- 6 **Design of specialized practical skills development programs** to improve the ability to create and manage innovation within enterprises
- 7 **Develop and strengthen the network of innovation structures to exploit services** for the participation of SMEs in value chains and to enhance their involvement in the innovation ecosystem



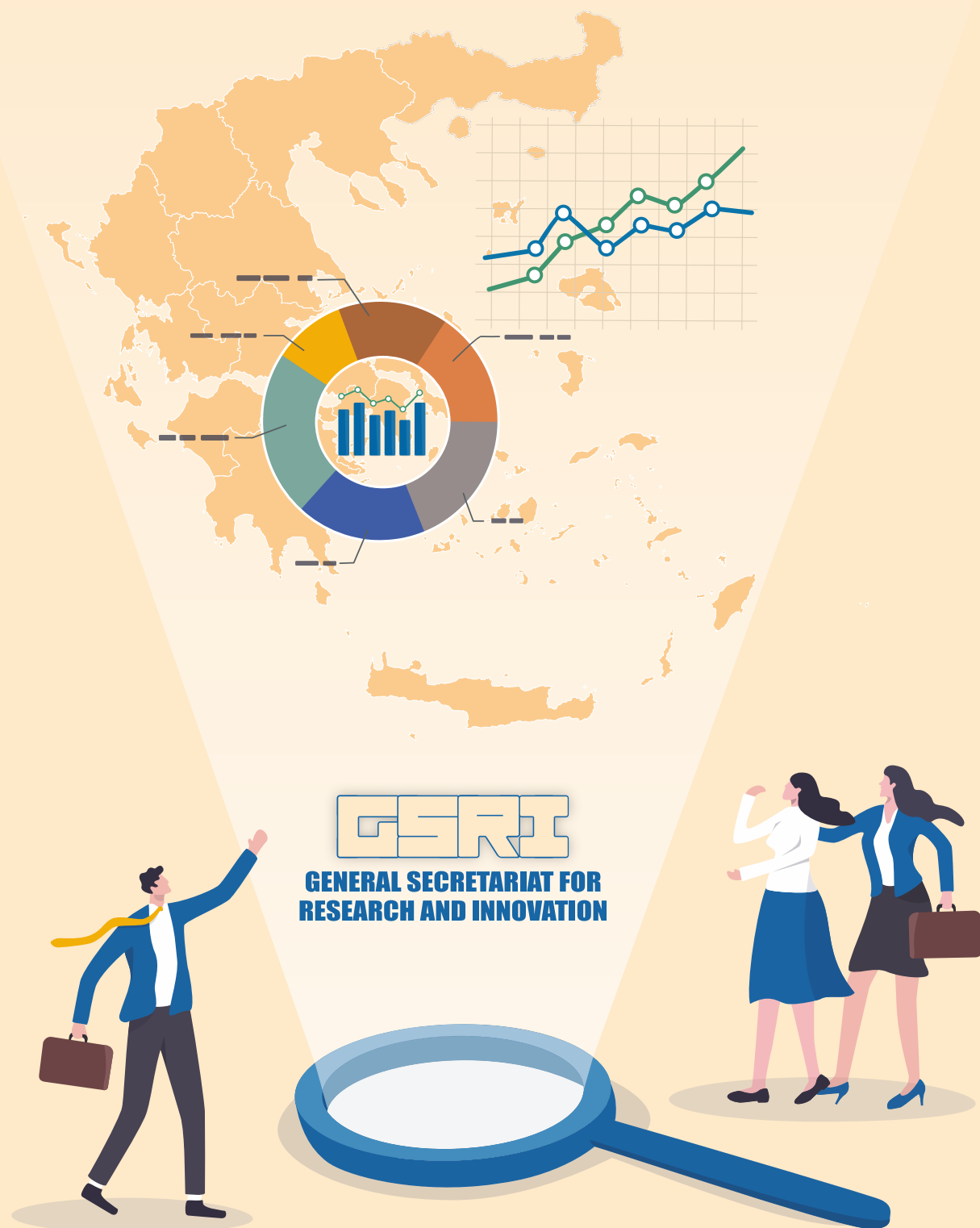
On the Governance System and the Monitoring Mechanism



- 1 **Definition of specific roles of those involved in the Governance System with clear allocation to its levels** and definition of a framework for a participatory approach
- 2 **Ensure the active participation of representatives of stakeholders in the Governance System** and the effective coordination of central and regional government bodies
- 3 **Well defined institutionalized cooperation** between the planning and the monitoring bodies of the Smart Specialisation Strategy
- 4 **Institutionalised permanent establishment and operation of the governing bodies of innovation platforms** while ensuring the participation of representatives of the quadruple helix
- 5 **Streamline the role and composition of Regional Councils of Research & Innovation Councils (RCRIs)**
- 6 **Meeting of the Sectoral and Regional OP and ECP Network** for the Smart Specialisation Strategy at least 2 times per year
- 7 **Development of a system of monitoring and evaluation indicators of the Smart Specialisation Strategy**, with additional monitoring indicators and Key Performance Indicators – KPIs
- 8 **Ensure interoperability** of the individual systems and data of the bodies that monitor National Smart Specialisation Strategy (RIS3) actions separately, to feed into a single decision-making framework and reduce bureaucratic procedures
- 9 **Systematic evaluation of the RIS3** to assess the soundness of the planning and appropriateness of the policy mix used, as well as to activate the policy cycle

For the Regional Strategies

- 1 **Improve regional research and innovation systems** by securing resources from the Regional Programmes (ROP) 2021-2027
- 2 **Correlation of policy instruments** used in 2014-2020 with the needs and characteristics of local Enterprises
- 3 **Development of intra-regional networks** between quadruple helix players for the systematic technology transfer, the knowledge dissemination and for launching common initiatives (clustering)
- 4 **Designation of a competent regional unit/service** or body responsible for managing the smart specialisation strategy
- 5 **Monitoring and evaluation tools for performance measurement**, adoption of commonly accepted result and target values, interoperability of systems
- 6 **Simplify and reduce red tape** to facilitate stakeholders' access to R&I funding and resources
- 7 **Effective functioning of the Entrepreneurial discovery process**, with greater involvement of the business sector and civil society actors
- 8 **Measures for international (and interregional) cooperation** and stronger activation of regional innovation system actors to participate in international cooperation actions
- 9 **Improve national and/or regional research and innovation systems**, strengthening the institutional capacity of the regional innovation system and securing the relevant resources from the new ROP
- 10 **Clarification of national and regional sector roles, redesign of the strategy** so that vertically integrated sectoral priorities are implemented exclusively at the regional level, while horizontal priorities are implemented at the national level.



www.gsri.gov.gr