IMPROVING S3 GOVERNANCE IN CROATIA















This brief presents a summary of findings and recommendations resulting from the assessment of the governance of the Croatian Smart Specialization Strategy 2016–2020 (S3). The assessment reviews the institutions engaged in designing and implementing the S3 and their roles, responsibilities, and decision-making processes. For more details on the approach, findings, and recommendations please refer to the report "Analysis of Design and Implementation of Croatian S3 Governance" (World Bank 2021).

HOW IS THE S3 GOVERNANCE SET UP IN CROATIA?

The analysis of S3 governance is structured around three modes of governance observed in Croatia

The analysis involves reviewing the institutions engaged in designing and implementing the S3 and their roles, responsibilities, and decision-making processes. The analysis is structured around three modes of governance observed in Croatia: policy governance, entrepreneurial discovery process governance, and implementation governance (Figure 1). Figure 2 shows the full S3 governance structure in Croatia.

Policy governance refers to policy design, adoption, and revision processes, strategic management, and M&E. The National Innovation Council is the top institution in the S3 policy governance structure and should be the final

decision-making authority for all strategic decisions on the S3 level.

Entrepreneurial discovery process governance refers to the structures and activities related to collective decision-making between governmental and non-governmental stakeholders. In Croatia, the critical structures were initially the Croatian Competitiveness Clusters and later the Thematic Innovation Councils.

Implementation governance refers to the structures and processes needed to implement S3 programs and projects. In most cases, implementation governance refers to the institutions managing the Operational Programs for the European Structural and Investment Funds (ESIF), which provide by far the largest share of funding for S3 delivery instruments.

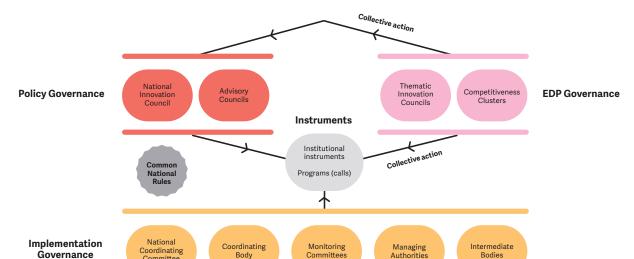
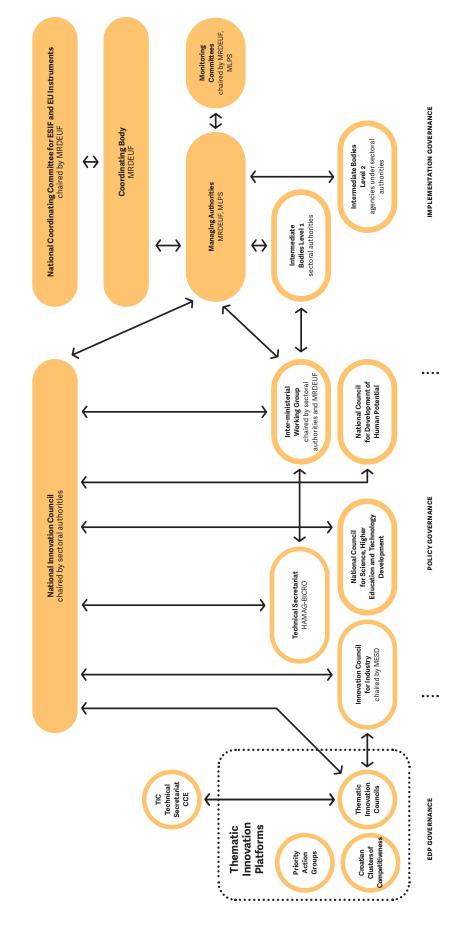


Figure 1 Analytical framework of S3 governance

Source: Staff elaboration.

Note: EDP = entrepreneurial discovery process.



Note: CCE = Croatian Chamber of Economy; EDP = entrepreneurial discovery process; ESIF = European Structural and Investment Funds; MESD = Ministry of Economy and Sustainable Development; MLPS = Ministry of Labor, Pension System, Family and Social Policy; MRDEUF = Ministry of Regional Development and EU Funds; TIC = Thematic Innovation Council. Source: Staff elaboration.

DID POLICY GOVERNANCE FACILITATE STRATEGIC DECISION-MAKING AND COORDINATION?

Delays and lack of clarity regarding roles and responsibilities interfered with the central coordination function of policy governance

The National Innovation Council, which is formally the top coordinating body for the S3 (Figure 3), was established two years after S3 adoption. In the absence of the National Innovation Council, there was no decision-making authority that could steer implementation and coordinate the S3 process because the top element of the governance system was missing.

The National Innovation Council utilized its decision-making authority to a limited extent

The National Innovation Council discussed implementation reports, experiences of project beneficiaries, information on progress on the institutional instruments, and so on. However, there is no record of decisions taken or recommendations issued for further action or follow up.

The strategic role of the National Innovation Council is to initiate diagnostic analyses, corrective measures, or revisions of S3 priorities, which was not evident in practice. Although stakeholders noted some improvement over time in inter-institutional collaboration, especially between the co-chairs of the National Innovation Council, the challenge is perhaps how to clarify duties and streamline that cooperation.

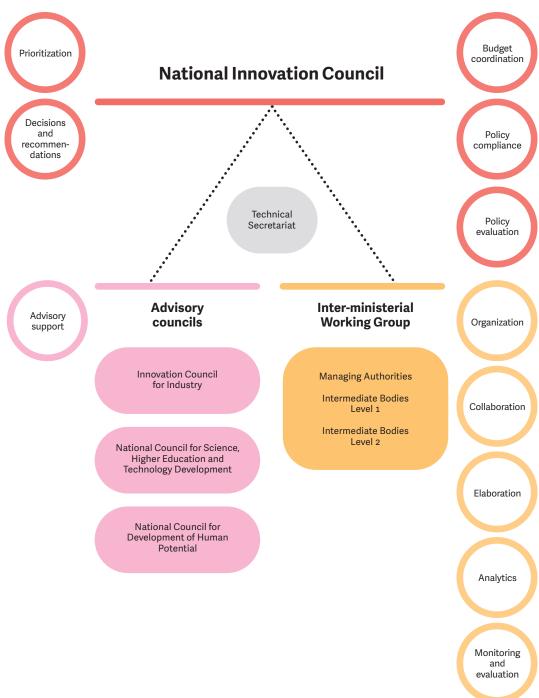
The role of monitoring and evaluation in policy governance, learning, and adjustment is limited

The flow of monitoring data to the National Innovation Council has been sporadic. Upon its establishment, the National Innovation Council was presented with several S3 implementation reports, including quarterly S3 progress reports, and progress of implementation of the Action Plan 2016-2017. However, no regular annual reporting is done, as it was planned in the S3. The critical challenge in this respect has been to treat monitoring data as an active tool for decision-making rather than a passive flow of information. Due to shortcomings in the M&E system, policy governance is not sufficiently responsive to internal and external changes and challenges. By the time M&E reports are completed and verified, it is often too late to implement the lessons learned and introduce any improvements.

The monitoring system has also faced some operational challenges. Integrating different monitoring systems (S3, ESIF, and non-ESIF) requires greater harmonization of results frameworks and reporting protocols. Data collected by implementation bodies need to be consolidated to track progress on the S3 level. Coordination is particularly difficult for data on thematic priorities because there is no common approach to collecting this data or the instruments for which it is being collected.

Organizational capacities differ substantially between institutions. In some institutions policy governance is covered by several organizational units. In others, the participation in the S3 policy governance process is limited to participation of their staff in the Inter-ministerial Working Group.

Figure 3 S3 policy governance based on S3 document



 $Source: Staff\ elaboration\ based\ on\ Croatia\ Smart\ Specialization\ Strategy\ 2016-2020.$

WAS ENTREPRENEURIAL DISCOVERY PROCESS GOVERNANCE EFFECTIVE FOR POLICY CO-CREATION?

Thematic Innovation Councils had limited opportunity to execute their leading role in the entrepreneurial discovery process

Figure 4 presents the structure of entrepreneurial discovery process governance. One of the crucial tasks of Thematic Innovation Councils, as defined in the S3, is to bring together stakeholders to discuss and endorse a long-term vision of development of each thematic priority through coherent research, development, and innovation strategies. However, Thematic Innovation Councils became operational in 2019, when the implementation of most S3 instruments was already underway. This provided limited opportunities to influence and inform instrument design.

Thematic Innovation Councils provided inputs for prioritizing indicative RDI themes in each priority area. However, this re-prioritization was performed exclusively for purposes of two Ministry of Economy and Sustainable Development programs, the IRI2 program and the Integrator. There were no other instances of similar Thematic Innovation Council engagement with other institutions, nor of any discussions on the revision of priorities at the S3 level.

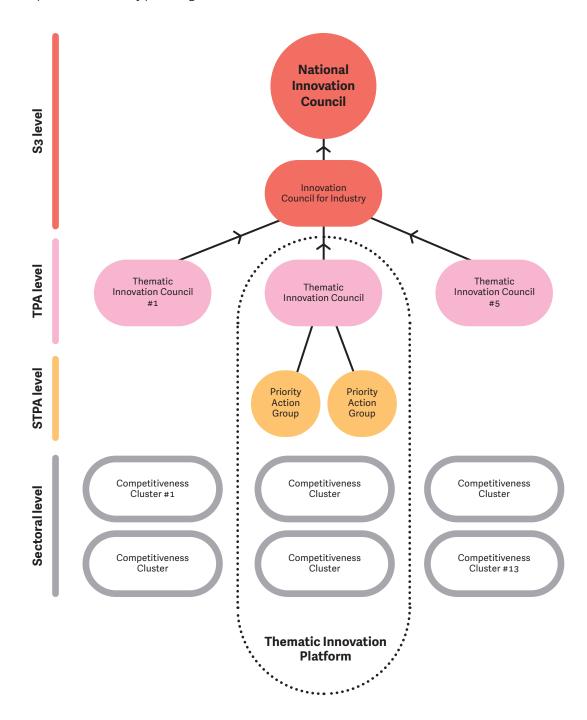
Based on minutes of the meetings, a lot of the Thematic Innovation Councils' operations focus on administration and management, such as formal establishment of the Priority Action Groups, and the appointment of Thematic Innovation Council presidents. More substantial agenda items are unfortunately scarce.

The establishment and operations of the Thematic Innovation Councils appear to be highly procedural and top-down steered

The Thematic Innovation Council establishment process, including selection and appointment of presidents and members, was bureaucratic. While this ensured an appropriate membership structure, the whole process was highly formal and rigid, mimicking procedures in governmental institutions. This can contradict the very idea of having bottom-up entrepreneurial discovery process structures with non-governmental stakeholders.

The initiative and agenda items for Thematic Innovation Council meetings came mostly from the policy maker, according to interviews with representatives of Thematic Innovation Councils. Thematic Innovation Councils generally did not raise topics and issues to be discussed in their meetings, and their role was relatively passive.

Figure 4 S3 entrepreneurial discovery process governance structure



Source: Staff elaboration based on Croatia Smart Specialization Strategy 2016-2020. Note: STPA = sub-thematic priority area; TPA = thematic priority area.

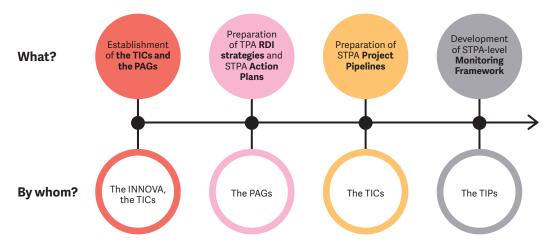
Key entrepreneurial discovery process milestones were not reached as the instruments designed to support them were used to a limited extent

The S3 lays out several milestones for the continuation of the entrepreneurial discovery process after the adoption of the S3. Figure 5 depicts the envisaged process for the development and implementation of Croatia's entrepreneurial discovery process. Upon establishing and operationalizing the bodies in the Thematic Innovation Platforms, the next step was preparing RDI strategies for each of the S3 thematic priorities action plans for their implementation. They were to provide a basis for focusing activities of the business sector. Following the development of RDI strategies and action plans, Thematic Innovation Councils were to prepare project pipelines stemming from sectoral strategies co-defined by industry, academia, and government. Finally, the Thematic Innovation Platforms were to develop monitoring frameworks.

However, aside from the establishment and operationalization of the Thematic Innovation Councils and Priority Action Groups, the governance structures did not reach the planned milestones. Thematic RDI strategies and related action plans, project pipelines and monitoring frameworks have not yet been developed.

Instruments that were envisaged to facilitate the entrepreneurial discovery process and reaching the mentioned milestones, either have not produced the expected deliverables yet, or the results produced were utilized to a limited extent only. The S3 implies that establishing and upgrading its governance is an ongoing activity or "work in progress," envisaging several instruments to support it. Such instruments, labeled as strategic projects, are projects implemented by government stakeholders that were envisaged to provide the analytical basis for entrepreneurial discovery process activities. These instruments include the Strategic Project for Support to Competitiveness Clusters Initiatives (CCI Project), the Strategic Project for Support to the Establishment of Innovation Network for the Industry and Thematic Innovation Platforms (INI Project), and the Strategic Project for Science and Technology Foresight (Foresight Project). The Competitiveness Clusters project presented its results to the National Innovation Council, but there were no further actions or follow up based on the results. The National Innovation Council did not discuss the activities of the other two projects or request reports on their progress.

Figure 5 Key milestones in Croatia's entrepreneurial discovery process as envisaged by the S3 document



Source: Staff elaboration based on Croatia Smart Specialization Strategy 2016-2020.

Note: The bottom part of the figure attributes responsibility for entrepreneurial discovery process milestones to particular actors or structures. Due to inconsistencies and ambiguities in the S3, this attribution is, to an extent, based on the authors' interpretation. For instance, the S3 does not clearly state who is in charge of developing the STPA monitoring frameworks, the extent of the Thematic Innovation Platforms' involvement, or how they should interact with other S3 monitoring actors (i.e., the Inter-ministerial Working Group and the Technical Secretariat). INNOVA = Innovation Council for Industry; PAG = Priority Action Group; RDI = research, development, and innovation; STPA = sub-thematic priority area; TIC = Thematic Innovation Council; TIP = Thematic Innovation Platform; TPA = thematic priority area.

WHAT WAS THE ROLE OF IMPLEMENTATION GOVERNANCE?

The ESIF governance structure has a strong influence on S3 implementation progress

ESIF are the predominant funding source for S3 instruments. Figure 6 illustrates the structure of the Croatian ESIF system. The central elements are the Managing Authorities and Monitoring Committees, one of each for every Operational Program. Additionally, Croatia introduced a Coordinating Body and a National Coordinating Committee for ESIF and EU Instruments (hereinafter, National Coordinating Committee) at the highest strategic level, overseeing the overall ESIF system. For particular strategic objectives of an Operational Program, the Managing Authority may delegate specific tasks to one or more Intermediate Bodies. In most cases, those Intermediate Bodies are sectoral authorities in charge of a particular implementation area covered by a strategic objective. While sectoral authorities play an important role in the design and implementation of instruments, the ultimate responsibility and authority rests with the Managing Authority.

There is a misalignment between the ESIF and S3 governance systems

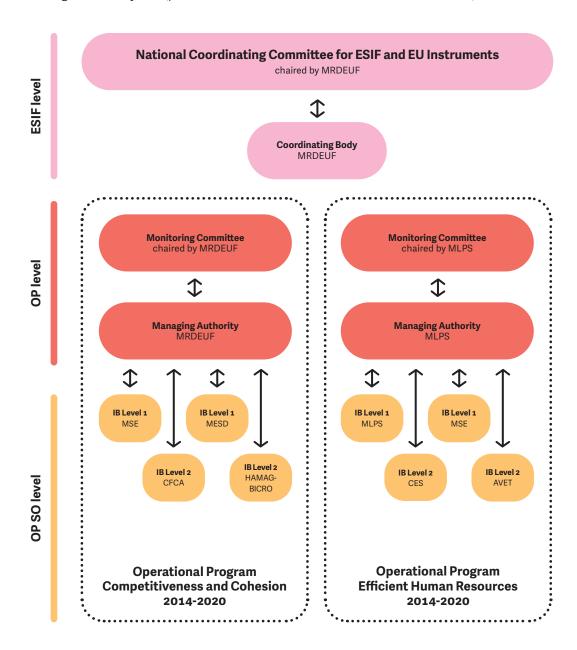
The misalignment arises because the top policymaking bodies in S3 (the Ministry of Science and Education and the Ministry of Economy and Sustainable Development) have subordinated roles in the ESIF system, while the Ministry of Regional Development and EU Funds as Managing Authority retains the key decision-making power, both strategically and operationally.

Fragmentation of operational functions and processes hampers implementation

Most S3 programs are managed by the three-level system that includes the Managing Authority and two levels of Intermediate Bodies (IB1 and IB2). This system requires extensive coordination, which introduces complexity and inefficiencies.

Excessive fragmentation of functions is particularly evident in the selection process, especially when tasks and responsibilities alternate between different institutions. For example, different institutions may be responsible for assessing the quality of project proposals and for determining the eligibility of costs. This often means that those institutions have two separate processes to procure experts to conduct such assessments, when both assessments could be done in one step.

Figure 6 Croatian ESIF governance system (part of the structure that is relevant for the S3 instruments)



Source: Staff elaboration.

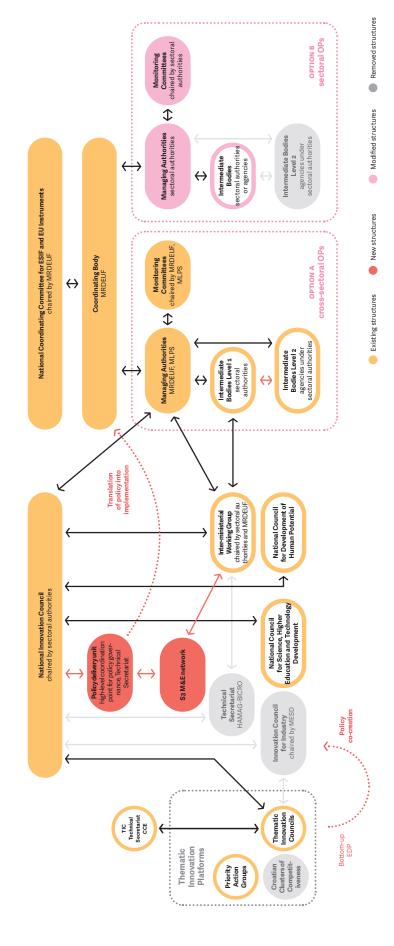
Note: AVET = Agency for Vocational Education and Training; CES = Croatian Employment Service; CFCA = Central Financing and Contracting Agency; ESIF = European Structural and Investment Funds; HAMAG-BICRO = Croatian Agency for SMEs, Innovations and Investments; IB = Intermediate Body; MESD = Ministry of Economy and Sustainable Development; MRDEUF = Ministry of Regional Development and EU Funds; MSE = Ministry of Science and Education; MLPS = Ministry of Labor, Pension System, Family and Social Policy; OP = Operational Program; SO = specific objective.

ACTIONS FOR IMPROVING S3 GOVERNANCE



Policy governance

- Establish an S3 policy delivery unit An independent body with strong authority over the
 individual ministries should facilitate coordination of different stages of the policy cycle,
 improve M&E, and ensure that the strategic decisions of the National Innovation Council
 are implemented. The policy delivery unit could be formed by pooling and upgrading existing capacities—to perform policy planning and coordination, M&E, administrative, and
 technical support functions (see Figure 7)—currently scattered across various institutions.
- Strengthen the role of the National Innovation Council Croatia should strengthen the
 position of the National Innovation Council by (i) empowering it to steer the overall national science and innovation policy and (ii) strengthening its role in coordinating S3 policy.
 Strengthening the National Innovation Council would enable better integration of science,
 technology, and innovation (STI) funding sources and create opportunities for streamlining
 STI policy governance.
- Involve the National Innovation Council more directly in strengthening entrepreneurial discovery process governance The National Innovation Council should be more directly involved in the design and implementation of institutional instruments, which are relevant for overall S3 governance. It could also interact more with the Inter-ministerial Working Group and the Thematic Innovation Councils to ensure that the entrepreneurial discovery process produces results. For instance, there could be more in-depth discussions on the progress of institutional instruments, joint meetings between the Inter-ministerial Working Group and the Thematic Innovation Councils to discuss the preparation of RDI strategies, and similar.
- Strengthen M&E reporting and utilization M&E should serve a more purposeful, strategic learning role, which requires streamlining and harmonizing M&E systems and strengthening the capacity for conducting effective M&E. The proposed policy delivery unit could take on the responsibility and resources for conducting M&E. It would then be able to use the data it collects to advocate for policy and implementation adjustments.
- Establish a real-time adjustment mechanism The bodies involved in S3 governance should establish an M&E network as a structured discussion platform that would detect issues in the entrepreneurial discovery process and in implementation as they emerge. The network would then resolve them to the extent possible or escalate them to other bodies in the S3 governance hierarchy. The network should comprise middle-level administrators who can identify issues in real time and have the authority to correct them or propose remedies.
- Strengthen institutional capacities Institutional capacities should be increased by investing more resources for capacity development, particularly for policy design, implementation management and adjustment, and M&E capabilities. Capacity development may consist of advanced training, staff retention policies, additional hiring, work (re)organization, or other activities. Any investment in capacity building should include a plan for knowledge dissemination and retention within the institution.



Source: Staff elaboration.

Note: CCE = Croatian Chamber of Economy; EDP = entrepreneurial discovery process; M&E = monitoring and evaluation; MESD = Ministry of Economy and Sustainable Development; MLPS = Ministry of Labor, Pension System, Family and Social Policy; MRDEUF = Ministry of Regional Development and EU Funds; OP = Operational Program; S3 = smart specialization strategy; TIC = Thematic Innovation Council.



Entrepreneurial discovery process governance

- Facilitate the bottom-up approach in structuring the
 entrepreneurial discovery process Thematic Innovation Councils should take the initiative in steering
 S3 policy. Program managers could help by defining
 broad parameters of Thematic Innovation Councils' engagement, including their objectives and purpose, but
 without creating unnecessary administrative burdens
 and without influencing the substance of the outputs
 produced in the Thematic Innovation Councils.
- Increase the involvement of Thematic Innovation Councils in policy co-creation Thematic Innovation Councils could provide inputs to other strategic documents or legislation related to STI and sectoral policies connected with the S3. Thematic Innovation Councils should also be involved earlier in program planning and design, focusing primarily on program contents and strategic aspects of the program. Their involvement should extend beyond the scope of the Ministry of Economy and Sustainable Development's policy authority by, for example, providing inputs on instruments targeting the research sector.
- Engage the Thematic Innovation Councils in developing RDI strategies and policy mixes for each thematic priority— The Thematic Innovation Councils should be supported in developing RDI strategies and corresponding policy mixes with tailored instruments addressing the specific circumstances and challenges of each thematic priority. Their responsibilities should include instruments and activities beyond the disbursement of grant financial aid. For example, they should be responsible for identifying regulations that need to be modified, procurement procedures, pilots, and demonstration projects that need to be initiated, and other opportunities to support their thematic priorities.



Implementation governance

- Streamline implementation governance The role of non-sectoral Managing Authorities should be limited to ensuring compliance of interventions with ESIF regulation without delving into policy and sectoral matters. Having sectoral Operational Programs with sectoral Managing Authorities with no Intermediate Bodies (or a single Intermediate Body) would achieve even better streamlining. This option would allow for more flexibility in program design and selection criteria instead of having a one-sizefits-all solution for different policy areas.
- Organize the policy implementation agenda around the stages of the innovation life cycle — Based on the scope of the Ministry of Science and Education's policy authority, its policy should be more focused on lower-TRL levels and pre-commercial research. The Ministry of Economy and Sustainable Development should manage the highest-TRL development activities and support for innovativeness capacities. This division of responsibilities would allow for better coordination of the policy mix and better use of different funding sources (ESIF, national budget, and others).
- Reduce fragmentation in key implementation processes
 - The selection processes could be streamlined by arranging matters so that one institution performs several consecutive steps in the process or by reorganizing the governance structure in ESIF implementation. The current system has three tiers: Managing Authority, Intermediate Body Level 1 (IB1), and Intermediate Body Level 2 (IB2). A more straightforward system would have only two tiers: Managing Authority and Intermediate Body.
- Introduce the regulatory guillotine approach and tailor-made procedures for RDI projects To radically reduce lengthy procedures and redundant documentary requirements for applicants, Croatia should apply the regulatory guillotine approach to ESIF regulations. One option would be to define a separate set of rules and procedures that would apply to RDI support instruments. Another possibility would be to have a separate Operational Program covering RDI instruments with tailor-made rules and procedures for RDI support.

