

**PGI05786 – IMPROVE**  
**Improving Structural Funds for better delivery  
of R&D&i policies**

**Regional State of the Art Report**

**Centro Region, Portugal**

May 2020



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## Introduction

IMPROVE project brings together partners from eight regions and cities with different background in terms of geographic area, economic development, innovation performance, more or less centralised administration systems and responsibilities for the management of the addressed policies. The partners involved are: Foundation FUNDECYT Science and Technology Park of Extremadura, Spain; DEV'UP Centre-Val de Loire, France; Regional Agency for Technology and Innovation, Apulia, Italy; Municipality of Gabrovo, Bulgaria; North-West Regional Development Agency, Romania; Tartu Science Park Foundation, Estonia; Regional Council of Lapland, Finland; Regional Coordination and Development Commission of Centro, Portugal.

The overall objective of the project is to improve the management and implementation of (mainly) Structural Funds Programmes in the participating regions and cities in order to ensure a better and more efficient delivery of R&D&i policies, with a special focus on Smart Specialisation Strategies. The expected results of the project are: innovative methodologies in the implementation of Structural Funds; solutions to specific issues that might hinder the proper deployment of policy instruments; new tools (methodologies, good practices, dedicated calls, capacity building of regional stakeholders) provided to stakeholders for a more efficient management and implementation of their policy instruments; action plans designed, implemented and monitored in each participating region; transfer of knowledge collected through the interregional learning process to stakeholders across Europe and with other Interreg Europe projects.

The interregional learning process and activities in the IMPROVE project are designed to foster the exchange of practices, experiences and knowledge and increase the capacities of partners and stakeholders involved. The basis for the learning process is the state-of-the-art report that each partner will conduct on their chosen Structural Funds Programme (policy instrument) to be improved in the project<sup>1</sup>. The objective of the state-of-the-art report is to clarify the current situation in terms of management and implementation of the policy instrument.

Moreover, the report will set the basis for a fruitful Peer Review, regarding the three main topics addressed by the project:

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<sup>1</sup> The interregional learning process will also take place by the means of peer reviews, identification of good practices and interregional thematic workshops organised in the participating regions. Towards the end of phase one partners will develop action plans to transfer the knowledge and experiences to their region or city to improve their chosen policy instrument with concrete actions.

Due to the current pandemic situation, it is possible that some of the on-site events foreseen within this project will be transformed on online events.

- How are the operations designed and implemented (by whom, how they relate with the Managing Authority, etc);
- How does the governance work (is it structured or not, who takes part and how, how is the coordination between other policies/instruments/funds); and
- How are those operations (and the instrument itself) being evaluated?

This way, the regional reports will help the partnership (and the regional stakeholders) to better work on the improvement of the selected policy instruments and guide the future activities thanks to the identification of the main challenges in each region. Finally, a Joint Report will be elaborated in order to disseminate the main outcomes at programme and European level.

The policy instrument chosen by Centro Region of Portugal to be improved in this project is the Regional Operational Programme of Centro (Centro 2020). More specifically, CCDRC aims at improving the management and implementation of Thematic Objective 1 (TO1 - strengthening research, technological development and innovation) and/or Thematic Objective 3 (TO3 - enhancing the competitiveness of small and medium-sized enterprises). In these Thematic Objectives (TO1 & 3) the Smart Specialisation Strategy of Centro (Centro RIS3) is especially important because it is used to evaluate the eligibility and/or regional merit of applicant projects.

## 1. CCDRC's presentation

Apart from the autonomous regions of Azores and Madeira, Portugal does not have political regions, only administrative. For the five mainland regions there are organisations of the central government with responsibility for regional development. These are the Regional Coordination and Development Commissions (CCDRs), which are bodies of central government in the regions.

The Regional Coordination and Development Commission of Centro implements governmental policies regarding regional development (including innovation and transnational and inter-regional cooperation), environment, city and land management, and it provides technical support to local administration in NUTSII Centro (PT16). CCDRC is also responsible for managing the Regional Operational Programme of Centro (Centro 2020).

Before going into the next chapter (Regional profile), it is also important to take into consideration that, not being Portugal a regionalised country, Centro Region does not have an independent regional budget, which can have the effect of reducing the level of flexibility and the range of initiatives that may be promoted, implemented and funded at the regional level.

## 2. Regional profile

In this section of the state-of-the-art report, we intend to give a general perspective of the regional framework in terms of economic structure and research and innovation system.

The main source of information used for quantitative data was the National Institute of Statistics (INE)<sup>2</sup>. Most of this information is also available on Datacentro<sup>3</sup>, an informatics platform from the regional monitoring and evaluation system, which is managed by CCDRC.

### 2.1. Main regional characteristics

Centro Region of Portugal is in the **geographic centre of Portugal**, having a privileged location for being in the middle of the two Portuguese metropolitan areas of Porto and Lisboa (Porto in the north – Norte Region [PT11] - and Lisbon in the south – Área Metropolitana de Lisboa [PT17]). In the south, Alentejo (another Portuguese region – PT18) is also flanking Centro. In the west the region is bordered

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<sup>2</sup> [https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine\\_main](https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_main)

<sup>3</sup> <http://datacentro.ccdr.pt/>

by the Atlantic Ocean and in the east by Spain (having two cross-border regions: Castilla y León and Extremadura).

The region is composed by **100 municipalities**, which are organised into **eight Intermunicipal Communities (CIM)** and are spread over an area of close to **28.000 km<sup>2</sup>** which accounts for more than 31% of Portugal's land area. Around 39% of the territory is covered by forest area<sup>4</sup>. Although the region does not have a formal capital the main city is Coimbra.

Centro has more than **2,2 million of inhabitants**<sup>5</sup>, accounting for around 22% of the population in Portugal. With 10 municipalities having more than 50.000 inhabitants<sup>6</sup>, the region has a **balanced network of medium-sized urban centres** covered by a good network of infrastructures. The **population's density is 78.6**<sup>7</sup> (number of inhabitants per km<sup>2</sup>) which makes Centro a region with a rather low population density (especially if compared with population's density of Área Metropolitana de Lisboa, which is 944). Nevertheless, it is important to note that the desertification the interior of the region is suffering contrasts with more populated and urbanized areas located along the coast.

In 2019, in Centro, the **unemployment rate was 4,9%**, below the national average of 6,5% making it the Portuguese region with the lowest unemployment rate<sup>8</sup>. Although this number has been decreasing since 2012, when it was 11,7%, it is possible that this number will increase in 2020 considering the negative impact that Coronavirus will have in the national economy. Since 2015 Centro's unemployment rate has been consistently below the EU average (EU27 from 2020) which was, for 2019, 6,7%<sup>9</sup>.

In 2019 the **higher education rate** (of resident population aged between 25 and 64 years) in the region **was 25,2%** which is lower than the national rate (26,3%)<sup>10</sup>. However, in 2018/2019 the enrollment rate in tertiary education<sup>11</sup> was 40,2%, above the national average (36,4%)<sup>12</sup>.

To finalise, a striking characteristic of the region is its **demographic decline**. In Centro, in 2018, the crude rate of natural growth (of population) was -0,56%<sup>13</sup>. In the period 2011-2018, only one<sup>14</sup>, of the 100 municipalities of the region, did not see its natural growth decrease, having a minor positive

<sup>4</sup> INE, 2020. Data updated on October 2019

<sup>5</sup> INE, 2020. Data updated on June 2019.

<sup>6</sup> The most populated municipality is Coimbra (with 133.724 inhabitants), followed by Leiria, Viseu, Torres Vedras, Aveiro, Figueira da Foz, Ovar, Castelo Branco, Pombal, Caldas da Rainha. .

<sup>7</sup> INE, 2020. Data updated on June 2019.

<sup>8</sup> INE, 2020. Data updated on February 2020.

<sup>9</sup> Eurostat, 2020.

<sup>10</sup> INE, 2020. Data updated on February 2020.

<sup>11</sup> Percentage relation between the number of students aged between 18 and 22 years old, enrolled in initial training courses, and the resident population aged at the same age groups.

<sup>12</sup> INE, 2020. Data updated on October 2019.

<sup>13</sup> INE, 2020. Data updated on May 2019.

<sup>14</sup> It was Entroncamento.

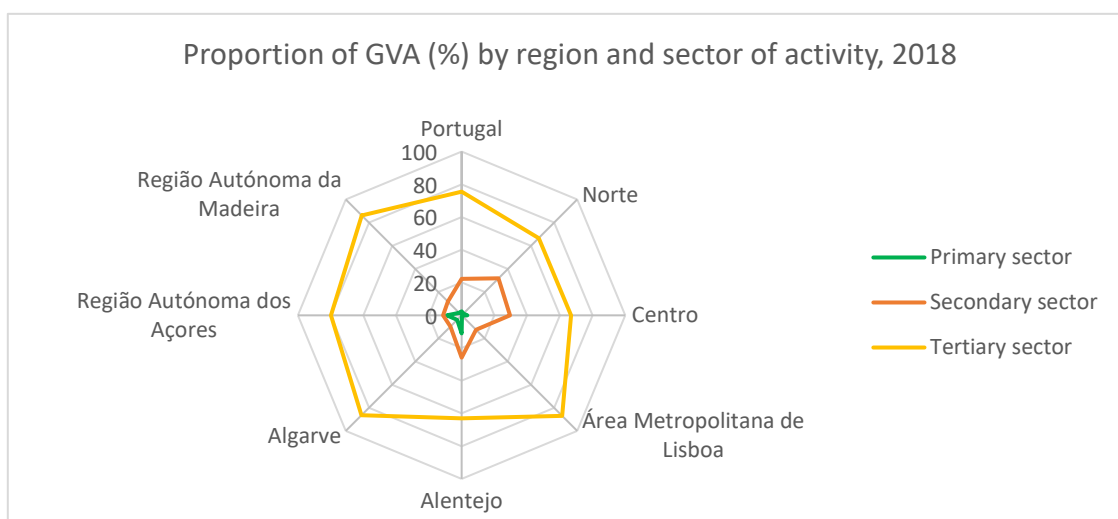
percentage variation (+0,28%). For that same period 18 municipalities presented a percentual drop higher than 10%.

Additionally, and because of the demographic decline, the region has an **ageing population**, which is the result of, on the one hand, the increase of elderly population, and on the other hand, the decreasing of the young population. In 2018, for each 199 elderly people (65 or more years-old) there was only 100 young persons (less than 15 years-old)<sup>15</sup>. This number is even more significant when compared with the national average (159 elderly people for each 100 young persons) and knowing that it is the second highest of Portugal (after Alentejo Region).

## 2.2. Regional economic structure

The regional economy is rather diversified encompassing both low technology level industrial sectors (such as most companies in ceramics, glass, cement, forest industries), and some medium and high-tech sectors (such as health services, biotechnology, space technologies, new materials and ICT).

It is worth mentioning that services and industry play a very important role in the region. The tertiary sector is actually the most important contributor to the regional **Gross Value Added (GVA)**, having a weight of 66,9% (being the national average 75,5%). The secondary sector represents 29,6% of the regional GVA, which is a value only exceeded by Norte Region (31,9%) and it is well above the national average (22%). The primary sector only accounts for 3,5%<sup>16</sup> of the regional GVA, but it is still above the national average (2,4%).



**Chart 1** – Proportion of GVA (%) by region and sector of activity

<sup>15</sup> INE, 2020. Data updated on June 2019.

<sup>16</sup> INE, 2020. Data updated on January 2020.



The regional Gross Value Added (at current prices) is more than **€33.000 million** which represents slightly more than 18% of the national value (around €176.000 million)<sup>17</sup>. Companies were responsible for more than €16.000 million from the regional value, which represents almost a half of the total number<sup>18</sup>.

In 2018, the regional **Gross Domestic Product (GDP)**, at current prices was more than **€38.000 million**, representing (again) almost 19% of the national value (which is close to €204.000 million)<sup>19</sup>. Nevertheless, for the same year, the **GDP per capita** (at current prices) **was around €17.196**, which is lower than the national average (close to €19.800)<sup>20</sup> and well below the EU average (EU 27 from 2020) that was €30.160. In 2017, the regional **GDP per capita in PPS** (Purchasing Power Standards) **was close to €20.000**, below the national average (almost €23.000) and representing 66,6% of the EU value (EU28 = 100)<sup>21</sup>.

### 2.2.1. Regional business fabric

Centro's business fabric is quite important for its regional dynamism. Having **264.492 companies**, Centro accommodates almost 21% of the total number of companies existing in Portugal<sup>22</sup>. These enterprises employ **738.063 persons** (which is more than 18% of the number of persons employed in enterprises in Portugal)<sup>23</sup>. The distribution of these numbers (enterprises and persons employed) by economic activity can be found in the graph below.

<sup>17</sup> INE, 2020. Data updated on January 2020.

<sup>18</sup> INE, 2020. Data updated on February 2020.

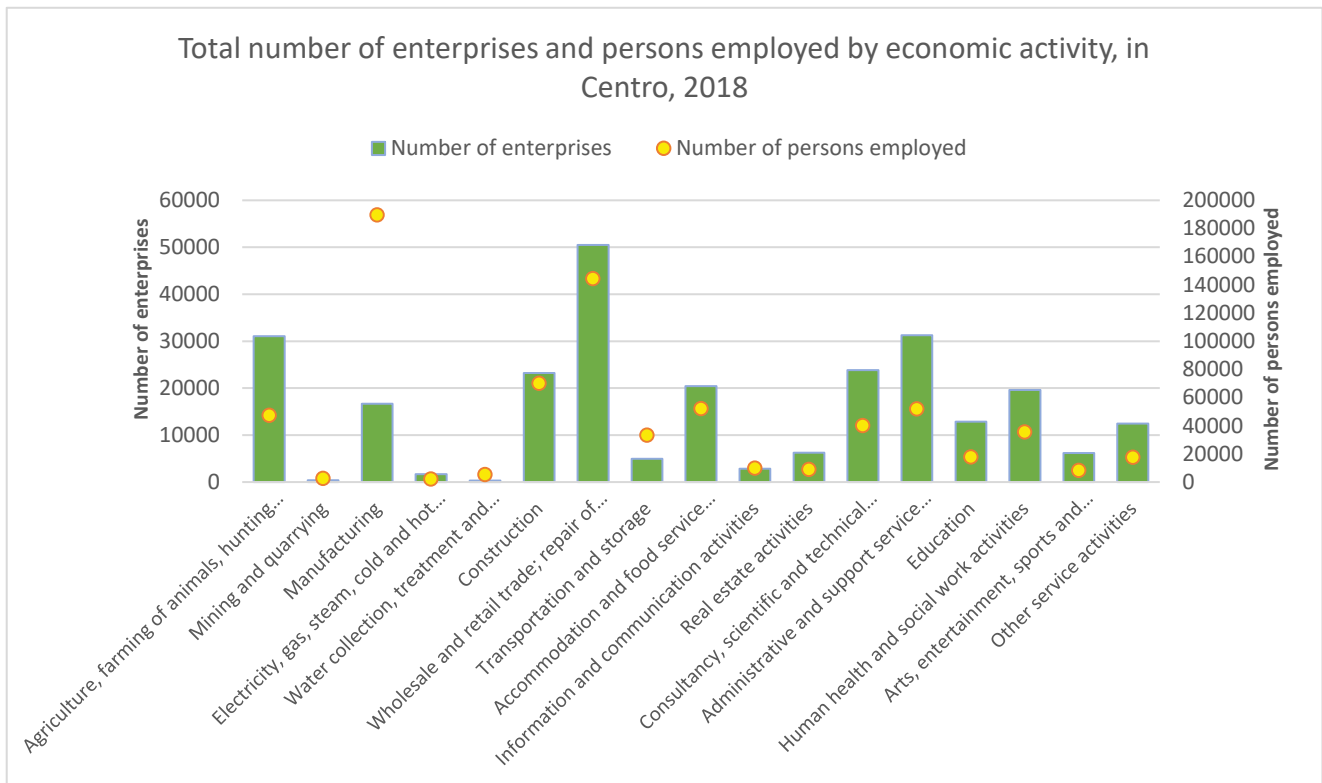
<sup>19</sup> INE, 2020. Data updated on January 2020.

<sup>20</sup> INE, 2020. Data updated on January 2020.

<sup>21</sup> INE, 2020. Data updated on January 2019.

<sup>22</sup> INE, 2020. Data updated on February 2020.

<sup>23</sup> INE, 2020. Data updated on February 2020.



**Chart 2** – Total number of enterprises and persons employed by economic activity, in Centro

According to the number of employees, in 2018, **more than 99% of Centro’s companies were SME’s** employing more than 89% of the persons working in regional enterprises<sup>24</sup>, thus, playing a very important role in the economic structure of the region. The distribution of companies by size and number of employees can be found in the table below.

	Micro enterprises (less than 10 persons)	Small enterprises (10 - 49 persons)	Medium enterprises (50 - 249 persons)	Big enterprises (250 and more persons)	Total
<b>Number of enterprises</b>	254.874	8.245	1.217	1.56	<b>264.492</b>
	96.36%	3.12%	0.46%	0.06%	
<b>Number of persons employed</b>	382.311	157.984	119.788	77.980	<b>738.063</b>
	51.80%	21.41%	16.23%	10.57%	

**Table 1** – Distribution of companies by size and number of employees

The number of regional **enterprises in high and medium-high technology sectors**, in 2018, was 4.308, which represents close to 18% of the total of existing companies in these sectors in Portugal and

<sup>24</sup> INE, 2020. Data updated on February 2020.

**1.63%** of all the regional enterprises<sup>25</sup>. The percentage of persons employed by enterprises in high and medium-high technology sectors represents around 5% of the total of persons employed by regional companies.

The number of **enterprises born** in Centro, in 2018 was 34.561, which represents close to 18% of the total number of companies created in Portugal in the same year and 13% of the total number of existing companies in the region<sup>26</sup>. The number of **births of enterprises in high and medium-high technology sectors** in the region was 648, representing close to 1,9% of the companies born in the region.

About the **gazelle companies**<sup>27</sup>, in 2019, the number was 112<sup>28</sup>, which represents a very small percentage of the universe of enterprises in Portugal. Nevertheless, the growth in this number, since 2011 (the first year with a complete study), was of 111% (from 53 to 112). Just from 2018 to 2019, the grow rate was of 18% (from 95 to 112).

The position of the **Foreign Direct Investment (FDI)** in Centro Region has increased since 2012 having reached, in 2019, the **€4.054 million**<sup>29</sup>, which corresponds to 2,9% of the FDI received by the national economy. Even though this number is rather low, we know that there is FDI in facilities of companies with headquarters outside Centro. Therefore, this FDI is not reflected in the regional figures. Nevertheless, since 2010, the value of FDI transactions in Centro has always been positive. Moreover, since 2014, the net inflow of FDI in the region has been above €100 million, having reached its peak in 2016, with €383 million<sup>30</sup>. Regarding the **exports of goods**, in 2019, the regional number was more than €11.300 million, which represents almost 19% of the national amount (approximately €59.900 million)<sup>31</sup>. From all the exports more than 43% were industrial supplies.

### 2.3. Research and Innovation (R&I) System

With three public universities, six polytechnic institutes, around 70 Research and Development (R&D) units, nine interface centres, four collaborative labs, 12 research infrastructures, 48 technological

<sup>25</sup> INE, 2020. Data updated on February 2020.

<sup>26</sup> INE, 2020. Data updated on February 2020.

<sup>27</sup> The criteria used by CCDRC is that the company must cumulatively: i) have headquarters in the region; ii) present a growth in the business volume above the 20% in the last three years; iii) have less than 10 years; iv) have at least 10 employees in the last year; v) have at least 500.000€ in sales in the year before.

The last study available online is the one from 2018:

[http://www.ccdrc.pt/index.php?option=com\\_docman&view=download&alias=4633-empresas-gazela-2018&category\\_slug=2019-1&Itemid=739](http://www.ccdrc.pt/index.php?option=com_docman&view=download&alias=4633-empresas-gazela-2018&category_slug=2019-1&Itemid=739)

<sup>28</sup> Number calculated by CCDRC.

<sup>29</sup> Data sent by Bank of Portugal

<sup>30</sup> Data from “Barómetro do Centro de Portugal”

<sup>31</sup> INE, 2020. Data updated on April 2020.

infrastructures, 4 clusters, and 39 business incubators, it is safe to say that Centro has a strong and quite balanced scientific and technological system. More specific information on each one of these types of organisations can be found in the table below.

Type of organisation	Description
<b>Public universities</b>	They are University of Aveiro, University of Beira Interior and University of Coimbra.
<b>Polytechnic institutes</b>	They are Polytechnic institute of Castelo Branco, Polytechnic institute of Coimbra, Polytechnic institute of Guarda, Polytechnic institute of Leiria, Polytechnic institute of Tomar and Polytechnic institute of Viseu.
<b>R&amp;D units</b>	<p>They are public and private research institutions, non-profit, having as main activity the scientific research and the technological development. These entities receive a pluriannual funding, according to its evaluation (carried out by the Portuguese Foundation for Science and Technology - FCT). For the 2020-2023 period, 348 R&amp;D units have presented themselves to the evaluation process in Portugal. From these, 68 were from Centro Region (close to 20%) and only 7 of the regional R&amp;D units did not obtain the classification required to obtain the funding<sup>32</sup>.</p> <p>It is worth to note that Centro's R&amp;D units will receive more than 58% of the total funding for the area of Science and Engineering of Materials and Nanotechnology (going only for one R&amp;D Unit). In the Sciences of Earth, Atmosphere and Climate Changes area, Centro will receive around 49% of the funding. Last but not least: in the Digital Services – social, cultural, economic or of public administration; Electronic and computer engineering; and in the Sciences and Technologies of the Sea; Centro's R&amp;D Units will receive 37%; 36% and 32% (respectively) of the total funding available for the areas<sup>33</sup>.</p>
<b>Interface centres</b>	<p>They are institutions that promote technological transfer and innovation in enterprises, namely through certification processes, improvement of quality, production efficiency, support to innovation activities, access to technologies in development and human resources capacitation<sup>34</sup>. In Portugal there are 31 recognised interface centres<sup>35</sup> and ten of them are from Centro Region.</p> <ul style="list-style-type: none"> <li>• AEMITEQ – Association for the Technological Innovation and Quality</li> <li>• AIBILI – Association for the Biomedical Research and Light and Imaging Innovation</li> <li>• BLC3 – Campus of Technology and Innovation</li> <li>• CENTIMFE – Technological Centre of the Moulds Industry, Special Tools and Plastics</li> <li>• COTHN – National Operating and Technological Horticultural Centre</li> <li>• CTCV – Technological Centre of Ceramics and Glass</li> <li>• CTIC – Technological Centre of Leather Industries</li> <li>• IPN - Instituto Pedro Nunes – Association for the Innovation and Development in Science and Technology</li> <li>• ITeCons – Technological Research and Development Institute in Sciences for Construction, Energy, Environment and Sustainability</li> </ul>

<sup>32</sup> Values calculated by CCDRC, accordingly to the data published to FCT

<sup>33</sup> Values calculated by CCDRC, accordingly to the data published to FCT

<sup>34</sup> <http://www.programainterface.pt/pt/cit>

<sup>35</sup> The recognition was made by the National Innovation Agency (ANI)

	<ul style="list-style-type: none"> <li>RAIZ – Forest and Paper Research Institute</li> </ul>
<p><b>Collaborative labs</b></p>	<p>Also called CoLaB, they can be non-profit private associations or companies and have as main goal to create, direct and indirectly, qualified and scientific jobs in Portugal, through the implementation of research and innovation agendas focused on the economic and social value creation<sup>36</sup>. A CoLaB must be composed by, at least, a company and a R&amp;D unit of a higher education institution funded by FCT in order to promote collaborative activities between these entities.</p> <p>Until this moment, 26 Collaborative Labs have been recognised, being four of them based in Centro Region:</p> <ul style="list-style-type: none"> <li>CoLAB Atlântico – Collaborative Lab for the Atlantic</li> <li>eCOLab- Collaborative Lab for Circular Economy</li> <li>FOODLAB - IDANHA FOODLAB</li> <li>SFCoLAB - Smart Farm CoLAB</li> </ul> <p>Even though the other 22 Collaborative Labs are not based in Centro, some of them are participated by Centro Region agents (as there are partners from outside the region in the four based in Centro).</p>
<p><b>Research Infrastructures</b></p>	<p>The Portuguese Roadmap of Research Infrastructures (RI) recognised 56 RI. From these, <b>12 are based in Centro</b> (either single sited, distributed or digital)..</p> <ul style="list-style-type: none"> <li>BIN - National Brain Imaging Network</li> <li>C4G -Collaboratory for Geosciences (distributed infrastructure)</li> <li>ENGAGE SKA - Enable Green E-Sciences for the Square Kilometre Array (distributed infrastructure)</li> <li>GenomePortugal – National Facility for Genome Sequencing and Analysis (distributed infrastructure)</li> <li>MIA-Portugal - Multidisciplinary Intutute of Ageing</li> <li>ORCIP - Optical Radio Convergence Infrastructure for Communications and Power Delivering (distributed infrastructure)</li> <li>PAMI - Portuguese Additive Manufacturing Initiative (distributed infrastructure)</li> <li>Portuguese Network of Infrastructures for the Circular Economy</li> <li>RNME – Portuguese Network of Electronic Microscopy (distributed infrastructure)</li> <li>TEMA - Centre for Mechanical Technology and Automation</li> <li>UC-LCA - Laboratory Coordinator for Advanced Computing</li> <li>VIRAVECTOR - Viral Vectors for Gene Transfer Core Facility</li> </ul> <p>Moreover, Centro Region has also <b>nodes from 15 Portuguese Research Infrastructures based outside the region.</b></p> <ul style="list-style-type: none"> <li>BIOBANCO – Portuguese Network of Biobanks</li> <li>EMBRC.PT – European Marine Biological Resource Centre Portugal</li> <li>EMSO-PT - European Multidisciplinary Seafloor Observatory Portugal</li> <li>INCD - Portuguese National Distributed Computing Infrastructure</li> <li>Laserlab-Portugal</li> <li>PASSDA - Production and Archive of Social Science Data</li> <li>PORBIOTA - Portuguese e-infrastructure for Information and Research on Biodiversity</li> <li>PPBI - Portuguese Platform of Bioimage</li> <li>PRISC - Portuguese Research Infrastructure of Scientific Collections</li> </ul>

<sup>36</sup> <https://www.fct.pt/apoios/CoLAB/>

	<ul style="list-style-type: none"> <li>• PtCAC – Portuguese Academic Clinic Centres Network</li> <li>• PtCRIN – Portuguese Clinical Research Infrastructure Network</li> <li>• PTNMR - Portuguese Nuclear Magnetic Resonance Network</li> <li>• RNCA –Advanced Computing Portugal</li> <li>• RNEM - Portuguese Mass Spectrometry Network</li> <li>• TRIS-HCP - Translational and Clinical Research Infrastructures Specialisation Platform - Health Cluster Portugal</li> </ul>
<p><b>Technological Infrastructures<sup>37</sup></b></p>	<p>In Portugal, the roadmap of Technological Infrastructures<sup>38</sup> recognises four types of entities: Technological Centres; Technological Valorisation and Transfer Centres, Science and Innovation Parks; Incubation Centres of Technological Basis. In total, Centro has 48 Technological Infrastructures, but only 37 have legal personality. These are the ones presented below.</p> <p><b>Technological Centres from Centro:</b></p> <ul style="list-style-type: none"> <li>• CENTIMFE – Technological Centre of the Moulds Industry, Special Tools and Plastics</li> <li>• CTCV – Technological Centre of Ceramics and Glass</li> <li>• CTIC – Technological Centre of Leather Industries</li> </ul> <p><b>Scientific and Technological Parks in Centro:</b></p> <ul style="list-style-type: none"> <li>• Biocant Park (the only park of biotechnology in Portugal)</li> <li>• BLC3 (only national entity created for the development and industrialisation of biorefineries)</li> <li>• Parkurbis</li> <li>• iParque</li> <li>• TAGUSVALLEY</li> <li>• Creative Science Park</li> </ul> <p><b>Incubation Centres of Technological Basis in Centro<sup>39</sup></b></p> <ul style="list-style-type: none"> <li>• CEI – Innovative Enterprises Centre</li> <li>• CETEC – Technological Enterprises Centre</li> <li>• CIEBI/BIC – Entrepreneurial Innovation Centre of Beira Interior</li> <li>• GreenValley FoodLab</li> <li>• IDNET - D. Dinis Incubator</li> <li>• IEF – Enterprises Incubator of Figueira da Foz</li> <li>• IEUA - Enterprises Incubator of University of Aveiro</li> <li>• Enterprises Incubator of Curia Tecnoparque</li> <li>• IPN Incubator</li> <li>• IUPEN – Urban Poli-nucleated Incubator of Enterprises and Businesses</li> <li>• OPEN – Association for Specific Business Opportunities</li> <li>• Parkurbis Incubation</li> <li>• Start-up Santarém</li> </ul> <p>In Centro we also have 18 <b>Technological Valorisation and Transfer Centres:</b></p> <ul style="list-style-type: none"> <li>• ADAI – Association for the Industrial Aerodynamics Development</li> <li>• AEMITEQ – Association for the Technological Development and Quality</li> </ul>

<sup>37</sup> The recognition of these entities was made by the National Innovation Agency, who established a set of criteria that each entity should comply with to be considered a Technological Infrastructure (and of which type). It is important to clarify that some of the Technological Infrastructures recognised were also recognised as Interface Centres, as they are complying with the criteria established to be part of each one of the different typologies of entity.

<sup>38</sup> [https://www.ani.pt/media/4382/caracteriza%C3%A7%C3%A3o-infraestruturas-tecnol%C3%B3gicas\\_v4\\_2018.pdf](https://www.ani.pt/media/4382/caracteriza%C3%A7%C3%A3o-infraestruturas-tecnol%C3%B3gicas_v4_2018.pdf)

<sup>39</sup> Including three without legal personality.

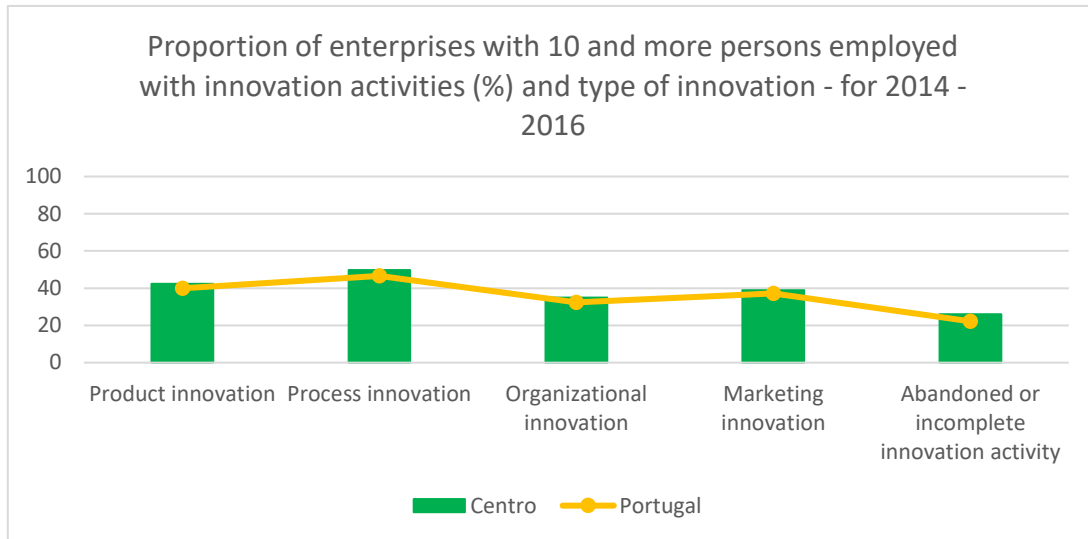
	<ul style="list-style-type: none"> <li>• AIBILI – Association for Innovation and Biomedical Research on Light and Image</li> <li>• CBPBI Association – Centre of Biotechnology of Plants of Beira Interior</li> <li>• UC Tecnimede Association – Research, Technological Development and Internationalisation</li> <li>• CATAA – Technological Support Centre for Agri-industry</li> <li>• CBE – Centre of Biomass for Energy</li> <li>• Centre of Innovation and Technology N. Mahalingam</li> <li>• Operative and Technological National Horticultural Centre</li> <li>• INOVLINEA – Centre of Food Technology Transfer</li> <li>• IPN - Pedro Nunes Institute</li> <li>• ISR – Systems and Robotics Institute</li> <li>• IT – Telecommunications Institute</li> <li>• ITeCons – Institute for Research and Technological Development for Construction, Energy, Environment and Sustainability</li> <li>• LINE – Industrial and Entrepreneurial Innovation Lab – TAGUSVALLEY</li> <li>• RAIZ – Forest and Paper Research Institute</li> <li>• SerQ – Forest Innovation and Competences Centre - Association</li> <li>• UC BIOTECH</li> </ul>
<b>Clusters</b>	Three National clusters are based in Centro: Cluster Habitat; ICT Cluster; and Cluster from Engineering and Tooling. We also have Inovcluster (as regional arm of the National Agri-food Cluster). These clusters have a strong regional implementation as they are strongly connected to some main activities developed in the region.
<b>Incubators</b>	The Region has 39 business incubators. From those, 20 belong to the National Incubators Network, 13 have a technological basis and five are predominantly industrial. One of these incubators (Instituto Pedro Nunes), recently, received an award in the World Incubation Summit 2019, for being in the Top 10 of the Best Incubators of the World, in the <i>University Business Incubators</i> category.

**Table 2** – Organisations from the Regional Research and Innovation System

We should note **that all these organisations are well spread over the territory** contributing to the consolidation and strengthening of the regional R&I Ecosystem.

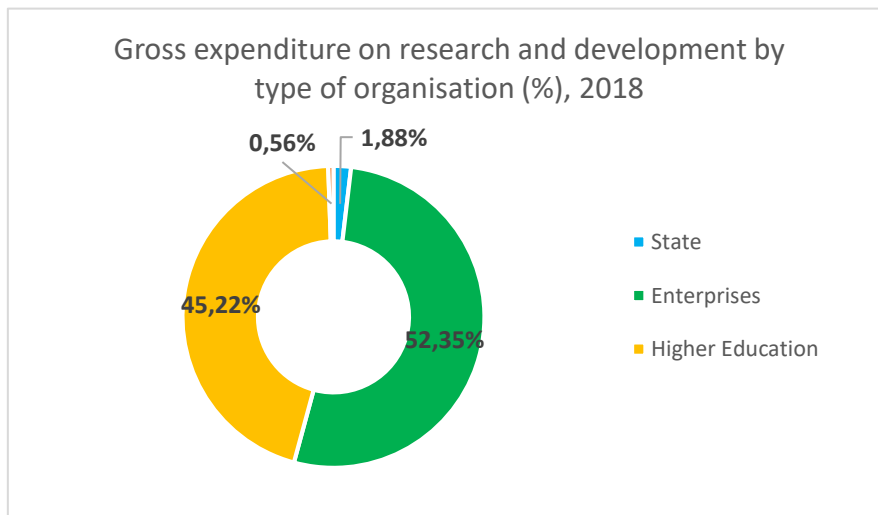
Although all these organisations are fundamental for the success of the regional R&I System, we must not forget the very important role played by the companies, which performance indicators contributed significantly for Centro to be ranked as “strong - innovator” in the last Regional Innovation Scoreboard (see end of this chapter for more information on this). As it is possible to see in the graphic below, in the period 2014-2016, 42,4% of the regional enterprises (with 10 and more persons employed) had product innovation activities, 49,7% had process innovation activities, 34,9% had organisational innovation

activities and 39% had marketing innovation activities. It is also important to note that each one of these values was above the national average.



**Chart 3** – Proportion of enterprises with 10 and more persons employed with innovation activities (%) and type of innovation

Furthermore, in Centro, in 2018, companies were responsible for more than 52% of all the regional **Gross Expenditure on Research and Development (GERD)**. They were closely followed by the Higher Education Institutions that accounted for more than 45% of the regional GERD<sup>40</sup>.



**Chart 4** – Gross expenditure on research and development by type of organisation (%)

It is important to notice that, for the same year, the regional Gross Expenditure on R&D was more than €499 million which represented around 18% of the national amount. The amount invested by Centro's

<sup>40</sup> INE, 2020. Updated on May 2020.



companies was approximately €261 million (accounting for more than 18% of the total value invested by enterprises in R&D in Portugal). About the amount invested by companies in R&D, it is interesting to see that, in 2016, almost 74% of these expenditures were made by SMEs and only 26% of the GERD came from big enterprises<sup>41</sup>.

	Total GERD of enterprises in 2016	Micro enterprises (less than 10 persons)	Small enterprises (10 - 49 persons)	Medium enterprises (50 - 249 persons)	Big enterprises (250 and more persons)
Amount (€)	€ 232,593.60	€ 21,635.30	€ 71,722.10	€ 77,722.20	€ 61,513.90
Amount (%)	100%	9.30%	30.84%	33.42%	26.45%

**Table 3** – GERD by type of company in 2016

As for the percentage of **gross expenditure on research and development in GDP** (at market prices), in 2018, the value for Centro was **1,31%**<sup>42</sup>. This number matched the national average (1,36%) below the national and European targets for 2020 (2,7% and 3%, respectively). For the same year, the regional GERD in GDP was also well below the European average of 2,19%<sup>43</sup> (EU27). In any case, it is worth mentioning that the two best performing NUTS III regions in Portugal, in 2017, were from Centro: Região de Aveiro (2,24%) and Região de Coimbra (2,20%)<sup>44</sup>.

In terms of R&D and innovation resources, in 2016, Centro ranked second among Portuguese NUTS II regions regarding the number of **PhDs in S&T areas** per 1,000 inhabitants (1,06 against the national average of 0,84)<sup>45</sup> and third concerning **R&D researchers** (full time equivalent) in the active population (0,78% in 2017, against the national average of 0,86%)<sup>46</sup>.

In total, in 2018, the region made **81 innovation patents applications per million inhabitants**, the highest value for the country. The national average was 71 innovation patents requests per million inhabitants<sup>47</sup>.

In terms of the regional performance regarding **Horizon 2020 funding**, Centro secured €156,98 million<sup>48</sup>, representing 407 signed grants and 477 regional participations. From these 407 projects approved, 112 were led by Centro Region partners. Enterprises obtained more than €54 million (almost

<sup>41</sup> INE, 2020. Updated on September 2018.

<sup>42</sup> INE, 2020. Updated on May 2020.

<sup>43</sup> Eurostat, 2020.

<sup>44</sup> INE, 2020. Updated on December 2019.

<sup>45</sup> INE, 2020. Data updated on November 2017.

<sup>46</sup> INE, 2020. Data updated on June 2019.

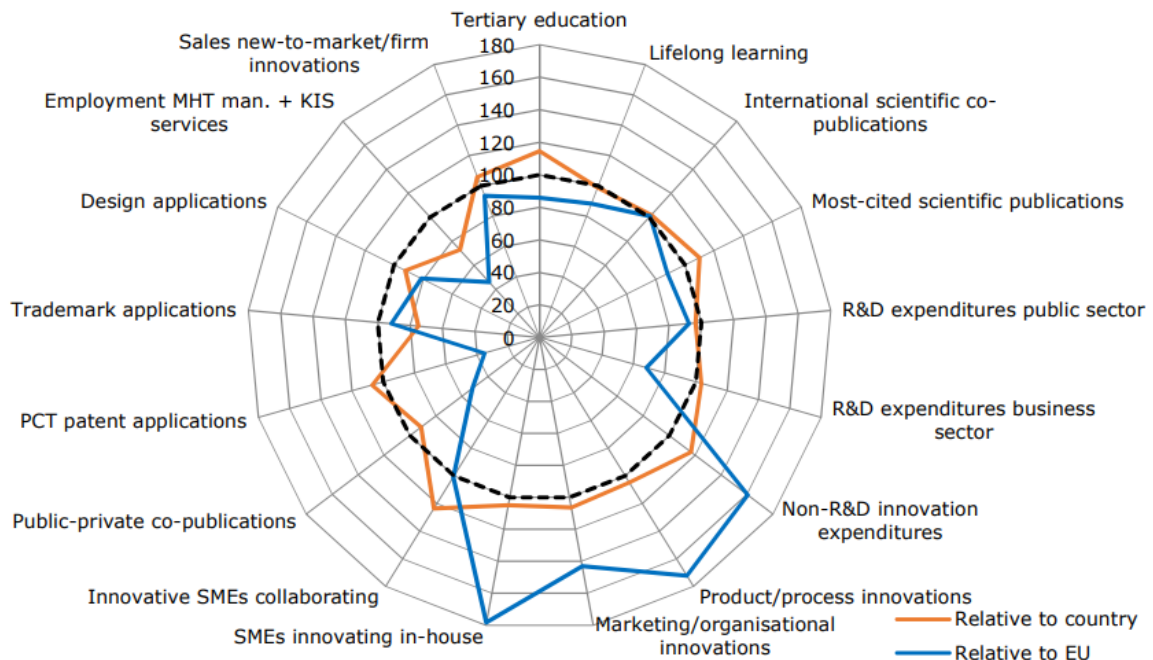
<sup>47</sup> INPI, 2020.

<sup>48</sup> Information shared by the National Innovation Agency, reporting to March 2020. Note: the data available to the National Innovation Agency is more updated than the one in the H2020 Dashboard.

€15 million have gone to big companies), higher education institutions have, approximately, 67 million € approved, research centres secured more than €30 million and more than €5 million were to other types of organisation.

Taking this into account, and accordingly to the JRC technical report “Mobilising European Structural and Investment Funds and Horizon 2020 in support of innovation in less developed regions”, Centro region belongs to the group of “**intermediary R&I regions**”, defined by a higher R&I intensity (GERD/GDP) combined with a higher ESIF dependence and lower capacities to capture Horizon 2020 funding (H2020/ESIF)<sup>49</sup>.

To conclude, in the **Regional Innovation Scoreboard (RIS)** of 2019, Centro Region was classified as “**strong - innovator**”<sup>50</sup>. The regional innovation performance has increased over time (the regional innovation index increased 8,9% from 2011 to 2019 when it reached 0,445). The region performed best in terms of: non-R&D innovation expenditures; SMEs innovating in-house; SMEs introducing product/process innovations; and marketing/organisational innovations. The region’s worst performances included: employment in medium-high technology manufacturing and knowledge-intensive services; PCT patent applications; and R&D expenditures in the business sector (even though the business sector is the one that most invests in R&D).



**Figure 1 – Centro Regional Innovation Scoreboard, 2019**

<sup>49</sup>[https://publications.jrc.ec.europa.eu/repository/bitstream/JRC112442/jrc112442\\_mobilising\\_european\\_structural\\_and\\_investment\\_funds\\_and\\_horizon\\_2020.pdf](https://publications.jrc.ec.europa.eu/repository/bitstream/JRC112442/jrc112442_mobilising_european_structural_and_investment_funds_and_horizon_2020.pdf)

<sup>50</sup> Portugal is a moderate innovator.

### 3. Research and Innovation Smart Specialisation Strategy of Centro – Centro RIS3

Having now a better understanding of the regional profile of Centro (its main characteristics, regional economic structure and research and innovation system) and knowing that the aim of this Interreg Europe project is to improve the management and implementation of Structural Funds Programmes to ensure a better and more efficient delivery of R&D&i policies, with a special focus on the Smart Specialisation Strategies, before moving to the presentation of the policy instrument chosen to be improved, it is essential to present the Research and Innovation Smart Specialisation Strategy of Centro (Centro RIS3).

It is important to be aware that, to meet the *ex-ante* conditionality, Portugal decided to have **a multilevel strategy: a National Smart Specialisation Strategy and seven Regional Smart Specialisation Strategies** – one by each of the Portuguese regions. Thus, Centro RIS3 was defined and all its development, implementation, operationalisation and monitoring were (and still are) conducted by CCDRC.

About Centro RIS3, its process of reflexion was, since the beginning, open to everyone. From the discussion with the regional stakeholders **eight differentiating thematic domains were established: Forest, Sea, Tourism, Agroindustry, Materials, Health, ICT and Biotechnology**. These domains are areas in which there is productive capacity and/or capability to produce scientific and technological knowledge, whether in already consolidated ways or as an emerging activity.

The process then led to the identification of **four cross-cutting priorities**, to be taken into account when allocating resources: **Resources sustainability, Qualification of human resources, Territorial cohesion and Internationalisation**.

From the thematic domains and the cross-cutting priorities, **four specific objectives** were defined:

- 1) Adoption of sustainable industrial solutions;
- 2) Valorisation of natural endogenous resources;
- 3) Mobilisation of technologies for quality of life;
- 4) Promotion of territorial Innovation.

Within each one of these objectives, stakeholders collectively defined some specific lines of action, establishing the path to achieve the proposed objectives.

Specific Objectives	Lines of Action
<b>1) Adoption of sustainable industrial solutions</b>	<ul style="list-style-type: none"> <li><b>1.a)</b> Development of processes, materials and sustainable systems with greater added value for the Centro Region</li> <li><b>1.b)</b> Efficient use of resources and reduction of productive processes' impact on the environment</li> <li><b>1.c)</b> Industrial modernisation through circular economy</li> <li><b>1.d)</b> Industrial modernisation through "Production centred on the human being"</li> <li><b>1.e)</b> Valorisation of advanced and/or emerging technologies in higher added-value eco-innovation processes, products and systems</li> </ul>
<b>2) Valorisation of endogenous natural resources</b>	<ul style="list-style-type: none"> <li><b>2.a)</b> Conservation and sustainability of natural endogenous resources</li> <li><b>2.b)</b> Monitoring and integrated management of natural endogenous resources</li> <li><b>2.c)</b> Development of products, processes and services with a view to boosting value chains associated with natural endogenous resources.</li> </ul>
<b>3) Mobilisation of technologies for quality life</b>	<ul style="list-style-type: none"> <li><b>3.a)</b> Development of innovative preventive health actions and systems</li> <li><b>3.b)</b> Development of innovative actions and systems that facilitate early diagnosis in health</li> <li><b>3.c)</b> Development of new treatments and therapies (e.g. cellular, genetic, biological, pharmacological, regenerative)</li> <li><b>3.d)</b> Development of innovative actions and systems that promote active and healthy ageing, conducive to independent living, that run through the different care networks (health care and social support)</li> <li><b>3.e)</b> The adoption of platforms to cultivate interoperability between systems, enhancers of citizen-centred solutions</li> <li><b>3.f)</b> Promotion of actions to reinforce the commitment to Health and Wellness Tourism</li> </ul>
<b>4) Promotion of territorial innovation</b>	<ul style="list-style-type: none"> <li><b>4.a)</b> Promotion and streamlining of innovation projects anchored in the territory</li> <li><b>4.b)</b> Promotion of social innovation initiatives</li> <li><b>4.c)</b> Development of innovative proposals for the qualification of tourism in the Centro Region</li> </ul>

**Table 4 – Centro RIS3' Specific Objectives and Lines of Actions**

It is important to underline that the lines of action established were not the result of a top-down process. On the contrary, the lines of action were defined within four working groups (one working group for each specific objective) that were open to everyone and coordinated by external experts. These experts translated the different suggestions into a coherent proposal and worked together with CCDRC team in a strategic level.

Another important note is that these working groups were not active just in the beginning of the process. They met and engaged throughout the years, to allow some adjustments in Centro RIS3, taking into account the changes and developments of the regional innovation system over the years.

In the image below we can have an overview of Centro RIS3' design and all its components.

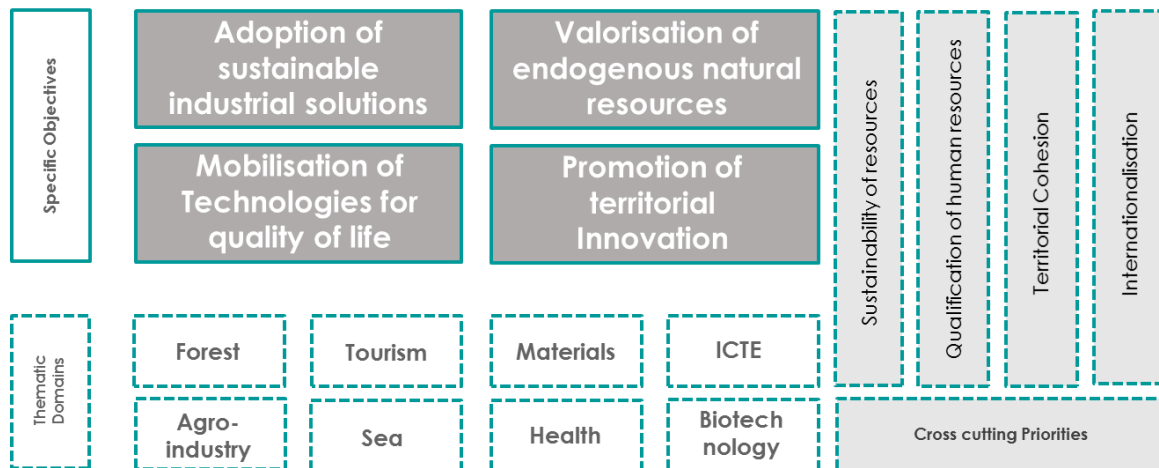


Figure 2 – Centro RIS3

Although there are several components, it is quite simple to operationalise. For instance, when evaluating the alignment of a project with Centro RIS3 **the first thing that is done (and the most important one) is to analyse if a project is contributing to at least one of the lines of action established** within the specific objectives. If it is, then the project is considered aligned with Centro RIS3.

Additionally, **a second analysis is carried out to assess the degree of alignment with Centro RIS3**. In practice, this will determine if the project will be scored with 3,50 or 5,00 in this evaluation criterion<sup>51</sup>. Therefore, for a project to be considered strongly aligned with Centro RIS3, besides contributing to at least one of the lines of action, it will also have to comply with at least two of the following three requirements:

- 1- To be aligned with, at least, one thematic domain or cross-cutting priority.
- 2- To contribute in a very clear and differentiating way to the regional economy and/or to the regional innovation ecosystem.
- 3- To produce a spill-over effect into the value chains or a dissemination effect in the region.

About the **governance model** of Centro RIS3 it was thought to ensure the involvement and participation in different ways of the regional stakeholders, being composed by eight governance bodies.

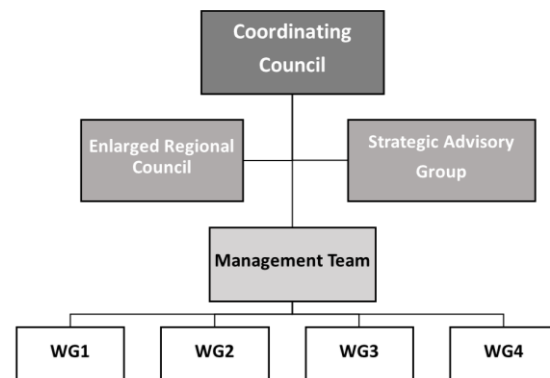


Figure 3 – Centro RIS3' Governance model

<sup>51</sup> The evaluation criteria are: A – quality of the project; B – impact of the project in the competitiveness of the company; C – contribute of the project for the economy; D – contribute of the project for the regional convergence (alignment with RIS3).

**Enlarged Regional Council:** acts as a Forum for the Regional Research and Innovation System and is responsible for validating the entire process, providing inputs, keeping track of the documents that are produced and making key strategic decisions throughout the exercise.

**Coordinating Council:** led by the CCDRC and comprising a group of national and regional relevant bodies that assume the management of the development and monitoring works of Centro RIS3.

**Strategic Advisory Group:** composed by persons of recognised merit who are involved in strategic thinking about the region and/or smart specialisation and who can make a valuable contribution to the process.

**Management Team:** made up of members of the CCDRC (with executive functions) and of the external coordinators of the thematic working groups. This team is responsible for streamlining the work, organising meetings, producing documents and mobilising the necessary resources for all this to happen.

**Thematic working groups:** they are "spaces of entrepreneurial discovery" *per excellence*. Within these groups, the relevant actors in each area work together, seeking to stimulate innovation and internationalisation, cooperation and networking. There are four working groups, one by each specific objective established in Centro RIS3.

One important point that must be underlined is the **multi-level governance system of the multilevel national strategy**. A Coordinating Council was established to assure this multi-level governance. However, this body only met twice (back in 2015 and in 2017). Although the collaborative work among national agencies and the regions has not been that efficient, the existence of two national networks, created to operationalise some instruments of Portugal 2020 (the partnership agreement between Portugal and the European Commission), has allowed a certain level of coordination between all the current smart specialisation strategies in what concerns the implementation of Thematic Objectives 1 and 3. These are the **Incentives Schemes Network and the Science Network** - that gather representatives of all Regional Operational Programmes – and that will be better explained further on in this report (in the policy instrument governance chapter, “Centro 2020 – TO1 and TO3 – Governance model”).

Presently, and acknowledging that this coordination should improve, the entity responsible for Coordinating the National Smart Specialisation Strategy (ANI - National Innovation Agency) has created a working group where all the regions and relevant national entities meet to discuss and coordinate the revision process of all the existing RIS3 (the national and regional ones). Even though this working group has a rather informal structure, it assures a good level of communication and exchange of practices and ideas, besides allowing the harmonisation of concepts and timeframes.

Moreover, we must stress that in Centro, with the existing RIS3 governance model, the participation of the relevant national stakeholders was always assured. Additionally, with the creation of the national

working group and the recognition of the importance of an inter-regional cooperation and harmonisation, invitations (to open Centro RIS3 meetings) started to be sent to representatives of all the other Portuguese regional RIS3.

Finally, we should add that **the revision process of Centro RIS3 is ongoing** and for that effect, in October of 2019 an online survey was launched to regional stakeholders to assess the adequacy of the current Centro RIS3' design. The results of this survey were presented in a meeting that occurred on the 31<sup>st</sup> of that month. This was a completely open meeting that counted with the participation of 132 regional and national stakeholders. This meeting was followed by four other meetings, this time organised by working group, aiming at discussing the present and future lines of action of Centro RIS3. These meetings occurred between January and February of 2020 and registered overall 354 participations. The contributions received in these meetings are now being taken into consideration. Moreover, it should be taken into consideration that this revision process will have to recognise the fact that COVID-19 will impact the regional reality (economically and socially). Thus, the future regional Smart Specialisation Strategy will have to meet the new challenges in order to tackle them in an efficient way.

#### 4. The policy instrument – Centro 2020

Before starting this section, it is important to remind that Centro Region is an administrative region, and not a political one, **not having an independent regional budget**. Thus, CCDRC is dependent, for all its activities on funding provided by the central Portuguese Government. Without a doubt, this has the effect of reducing the level of flexibility over the range of initiatives that the region can promote and fund at the regional level. Nevertheless, CCDRC manages the **Regional Operational Programme of Centro (Centro 2020)** and works to provide its regional stakeholders with tools that can help them to succeed at the regional, national and European level.

With all this in mind, the policy instrument chosen by Centro Region to be improved in this project is **Centro 2020**, which is managed, as mentioned before, by CCDRC. Taking into account that the main objective of this Interreg Europe project is to improve the management and implementation of Structural Funds Programmes to ensure a better and more efficient delivery of R&D&i policies, with a special focus on the Smart Specialisation Strategies, Centro will concentrate its work on Thematic Objective (TO) 1 and TO3, as in Portugal they are the main ones used to implement and operationalise the Research and Innovation Smart Specialisation Strategies (RIS3).



## 4.1. Overall description of the policy instrument

Before starting to describe Centro 2020, it is important to refer that, although Centro only manages one programme based on funds allocated to Portugal by the EU (within the Cohesion Policy), **all regional stakeholders benefit from funding allocated by the EU to Portugal (within the Cohesion Policy) that are managed at the national level.** Thus, to better understand Centro 2020 (the way it is managed and all the funds available to regional stakeholders) it is necessary to understand how **Portugal 2020** (the Partnership Agreement between Portugal and the European Commission) is managed and operationalised.

### 4.1.1. Portugal 2020

The partnership agreement between Portugal and the European Commission, called Portugal 2020, was adopted to apply the principles of the Europe 2020 strategy in Portugal and to focus on the economic, social, environmental and territorial development policy that should stimulate smart, sustainable and inclusive growth and job creation in Portugal for the 2014-2020 period<sup>52</sup>.

The adoption of the Economic and Financial Adjustment Plan by Portugal since 2011 had negative social consequences and asymmetric impacts on the development of the different regions. Public policies, in particular those co-funded by EU funds, should, therefore, promote growth and employment, with a view to reduce poverty and correct the imbalances<sup>53</sup>.

The programming and implementation of Portugal 2020 was organised in four thematic areas: i) competitiveness and internationalisation; ii) social inclusion and employment; iii) human capital; iv) sustainability and efficiency in the use of resources. The agreement also considered transversal domains related to public administration reform and an integrated territorial approach.

This approach resulted from the identification of the main constraints and opportunities offered by each of these areas to better target and prioritise the support provided by the European Structural and Investment Funds (ESIF) for the period 2014-2020. Thus, the Partnership Agreement between Portugal and the European Commission covers five funds: the European Regional Development Fund (ERDF), the Cohesion Fund (CF), the European Social Fund (ESF), the European Agricultural Fund for Rural Development (EAFRD) and the European Maritime and Fisheries Fund (EMFF).

<sup>52</sup><https://ec.europa.eu/growth/tools-databases/regional-innovation-monitor/policy-document/continente/portugal-2020-partnership-agreement-2014-2020-0>

<sup>53</sup><https://ec.europa.eu/growth/tools-databases/regional-innovation-monitor/policy-document/continente/portugal-2020-partnership-agreement-2014-2020-0>



The expected results established within Portugal 2020 are:

- **Intelligent growth:**
  - R&D expenditure in % of GDP: between 2.7 and 3.3% (1.5% in 2013)
  - Early school leaving: 10% (19.2% in 2013)
  - Tertiary or equivalent education completed by 30-34 years: 40% (29.2% in 2013)
- **Inclusive growth:**
  - Employment rate for the population aged 20-64: 75% (65.6% in 2013)
  - Reducing the number of people at risk of poverty or exclusion: -200 000
- **Sustainable growth:**
  - Share of renewable energy in gross final energy consumption: 31% (24.6% in 2013)

To achieve the expected results, Portugal is benefiting from a €25.860 million until 2020, including €321,5 million for the Youth Employment Initiative (YEI), €129 million for territorial cooperation and €115.7 million representing the special allocation for the outermost regions<sup>54</sup>. From the €25.860 million, 41,7% is ERDF, 29,4% ESF, 11,1% CF, 15,8% EARDF and 1,5% EMFF.

The Partnership Agreement is composed by 11 Thematic Objectives<sup>55</sup> and 16 Operational Programmes (OP), according to the table below.

	Name of the Programme	Thematic Objectives covered <sup>56</sup>	Allocated Fund (€)
<b>4 Thematic Operational Programmes</b>	OP Competitiveness & Internationalization	TO 1,2,3,7,8,11	4.413.930.409 (ERDF, ESF, CF)
	OP Social Cohesion & Employment	TO 8 and 9	2.130.180.734 (ESF - including the YEI specific allocation)
	OP Human Capital	TO 10	3.095.832.100 (ESF)
	OP Sustainable & Efficient Use of Resources	TO 4,5 and 6	2.252.742.164 (CF)
<b>7 Regional Operational Programmes</b>	OP Regional Norte	TO 1,3,4,6,8,9,10 and 11	3.378.770.731 (ERDF, ESF)
	OP Regional Centro	TO 1,3,4,6,7,8,9,10 and 11	2.155.031.031 (ERDF, ESF)
	OP Regional Alentejo	TO 1,2,3,4,5,6,7,8,9,10 and 11	1.082.944.371 (ERDF, ESF)
	OP Regional Lisboa	TO 1,3,4,6,8,9 and 10	833.334.547 (ERDF, ESF)

<sup>54</sup> Autonomous Region of Azores and Autonomous Regions of Madeira.

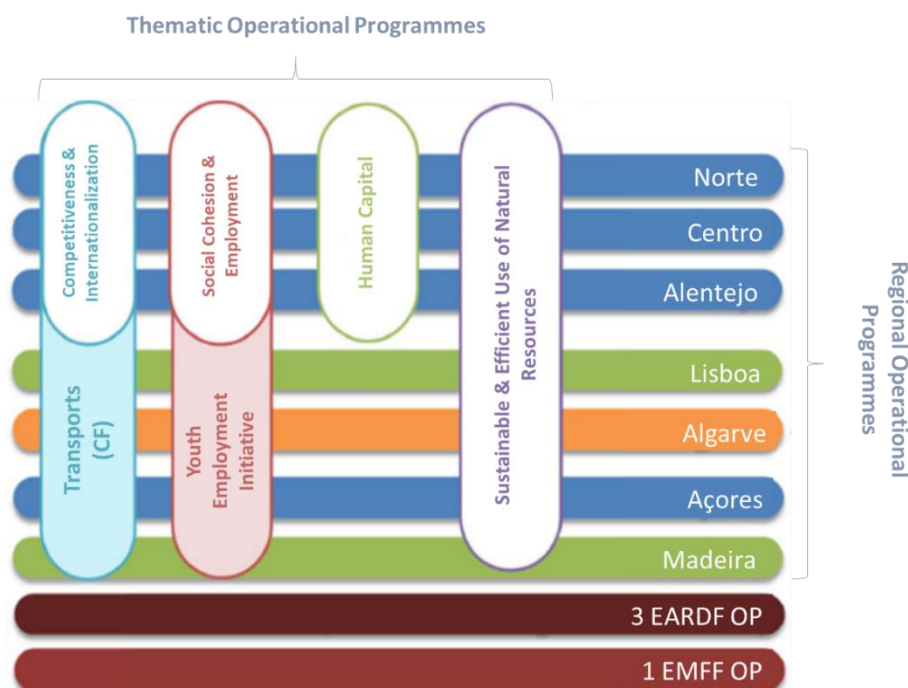
<sup>55</sup> TO1 - Strengthening research, technological development and innovation; TO2 - Improving access to ICT as well as its use and quality; TO3 - Reinforcing the competitiveness of SMEs; TO4 - Support for the transition to a low-carbon economy in all sectors; TO5 - Promoting adaptation to climate change and risk prevention and management; TO6 - Preservation and protection of the environment and promotion of resource efficiency; TO7 - Promoting sustainable transport and eliminating bottlenecks in major network infrastructures; TO8 - Promoting sustainability and quality of employment and supporting worker mobility; TO9 - Promoting social inclusion and combating poverty and discrimination; TO10 - Investments in education, training and vocational training for skills acquisition and lifelong learning; TO11 - Strengthening the institutional capacity of public authorities and stakeholders and the efficiency of public administration.

<sup>56</sup> This is the updated data available after some reprogramming (except for the RDPs, for which we have the initial information). It is important to be aware that if any other reprogramming occurs (which most probably will happen in the context of the COVID19 crisis) this information will change.

	OP Regional Algarve	TO 1,3,4,6,8,9,10 and 11	318.676.488 (ERDF, ESF)
	OP Açores	TO 1,2,3,4,5,6,7,8,9,10 and 11	1.139.752.011 (ERDF, ESF)
	OP Madeira	TO 1,3,4,6,8,9,10 and 11	403.347.728 (ERDF, ESF)
<b>3 Rural Development Programmes</b>	RDP Mainland	TO 3,4,5,6,8 and 9	3.583.056.823 (EARDF)
	RDP Açores	TO 3,4,5,6,8 and 9	295.282.051 (EARDF)
	RDP Madeira	TO 3,4,5,6,8 and 9	179.449.500 (EARDF)
<b>1 Operational Programme for Fisheries and the Sea</b>	OP for Fisheries and Sea	TO 3,4,6 and 8	392.485.464 (EMFF)
<b>1 Operational Programme for Technical Assistance</b>	OP TA	NA	138.000.000 (ERDF)

**Table 5** – Identification of Programmes from Portugal 2020 (its TOs and allocated fund)

Considering, on the one hand, the thematic programming and, on the other hand, the eligibility criteria from the different regions<sup>57</sup>, the operational structure of Portugal 2020 is the one represented in the image below.



**Figure 4** – Operational Structure of Portugal 2020

Source: [www.portugal2020.pt](http://www.portugal2020.pt)

<sup>57</sup> In terms of ESIF eligibility, the seven Portuguese regions are divided in:

**Less developed regions** (GDP *per capita* < 75% EU average): Norte, Centro, Alentejo and R.A. Açores. Cofounding rate: 85%

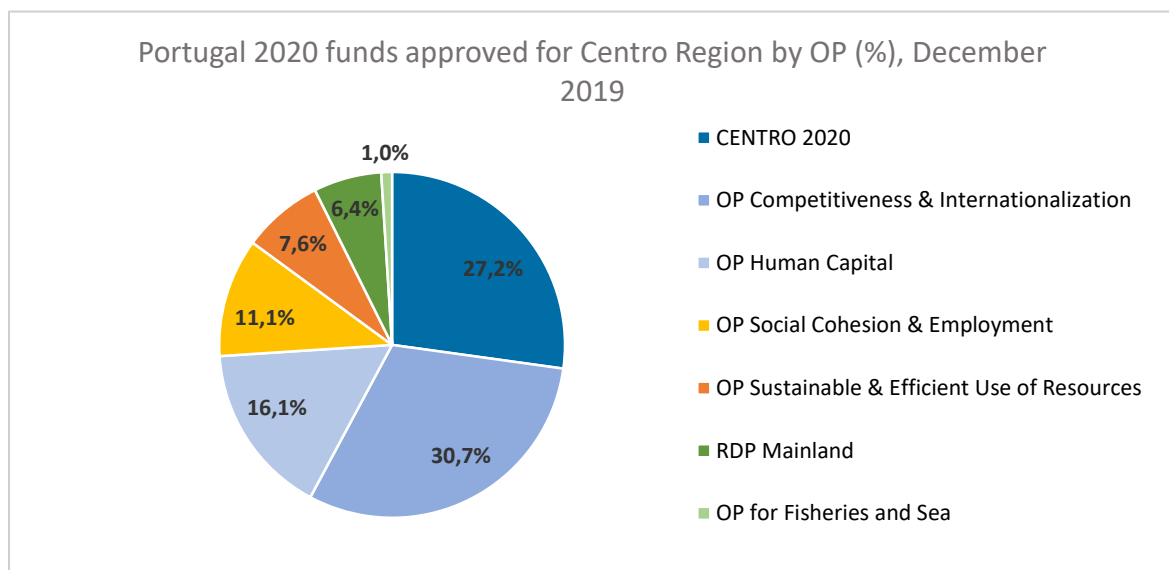
**Transition regions** (GDP *per capita* between 75% and 90%): Algarve. Cofounding rate: 80%

**More developed regions** (GDP *per capita* > 90%): Lisboa and Madeira. Cofounding rate: 50% (Lisboa) and 85% (Madeira)

Less developed regions have access to more Programmes than the transition and more developed regions.

Considering this, Centro Region stakeholders are eligible (on a competitive basis with those from other regions) to apply for funding from, apart the ROP, the four national thematic OPs, the Rural Development Programme (for the mainland) and the Programme for the European Maritime and Fisheries Fund.

By December 2019, funds to the value of **€6.000 million had been approved for Centro Region**, to support €9.200 million of investment in the region. The €6.000 million absorbed by Centro represent 25,8% of the total amount allocated to Portugal 2020 and **only 27.2% of this value was from the Regional Operational Programme<sup>58</sup> (ROP)**.



**Chart 5 – Funding approved for Centro Region by OP (%)**

Source: Centro de Portugal – Boletim Trimestral (CCDRC)

#### 4.1.2. Centro 2020

The Regional Operational Programme of Centro (also called Centro 2020) is the policy instrument chosen by CCDRC to be improved within this project. Centro 2020 was created for the period 2014-2020 and it was established in the Partnership Agreement between Portugal and the EU, thus, being under its regulatory framework and contributing to its expected results.

The **main goal** of the ROP is to promote a knowledge economy, intensifying the knowledge transfer between the scientific and technological system and the regional economic tissue, and increasing the productivity of enterprises, capacitating them for exports. Additionally, it is also objective of the Programme to qualify human capital and to promote its insertion in the market labour, contributing to companies and their competitiveness and to valorise regional resources with an economic potential,

<sup>58</sup> Centro de Portugal – Boletim Trimestral, n.º45 (information reporting on the fourth trimester of 2019).

assuring a sustainable and respectable use of what they represent for the coming generations. Centro 2020 also intends to pay particular attention to people, communities and to the more disadvantaged territories: promoting the educational success and fighting the early school leaving; supporting the access to employment; contributing to an active inclusion of elderly people; revitalizing the urban spaces and communities of the rural territories and the low-density spaces.<sup>59</sup>

All these objectives were translated into specific numbers, being the ambition of Centro to reach the following regional targets<sup>60</sup>, by 2020:

- To be an Innovation Follower, accordingly to the Regional Innovation Scoreboard<sup>61</sup>.
- To represent 20% of the national GDP.
- To decrease in 10% the territorial asymmetries.
- To have 40% of the young population with Higher Education.
- To have an unemployment rate lower than 70% of the national average.

To be able to fulfil these ambitions Centro's ROP has available about **€2.155 million** from EU funds (€1.751 million are from ERDF and €404 million from ESF) that were divided into 10 priority axes, **covering nine of the 11 European Thematic Objectives**, 19 of the 38 ERDF Investment Priorities<sup>62</sup> and 10 of the ESF Investment Priorities<sup>63</sup>.

Foreseen budget per year and type of fund	ERDF (€)	ESF (€)	Total (€)
<b>2014</b>	235.588.219	54.275.252	289.863.471
<b>2015</b>	240.304.78	55.361.864	295.666.645
<b>2016</b>	245.115.096	56.470.072	301.585.168
<b>2017</b>	250.020.672	57.600.229	307.620.901
<b>2018</b>	255.024.275	58.752.967	313.777.242
<b>2019</b>	260.127.848	59.928.738	320.056.586
<b>2020</b>	265.333.088	61.127.930	326.461.018
<b>Total (€)</b>	<b>1.751.513.97</b>	<b>403.517.052</b>	<b>2.155.031.031</b>

**Table 6** – Foreseen budget per year and type of fund in Centro 2020

<sup>59</sup> Leaflet of Centro 2020, Programa Operacional Regional do Centro, 2014 - 2020

<sup>60</sup> Programa Operacional Regional do Centro.

<sup>61</sup> In 2014, Centro was classified as Moderate Innovator.

<sup>62</sup> See Article 5 of REGULATION (EU) N° 1301/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 December 2013 on the European Regional Development Fund and on specific provisions concerning the Investment for growth and jobs goal and repealing Regulation (EC) No 1080/2006

<sup>63</sup> REGULATION (EU) No 1304/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 December 2013 on the European Social Fund and repealing Council Regulation (EC) No 1081/2006

Priority Axis	Amount Allocated by Fund	Corresponding Thematic Objective	Corresponding Investment Priorities
<b>Axis 1 – Research, development and innovation</b>	€186 million ERDF	TO 1 - Strengthening research, technological development and innovation	ERDF IP 1a) ERDF IP 1b)
<b>Axis 2 - Competitiveness and internationalisation of regional economy</b>	€642 million ERDF	TO 3 - Enhancing the competitiveness of small and medium-sized enterprises (SMEs)	ERDF IP 3a) ERDF IP 3b) ERDF IP 3C)
<b>Axis 3 - Human potential development</b>	€327 million €128 million ERDF + €199 million ESF	TO 10 - Investing in education, training and vocational training for skills and lifelong learning	ERDF IP 10a) ESF IP 10i) ESF IP 10ii) ESF IP 10iv)
<b>Axis 4 - Employability</b>	€191 million €66 million ERDF + €125 million ESF	TO 8 - Promoting sustainable and quality employment and supporting labour mobility	ERDF IP 8a) ERDF IP 8b) ESF IP 10i) ESF IP 10iii) ESF IP 10v)
<b>Axis 5 - Social and territorial cohesion</b>	€196 million €102 million ERDF + €194 million ESF	TO 9 - Promoting social inclusion, combating poverty and any discrimination	ERDF IP 9a) ERDF IP 9d) ESF IP 10i) ESF IP 10vi)
<b>Axis 6 - Resources sustainability</b>	€111 million ERDF	TO 4 - Supporting the shift towards a low-carbon economy in all sectors	ERDF IP 4b) ERDF IP 4c) ERDF IP 4e)
<b>Axis 7 - Sustainability of the regional territories</b>	€174 million ERDF	TO 6 - Preserving and protecting the environment and promoting resource efficiency	ERDF IP 6c) ERDF IP 6e)
<b>Axis 8 - Institutional capacity building of regional entities</b>	€49 million €24 million ERDF + €25 million ESF	TO 2 - Enhancing access to, and use and quality of information and communication technologies (ICT) TO 11 - Enhancing institutional capacity of public authorities and stakeholders and efficient public administration	ERDF IP 2c) ESF IP 11i) ESF IP 11ii)
<b>Axis 9 - Urban network</b>	€225 million ERDF	TO4 - Supporting the shift towards a low-carbon economy in all sectors TO6 - Preserving and protecting the environment and promoting resource efficiency TO9 - Promoting social inclusion, combating poverty and any discrimination	ERDF IP 4e) ERDF IP 6e) ERDF IP 9b)
<b>Axis 10 - Technical assistance</b>	€54 million ERDF	NA	NA

Table 7 – Centro 2020' priority axis (amount allocated, corresponding thematic objectives and investment priorities)

## 4.2. Centro 2020 - TO1 and TO3 - Overview

As we saw before, the main objective of this project is to improve the management and implementation of Structural Funds Programmes to ensure a better and more efficient delivery of R&D&i policies, with a special focus on the Smart Specialisation Strategies. Considering this, it is important to start this section of the report explaining that, **in Portugal, RIS3 is used in TO1 (Strengthening research, technological development and innovation), TO3 (Enhancing the competitiveness of small and medium-sized enterprises), TO8 (Promoting sustainable and quality employment and supporting labour mobility) and TO10 (Investing in education, training and vocational training for skills and lifelong learning).**

Focusing on **TO1** and **TO3**, the relevant figures are presented below. TO1 corresponds to Priority Axis 1 (Research, Development and Innovation) and has allocated close to **€186 million of ERDF**, corresponding to 8,63% of the Programme, distributed through two Investment Priorities. At the end of 2018, the **execution rate** of this TO was around **15%**.

	Amount allocated (€)	Applications received (n.º)	Applications received (€)	Applications approved (n.º)	Applications approved (€)
IP 1.a)	€77,5	735	€169	131	€44,3
IP 1.b)	€108,9	852	€395	264	€71,4
<b>Total – TO1</b>	<b>€185,9</b>	<b>1.587</b>	<b>€564</b>	<b>395</b>	<b>€115,7</b>
<b>Total – TO1 Commitment</b>	62,24%				
<b>Total – TO1 execution</b>	15,11%				

**Table 8** – Relevant figures from Centro 2020' TO1

**TO3** corresponds to Priority Axis 2 (Competitiveness and internationalisation of regional economy) of Centro 2020 and has allocated around **€642 million** of ERDF, representing around 29,80% of the total amount of the Programme, and distributed through three Investment Priorities. The high value assigned to TO3 was justified with the need to concentrate resources to guarantee higher levels of competitiveness, productivity and growth in Portugal and in Centro Region, in particular<sup>64</sup>. At the end of 2018, the **execution rate** of this TO was around **44,22%**.

	Amount allocated (€)	Applications received (n.º)	Applications received (€)	Applications approved (n.º)	Applications approved (€)
IP 3.a)	€37,9	818	€221,9	294	€34,9
IP 3.b)	€109,2	1.679	€531,9	962	€109,2

<sup>64</sup> Regional Operation Programme of Centro – text of the Programme.

IP 3.c)	€495,2	3.753	€1868,6	1255	€527,7
Total – TO3	€642,3	6.250	€2.622,4	2.511	€671,8
Total – TO3 Commitment	104,59%				
Total – TO3 execution	44,22%				

**Table 9** – Relevant figures from Centro 2020' TO3

Together, **TO 1 and TO3 represent 38,43%** of the total value allocated to Centro 2020.

In Annex 1 it is possible to find some more information about each one of these Investment Priorities and their specific objectives.

### 4.3. Centro 2020 – TO1 and TO3 – Governance model

As already mentioned before on this report, Centro 2020, as well as all other Portuguese thematic and regional operational programmes, were created for the period 2014-2020 and were established in the Partnership Agreement between Portugal and the EU (Portugal 2020), hence, being under its regulatory framework. One of the consequences of this model is that **the governance system is the same for all Portuguese Programmes funded by European Structural Investment Funds (ESIF)<sup>65</sup>** and it was established by Decree Law<sup>66</sup>.

The governance model established foresees, among other aspects, the following innovations (in relation to the previous programming periods):

- The establishment of a common governance structure for ESIF, assuring better conditions of equity and transparency.
- The multi-level governance, promoting articulation between the central, regional and local governance with a common national coordination.
- The simplification of access to funding for beneficiaries and the reduction of administrative costs.
- The pluri-fund support, allowing for the achievement of a priority or objective in which more than one type of ESIF can be convened.
- The creation of a one-stop-shop designated “Desk Portugal 2020”, where project promoters can submit and consult, in the same page, all their applications and approved projects (no matter the funding Programme).

<sup>65</sup> The only difference existing is that the entities responsible for some management activities for ERDF, SF, CF are not the same entities responsible for that same activities for EARDF and EMFF.

<sup>66</sup> Decree law n. ° 137/2014



In a brief and general way, we can say that the Portuguese model has **two levels of governance: the political and the technical one.**

As for the first level of governance, the body responsible for the **political coordination** is the Inter-ministerial Coordinating Commission (**CIC**). CIC has the mission of assuring the coherent application of ESIF and it is composed by government members of each ministerial area, being coordinated by the minister responsible for the regional development. Among others, CIC has the following competences:

- Coordinating the policy and global strategy of Portugal 2020.
- Approving the annual reports of strategic, operational and financial monitoring of Portugal 2020.
- Approving the global evaluation plan of Portugal 2020.
- Approving the global communication plan of Portugal 2020.
- Approving the plan of calls elaborated by the managing authorities of each operational programme.
- Homologating the approval decisions of the managing authorities relative to projects which eligible costs are higher than €25 million.

About the **technical level of governance**, for ERDF, ESF and CF, this level is coordinated by the national Development and Cohesion Agency (**AD&C**). Nevertheless, it is important to underline that each programme has its own managing authority. The monitoring and evaluation of the programmes is coordinated by the same entity (AD&C) and the payments to beneficiaries are also made by the same entity (AD&C). Payments are made according to the requests made by the managing authorities. The audit of the management systems of all OPs (including EARDF and EMFF) is done by the same national entity (General Finances Inspection).

Even though this is all important information about the governance system of Portugal 2020 and, therefore, of Centro 2020, the most critical point of this model, regarding the scope and context of this report, is the existence of a number of different national networks to assure the **functional articulation** of the system. Meaning, to assure that the system is coherent and its agents capacitated through networking. Concerning this report, the most important networks foreseen in the Decree Law<sup>67</sup>, that establishes the governance model of Portugal 2020, are the **Science Network** and the **Incentives Schemes Network** because they are responsible for coordinating the implementation of TO1 and TO3.

The **Science Network manages TO1 calls for research, development and innovation (in the scientific dimension)** and it is coordinated by the President of the national Foundation for Science and Technology (FCT). The network also incorporates the President of the (national) Operational Programme of Competitiveness & Internationalisation (Compete 2020), the President of the National Innovation Agency (ANI) and the Presidents of each one of the Regional Operational of Programmes of the mainland.

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<sup>67</sup> Decree law n. ° 137/2014



The **Incentives Scheme Network manages all TO3 calls and TO1 calls for companies** and, again, it is coordinated by the President Compete 2020. This network also incorporates the Presidents of each one of the Regional Operational of Programmes of the mainland, the representative of each intermediate body and of the Development Financial Institution, as well as the General Director of the General-Direction of the European Affairs.

Thereby, **in Portugal, the management of TO1 and TO3 is coordinated.** Meaning that **most TO1 and TO3 calls are jointly launched. Thus, when a call is launched all Regional Operational Programmes, as well as Compete 2020, decide if and how much money to put into it, contributing to the overall budget of the call.** The criteria used to decide which Programme will fund each project was established in the Specific Regulation Portuguese of the Competitiveness and Internationalisation Domains<sup>68</sup> (RECI) and it is published in all calls (that in specific circumstances might establish some more detailed rules).

This does not mean that the managing authority of an Operational Programme, like Centro 2020, is forbidden to launch a TO1 or TO3 call, independent from all other OPs. This means that all decisions related to these TOs are discussed in these networks and should be highly consensual. When the MA of an Operational Programme wants to open a new and different call, that is more unusual and that seeks to address specific needs (e.g. when the MAs of the ROPs want to target regional stakeholders needs), there is a very complicated and discouraging process that hampers this possibility.

**Main advantage of this centralised method:** Applicants do not need to worry about which programme they should apply for. Applicants apply to a common call and then the system will direct the application to the right entities to evaluate and fund.

**Main disadvantage of this centralised method:** Regional Operational Programmes have high difficulties in managing these TOs targeting the regional specificities.

Another important note that needs to be taken into consideration about the governance model is that **calls to be launched over the year are scheduled**, being this agenda **approved by the CIC**. The schedule is not compulsory but if any Operational Programme wants to launch a call not foreseen, it needs to be approved by the CIC.

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<sup>68</sup> Annex 5 of RECI

#### 4.4. Centro 2020 - TO1 and TO3 - Policy mix and Implementation methods

In Portugal, **the instruments available for TO1 and TO3 were established at the national level** and listed in the Specific Portuguese Regulation of the Competitiveness and Internationalisation Domains (RECI). RECI also established all the details about each one of the instruments foreseen and their typologies of investments (e.g. specific objectives, sectorial scope, beneficiaries, typologies of projects, procedures for assessment and selection of projects, assessment criteria, form of the support given and funding rate).

The policy mix established in RECI, for TO 1 and TO3 is the one presented in the chart below.

Instrument	Typologies and areas of investments	Thematic Objective	Investment Priority
<b>Incentives System for Enterprises</b>	<b>Entrepreneurial Innovation and Entrepreneurship</b> <u>Structured in three areas:</u> - Productive Innovation for non-SMEs - Productive Innovation for SMEs - Qualified and Creative Entrepreneurship	TO1 TO3 TO3	1.b) 3.c) 3.a)
	<b>SMEs' qualification and internationalisation</b> <u>Structured in two areas:</u> - SMEs' internationalisation - SMEs' qualification	TO3 TO3	3.b) 3.c)
	<b>Research and Technological Development</b>	TO1	1.a)
<b>Support System for Scientific and Technological Research</b>	<b>Support System for Scientific and Technological Research</b>	TO1	1.a)
<b>Support System for Collective Actions</b>	<b>Support System for Collective Actions</b> <u>Four specific objectives:</u> – Scientific and Technological Knowledge Transfer; – Promotion of the Entrepreneurial Spirit; – Internationalisation; – Qualification	TO1	1.b)
		TO3	3.a)
		TO3	3.b)
		TO3	3.c)

**Table 10** – TO1 and TO3' policy-mix

The **Incentives System for Enterprises** is an instrument to directly support companies in their innovation, research, internationalisation and qualification activities. Other types of entities can also be partners of some projects (depending on the typology of investment), as long as the leading partner is an enterprise. For instance, in the Research and Technological Development typology of investment, a company may apply with an individual project or in co-promotion with a non-business entity from the Research and Innovation system. More information about this instrument and each one of its typologies

and areas of investment (specific objective, typologies of projects, calls already launched, beneficiaries, funding boundary criteria, form of support given and funding rate) can be found in Annex 2.

The **Support System for Scientific and Technological Research** aims at increasing the scientific and technological production in strategic domains aligned with RIS3, involving fundamental and applied research activities, developed by non-business entities from the Research and Innovation system, to boost an economy based on knowledge of high added value, favouring excellence, cooperation and internationalisation. More information about this instrument (specific objective, typologies of projects, calls already launched, beneficiaries, funding boundary criteria, form of support given and funding rate) can be found in Annex 3.

The **Support System for Collective Actions** is an instrument of indirect support to companies that aims at improving and reinforcing networks, as well as other forms of partnership and cooperation, in the scope of collective efficiency strategies to create or improve the existing immaterial factors of competitiveness with a collective nature. The main beneficiaries of this instrument are business associations, non-business entities from the R&I system, public entities and agencies and non-profit entities aiming at fulfilling public interest objectives. The only projects that can be approved within this instrument are the ones that, cumulatively, assure the following conditions: demonstrate a collective nature; guarantee the wide publication of its results; assure the free and universal availability of all the goods and services produced. More information about this instrument (specific objective, typologies of projects, calls already launched, beneficiaries, funding boundary criteria, form of support given and funding rate) can be found in Annex 4.

Apart from these, it is important to notice that a new kind of instrument (not foreseen in RECI) is arising as, during the last year, some regions have been able to launch some calls, independently (unlike the big majority of TO1 and TO3 calls), to support Technological Infrastructures. This instrument seeks to (re)qualify and/ or create different typologies of research and innovation infrastructures (namely, Technological Centres, Technological Valorisation and Transfer Centres, Science and Innovation Parks and Incubation Centres of Technological Basis), oriented to the promotion of knowledge and technological flows between the Scientific and Technological System, companies and the national and international markets. The instrument is commonly being designated as “**Support to Technological Infrastructures**”. Until this moment, just in Centro 2020, three calls have already been launched.

Instrument	Calls launched by Centro 2020	Thematic Objective	Investment Priority
<b>Support to Technological Infrastructures</b>	<p><b>Creative Science Park Invitation</b> The objective of this call was to allow the conclusion of the Creative Science Park.</p>	TO1	1.a)
	<p><b>Incubation Centres of Technological Basis</b> This call was exclusively for the Incubation Centres of Technological Basis inserted in the regional roadmap of technological infrastructures. The objective was to support the construction and acquisition of equipment.</p>	TO3	3.a)
	<p><b>Technological Centres, Technological Valorisation and Transfer Centres, Science and Innovation Parks</b> This call was for the Technological Centres, Technological Valorisation and Transfer Centres, Science and Innovation Parks inserted in the regional roadmap of technological infrastructures. The objective was to support the construction and acquisition of equipment.</p>	TO1	1.b)

**Table 11** – Instrument “Support to Technological Infrastructures”

In addition, we should not forget that in Portugal **RIS3 is also operationalised through TO8 and TO10**. For these objectives, the policy-mix available in Centro 2020 to implement RIS3 is the one in the table below.

<b>Thematic Objective 8 - Calls launched by Centro 2020 to implement RIS3</b>
Employment of highly qualified human resources
<b>Thematic Objective 10 - Calls launched by Centro 2020 to implement RIS3</b>
Doctoral and Post-doctoral Programmes
Technological Specialisation Courses
Higher Technical Professional Courses
Higher Technical Professional Courses – Acquisition of equipment

**Table 12** – Calls launched by Centro 2020, on TO8 and TO10, to implement RIS3

All instruments mentioned (for TO1, TO3, TO8 and T010) **are funding instruments, which means that the support given is always through the funding of project proposals.**

Another important remark to be made is the fact that RIS3 is used in different ways to assess projects, depending on the Thematic Objective.

**For TO1 calls, RIS3 is used as an admissibility criterion.** This means that if a project of a TO1 call is not aligned with RIS3 it will not go through the other criteria and it will not even be evaluated. If the project is aligned with RIS3 it will be assessed and the alignment with RIS3 will be one of the evaluation criteria (it is the regional merit of the project). **For TO3 calls, usually, RIS3 is only used as an assessment criterion** and even if the project is not aligned with RIS3 it can still be approved. However, there was already one TO3 call where RIS3 was used as an admissibility criterion<sup>69</sup>. **For the TO8 calls, launched at regional level, RIS3 was only used as assessment criteria. For TO10 calls, launched at regional level, RIS3 was always used as an admissibility and assessment criteria.**

Depending on the instrument that we are talking about, RIS3 will also have a different relative weight in the evaluation of the project. In the table below, we can see in which instruments and typologies of investments the RIS3 is, or not, used as an admissibility criterion and its relative weight in the final evaluation of a project.

Instruments and Typologies of investment		Centro RIS3		
		Admissibility criterion	Assessment criterion (% of the project evaluation)	
<b>Incentives System for Enterprises</b>	Research and Technological Development - TO1	✓	30% (it can be 20% for R&D projects at the European scale)	
	Entrepreneurial Innovation and Entrepreneurship	SMEs - TO3	✗	15% (10% in 3 calls)
		Non-SMEs - TO1	✓	
	SMEs' qualification and internationalisation	Individual projects - TO3	✗	21%
Joint projects - TO3		✗	30%	
<b>Support System for Collective Actions</b>	Internationalisation - TO3	✗	10.8%	
	Promotion of the entrepreneurial spirit - TO3	✗	10.8%	

<sup>69</sup> The call was "Support to Technological Infrastructures - Incubation Centres of Technological Basis"

	Scientific and Technological Knowledge Transfer - TO1	✓	10.8%
<b>Support System for Scientific and Technological Research</b>	Integrated programmes of SR&TD - TO1	✓	6.75%
	SR&TD - individual projects - TO1	✓	3%
	SR&TD – co-promotion projects - TO1	✓	9%
	Research Infrastructures projects - TO1	✓	10%
<b>Support to Technological Infrastructures</b>	Incubation Centres of Technological Basis - TO3	✓	15%
	Technological Centres, Technological Valorisation and Transfer Centres, Science and Innovation Parks - TO1	✓	15%
	Creative Science Park - TO1	✓	30%
<b>Employment of highly qualified human resources – TO8</b>		✗	24% or 30% (depending on the call)
<b>Doctoral and Post-doctoral Programmes – TO10</b>		✓	40%
<b>Technological Specialisation Courses (CET) – TO10</b>		✓	20%
<b>Higher Technical Professional Courses– TO10</b>		✓	15%
<b>Higher Technical Professional Courses – Acquisition of equipment – TO10</b>		✓	25%

**Table 13** – Identification of instruments and typologies of investments where Centro RIS3 is used as an admissibility criterion and its relative weight in the final evaluation of a project

**Potential beneficiaries are informed about the calls open** as, as soon as they are launched, they are published in Centro 2020 website. Nevertheless, regional stakeholders can benefit from funding from other programmes, to which the regional operational programme does not make any contribution. Being aware of this fact and that all the information was, therefore, spread throughout all the different programmes' websites, to facilitate the access to all information to regional stakeholders, CCDRC publishes **two weekly newsletters**. The first one gathers information about all calls open at national level in all programmes to which Centro stakeholders can apply for. The second newsletter gathers information about the calls open at the European level.

In any case, as was already mentioned, in the Governance model section of this report, in the personal area of the portal “Desk Portugal 2020” promoters can also have access to all calls open at the national level (for all the existing Operational Programmes).

#### 4.4.1. Remarks on the policy-mix

TO1 and TO3' policy-mix in Portugal is **extremely complete**, allowing companies to fund all their innovation and research activities. The policy-mix also supports non-business entities from the research and innovation system in the development of their scientific and technological research activities. Having

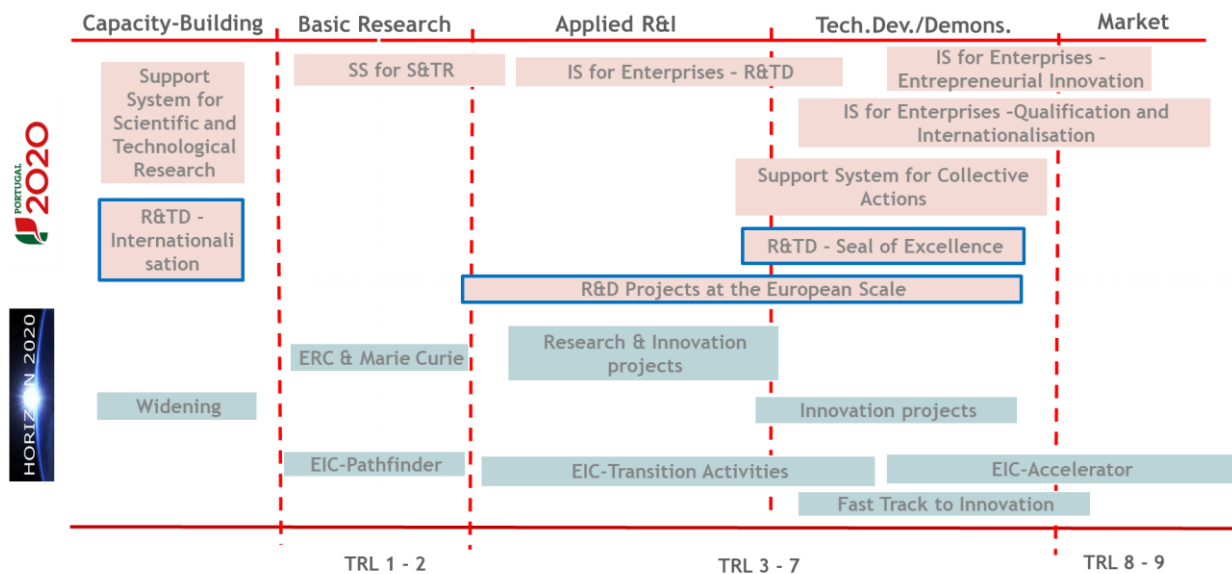
a look at the exhaustive list of calls already launched in the different instruments foreseen (and that can be found throughout Annexes 2, 3 and 4) and combining this with H2020 calls, it is self-evident that Portuguese stakeholders have a large range of tools that **covers all the innovation cycle** available.

Additionally, it is important to mention that in the last few years, in Portugal, a very interesting set of calls has been launched, allowing, even if indirectly, the **creation of synergies between funds**.

**Incentives Scheme for Enterprises - R&TD - R&D Projects at the European Scale:** It aims at co-financing the national counterpart of regional actors' participation in European R&D projects. A first call supported stakeholders participating in EUREKA, Eurostars, ERA-NET and Joint Undertakings. The second and third calls supported stakeholders participating in EUREKA and Eurostars.

**Incentives Scheme for Enterprises - R&TD - Internationalisation, Individual Projects:** It aims at supporting the participation of companies in European programmes, in particular H2020, supporting the preparation of applications. Two calls were launched.

**Incentives Scheme for Enterprises - R&TD - Individual Demonstrators, Seals of Excellence:** It aims at financing companies that applied for the European SME Instrument - Phase 2 and that did not get any funding but were highly evaluated (thus obtained a Seal of Excellence). Two calls were launched.



**Figure 5** – Instruments available in Portugal 2020 and Horizon 2020 by TRL

**Source:** National Innovation Agency

Furthermore, with the existence of calls where projects should necessarily be developed in a collaborative way, between companies and non-business entities from the R&I system, the policy-mix available **promotes cooperation** between different types of organisations, thus, enabling the transfer and valorisation of scientific knowledge and technologies.

Nevertheless, and even having all these remarkable characteristics, the fact that TO1 and TO3 are coordinated at national level, creates a **gap between the needs felt regionally and the instruments available in the policy-mix**. For instance, if Centro Region recognises the need for research activities in a certain RIS3 domain and wishes to open a dedicated call to promote and support these specific projects, this will be quite difficult. Another example is the launch of a unique call to support projects born in the context of an Entrepreneurial Discovery Process (EDP) event. Centro already organised some thematic EDP events but then they were not followed by the launch of calls designed to meet the challenges identified by participants.

Centro managed to open some thematic calls, on Thematic Objective 8<sup>70</sup>, for important regional value chains, which aimed at promoting research, innovation, qualification and internationalisation of the sector identified, gathering all the relevant regional stakeholders under the same projects. This means that for each one of the calls that will be presented below, only one project was approved, corresponding to the one with the more comprehensive and coherent list of activities foreseen and with the more representative and complete partnership. Thus, two different ERDF calls were opened on TO8, in the Investment Priority 8.b)<sup>71</sup>: one for the wine and other for the cheese value chains.

The wine project had €2,9 million of funding approved and it gathered the five wine associations of the region, the National Institute of Agricultural and Veterinarian Investigation and two regional Polytechnic Institutes. Together, the project partners contributed to the economic valorisation of an important regional natural resource – the wine (and vineyard). For this, the partnership developed a structural and complementary set of actions in the following domains of intervention: i) viticulture and winemaking; ii) certification and quality; iii) promotion and valorisation of the wine and vineyards territories. A second call to further develop this project was then launched.

The cheese project has €1,9 million of funding approved and it gathers relevant regional and national associations and clusters, regional public entities (as municipalities), two Polytechnic Institutes and two technological centres. The main objective of the partnership is to support the regional actors of this value chain in the challenges faced (from the producer of milk to the cheese consumer) to strengthen this sector. For this to be possible, the project will promote some actions related to innovation, knowledge, quality and food security within the cheese value-chain.

Apart from this, Centro 2020 has also managed to open another thematic call, very similar to the ones presented above, but this time for the agroindustry sector and, exceptionally, in Thematic Objective 1. The application approved is an €1,9 million ERDF project, which gathers one university, one polytechnic institute, one technological centre and one interface centre. The partnership will try to meet the

<sup>70</sup> TO8 - Promoting sustainability and quality of employment and supporting worker mobility.

<sup>71</sup> IP 8.b) - supporting employment-friendly growth through the development of endogenous potential as part of a territorial strategy for specific areas, including the conversion of declining industrial regions and enhancement of accessibility to, and development of, specific natural and cultural resources.



challenges that the agri-food sector of the region faces, by characterising, conserving and valuing the natural endogenous resources of low density territories, through a territorial development strategy, promoting and consolidating the collaboration between science and technology institutions, higher education and the Agri-food cluster.

These calls were launched to answer specific needs felt within differentiating domains identified in Centro RIS3. Therefore, the promotion of these calls, as well as the approval and implementation of the projects described above, were a way of operationalising Centro RIS3, by promoting research, innovation and qualification in critical regional value chains, in which these needs were clearly and collectively identified

## 5. Evaluation and monitoring

As already pointed out on this report, Centro 2020, as well as all other Portuguese Operational Programmes, is under the regulatory framework of Portugal 2020 (the partnership agreement between Portugal and the European Union). One of the benefits of this model, that was already underlined, is that the governance system, which was established by Decree Law<sup>72</sup>, is the same for all Portuguese Programmes funded by ESIF. A consequence of this common governance model is that **the monitoring and evaluation, of all the Operational Programmes existing in Portugal, is done through a global approach and, therefore, coordinated at national level.**

The national Development and Cohesion Agency (AD&C) has the competence to monitor and evaluate Portugal 2020, elaborating the annual reports and gathering the information provided by each managing authority of all the Operational Programmes. All these processes are coordinated at national level through a **Monitoring and Evaluation Network** (which creation was duly foreseen in Decree Law). This network is coordinated by AD&C and it is composed by all the technical coordinating bodies, from the governance model of Portugal 2020, and all the managing authorities of the Operational Programmes.

### 5.1. Evaluation

In Portugal there is a **Global Evaluation Plan<sup>73</sup> for the Programmes funded by ESIF**, which was established by the Monitoring and Evaluation Network, approved by the Inter-ministerial Coordinating Commission (CIC) and updated in 2019. In this evaluation plan two types of evaluation are foreseen:

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<sup>72</sup> Decree law n.º 137/2014

<sup>73</sup> <https://www.adcoesao.pt/content/o-plano-global-de-avaliacao-do-portugal-2020-pga-pt-2020>

**Process evaluation:** it is centred in the implementation of the programmes, namely the ways the public policies and the programmes are operationalised, its coverage, the access to the programme and the management practices.

**Impact evaluation:** it aims at distinguishing the effects of an intervention from the contribution of other factors and understanding the results of the programmes.

For Portugal 2020, as a whole, four impact evaluations were foreseen. These evaluations (scheduled for 2020 and 2022) have the objective of assessing the global impacts of Portugal 2020 and its contributions to the National Plan of Reforms and the Europe Strategy 2020. In any case, the list of evaluations established is flexible, being possible to exclude or to add new evaluations not foreseen at the beginning.

Until this moment, two relevant evaluations were already made, related to the previous Programming Period and its results.

- 1) **Evaluation of the impact of ESIF in the performance of Portuguese enterprises<sup>74</sup>:** the results of this evaluation proved that the impact of ESIF in Portuguese enterprises were, globally, positive, suggesting an effectiveness of the supports given through the instruments available. Some of the results showed that, in average, the companies supported spent more €39.000 in R&D than companies not supported, had more €579.000 in exports, more 8,2 employees and plus 1,6 workers with higher education<sup>75</sup>.
- 2) **Evaluation of the impact of ESIF in the knowledge transfer and valorisation dynamics<sup>76</sup>:** this evaluation has highlighted the positive results of the instruments oriented to the promotion of the scientific and knowledge production, including the production in network with high participation and international recognition, predominantly by non-business entities of the research and innovation system.

Apart from these, another impact evaluation was developed, but this time to assess the contribution of ESIF, in the previous and current Programming Periods, in the advanced training.

- 3) **Evaluation of the role of ESIF in the advanced training:** this evaluation emphasized that in eight years, between 2007 and 2015, 17.000 people completed a doctorate, whereas in the 46 previous years, between 1960 and 2006, the number of new doctorates was, in total, 14.000. From the 17.000 new doctorates 1/3 benefited from support of ESIF, indicating an essential contribution of the Funds for the implementation of Advanced Training in Portugal.

<sup>74</sup>[https://www.adcoesao.pt/sites/default/files/avaliacao/resultados\\_das\\_avaliacoes\\_pt2020/dinamiacetexecutivesummary\\_empresas.pdf](https://www.adcoesao.pt/sites/default/files/avaliacao/resultados_das_avaliacoes_pt2020/dinamiacetexecutivesummary_empresas.pdf)

<sup>75</sup> These values correspond to the differences of the average performance between companies supported and companies not supported that compounded the group of control: 3.000 companies supported; 200.000 companies not supported.

<sup>76</sup> [https://www.adcoesao.pt/sites/default/files/avaliacao/resultados\\_das\\_avaliacoes\\_pt2020/feei\\_tvc\\_sumarioexecutivo.pdf](https://www.adcoesao.pt/sites/default/files/avaliacao/resultados_das_avaliacoes_pt2020/feei_tvc_sumarioexecutivo.pdf)

Last but not least, an unplanned evaluation was, recently, carried out (and published) to assess the implementation of the National and Regional Smart Specialisation Strategies.

#### 4) Evaluation of the implementation of the National and Regional Smart Specialisation

**Strategies in Portugal:** this evaluation is especially relevant for the context of this report and it highlighted that, in Portugal, the operationalisation of the RIS3 approach, happened in a moment where the policy of R&TD and innovation was rather mature. Therefore, regional innovation systems were quite mature as well. However, it was remarked that the different regional innovation systems have diverse degrees of performance – the processes of institutional promotion and elaboration of Centro RIS3, Norte RIS3 and Lisbon RIS3, reflected a higher level of maturation. This higher maturation level seemed to have two effects: i) higher level of selectivity of projects (according to the RIS3 priorities established); ii) the systems more mature seemed to be the ones that took the most advantage of the potential of the RIS3 approach.

Another important conclusion of this report was that, in Portugal, the implementation of the national and the regional smart specialisation strategies is highly centred in the European Structural Funds. It goes even further affirming that without the ESIF contribution, the Portuguese smart specialisation strategies would have been policy instruments with a very small expression. Therefore, one **recommendation** of the evaluator was to increase the range of the policy-mix available for the implementation of the smart specialisation strategies, through a higher articulation with other national funds, programmes and policies. Two other main recommendations were the reinforcement of the monitoring process of the regional strategies and the employment and launch of RIS3 specific calls.

Three other evaluations were carried out within Portugal 2020, however, in the context of this report, they are not so relevant as the ones mentioned above.<sup>77</sup>

Centro 2020, as a Regional Operational Programme, has only **one impact evaluation foreseen** and scheduled for 2020. However, Centro 2020, as a member of the Monitoring and Evaluation Network will have to **contribute to the evaluations foreseen in the Global Plan of Evaluation**.

<sup>77</sup> Evaluation of the operationalisation of the territorial approach of Portugal 2020 in the convergence and cohesion territorial context. Evaluation of the impact of the Local Contracts of Social Development. Evaluation of the implementation, effectiveness and efficiency of the Youth Employment Initiative.

## 5.2. Monitoring

Within Portugal 2020, two different types of monitoring were established by the Monitoring and Evaluation Network:

**Strategic monitoring:** its objective is to analyse how Portugal 2020' intervention is meeting the defined priorities and producing the desired effects, seeking to identify the contribution of Portugal 2020 in the changes of the economic, social and territorial frameworks. It also should produce analysis, warnings and recommendations directed to the bodies responsible for the public policies. Annually, one report of strategic monitoring is elaborated and published by AD&C. The latest one was approved in August 2019 and it corresponds to the period 2017-2018<sup>78</sup>. The reports are supported by both, quantitative and qualitative data.

**Operational monitoring:** its objective is to analyse how the physical and financial programming and the commitments in terms of management, follow-up, control and information of the operational programmes are being met. This analysis is supported, essentially, by quantitative data and AD&C prepares and publishes, quarterly, an operational monitoring report. The latest version of this report is from March 2020<sup>79</sup>. This type of monitoring includes three domains:

- **Selection process monitoring:** it is a follow-up of all the phases that integrate the selection process of projects in a call (since the territorial scope of the call, the funds available, the selection criteria and the projects approved – in number and financial volume).
- **Execution monitoring:** it is focused on the execution of ESIF (funded approved and executed) and in the characterisation of the operations (localisation, form of funding, final beneficiaries).
- **Output and result monitoring:** it follows the direct and immediate outputs of the operations supported as well as the results (the direct results of the operations approved and the results of the public policies implemented), having as basis the goals established at different levels (at the programme level and at the project level).

To execute this operational monitoring, all the Managing Authorities, from all the Operational Programmes existing (including the Regional Operational Programme of Centro) are obliged to elaborate an annual execution report and to provide, every month, all the information that AD&C needs to prepare its quarterly operational reports (publicly available on AD&C' website<sup>80</sup>).

<sup>78</sup>[https://www.adcoesao.pt/sites/default/files/portugal2020/monitorizacao/resultados\\_da\\_monitorizacao\\_estrategica/relatorios\\_a\\_nuais\\_dos\\_fundos\\_da\\_ue/relatorio\\_anual\\_fundosue\\_2017\\_2018.pdf](https://www.adcoesao.pt/sites/default/files/portugal2020/monitorizacao/resultados_da_monitorizacao_estrategica/relatorios_a_nuais_dos_fundos_da_ue/relatorio_anual_fundosue_2017_2018.pdf)

<sup>79</sup>[https://www.adcoesao.pt/sites/default/files/portugal2020/monitorizacao/resultados\\_da\\_monitorizacao\\_operacional/boletins\\_trimestrais\\_dos\\_fundos\\_da\\_ue/boletim31marco2020\\_final\\_05maio2020.pdf](https://www.adcoesao.pt/sites/default/files/portugal2020/monitorizacao/resultados_da_monitorizacao_operacional/boletins_trimestrais_dos_fundos_da_ue/boletim31marco2020_final_05maio2020.pdf)

<sup>80</sup> <https://www.adcoesao.pt/content/resultados-da-monitorizacao>

Even though the monitoring processes presented so far give essential information about the implementation and execution of ESIF in Portugal, they do not give much information about the operationalisation of RIS3. Acknowledging that this is primordial to better understand and comprehend the regional dynamics of research and innovation, **CCDRCC took the initiative of developing a regional monitoring system that includes the analysis of the alignment of projects (applicants and approved) with Centro RIS3.**

Furthermore, the national entity responsible for developing, implementing and operationalise the national smart specialisation strategy has also prepared and published a monitoring report in 2018<sup>81</sup>. The report covers three dimensions: i) operationalisation and implementation of the RIS3 (implementation of governance model and regulatory transposition); ii) demand (distribution of projects approved); iii) qualitative analysis.

### 5.2.1. System to analyse the alignment of projects with Centro RIS3

Before doing a brief description of this system, an important remark should be made: the **projects considered in this system are only the ones that applied to calls from the policy-mix available to implement RIS3 in Centro**. Also, **this system should not be confused with Centro RIS3 monitoring system**, which incorporates this analysis, but it is not limited to it, being much broader.

In second place, it is also important to underline that, the information that composes this regular analysis is not automatically taken from any existing platform. To be able to make this analysis, CCDRC' team has feed a list of projects evaluated with all the relevant information needed to carry out the monitoring foreseen. With all data available properly processed, twice a year, CCDRC publishes a monitoring document in its RIS3' website<sup>82</sup>. The latest version of his document was made public in April 2020, with information reporting to December 2019<sup>83</sup>.

Some **pertinent figures** that can be found in this document are:

- The number and percentage of projects evaluated by Centro RIS3' team (by policy instrument);
- The geographical location of applicant and approved projects in Centro;
- The distribution of applicant and approved projects by sector of activity;
- The average value of investment by project (applicant and approved) and by policy instrument;
- The average value of investment by project (applicant and approved) and by geographical location;

<sup>81</sup> <https://www.ani.pt/Content/documents/Relatorio-monitoriza%C3%A7%C3%A3o-ENEL.pdf>

<sup>82</sup> <http://ris3.ccdrc.pt/>

<sup>83</sup> <http://ris3.ccdrc.pt/index.php/ris3-documentacao/regional/2-4-caderno-d-a-analise-do-alinhamento-dos-projetos-candidatos-ao-portugal-2020-com-a-ris3-do-centro-novembro-de-2018-dados-reportados-a-30-de-junho-de-2018/download>

- The average score of projects (regarding its alignment with Centro RIS3) by policy instrument;
- The distribution of projects (applicant and approved) by policy instrument and degree of alignment with Centro RIS3 (not aligned, aligned, strongly aligned);
- The alignment of applicant and approved projects with the differentiating domains and the cross-cutting priorities of Centro RIS3;
- The alignment of applicant and approved projects with the specific objectives of Centro RIS3;
- The alignment of projects with each line of action established within the specific objectives.

It is worth mentioning that until the 31<sup>st</sup> of December 2019, Centro RIS3 technical body had evaluated the alignment with Centro RIS3 of more than **7.700 applications**. From those, 3.777 applications were already approved. It is also interesting to mention that more than 85% of the applications assessed were from the Incentives System for Enterprises but this number increases to 86% when we are talking about approved projects.

It is important to note that, although the alignment of these applications with Centro RIS3 was made by Centro RIS3 technical body, **not all the projects approved were funded by Centro 2020**. In some cases, depending on the funding criteria, projects have been funded by Compete 2020 (the national Operational Programme for Competitiveness and Internationalisation).

Instruments and Typologies of investment		Applications		Approved Projects		
		N.º	Average investment by project	N.º	Average investment by project	Average support by project
<b>Incentives System for Enterprises</b>	Research and Technological Development	1 413	869 191 €	591	792 871 €	466 324 €
	Entrepreneurial Innovation and Entrepreneurship	2 246	2 927 562 €	1,027	3 123 872 €	1 371 856 €
	SMEs' qualification and internationalisation	2 881	420 862 €	1 642	452 459 €	154 781 €
	Subtotal	6 540	1 378 589 €	3 260	1 355 749 €	594 676 €
<b>Support System for Collective Actions)</b>	Internationalisation	31	406 154 €	15	367 084 €	304 037 €
	Promotion of the entrepreneurial spirit	44	441 309 €	27	397 702 €	289 320 €
	Scientific and Technological Knowledge Transfer	21	565 704 €	14	586 264 €	427 492 €
	Subtotal	96	457 168 €	56	436 641 €	327 805 €
<b>Support System for Scientific and Technological Research</b>	Integrated programmes of SR&TD	22	1 318 356 €	16	1 628 838 €	1 377 693 €
	SR&TD Projects - Individual	827	222 243 €	260	217 843 €	183 990 €
	SR&TD Projects - Copromotion	75	95 947 €	65	97 389 €	78 825 €
	Research Infrastructures projects	20	1 319 590 €	20	1 700 583 €	1 304 092 €
	Subtotal	944	261 003 €	361	340 838 €	280 017 €
<b>Support to Technological Infrastructures</b>		23	2 727 613 €	9	3 154 257 €	2 478 818 €
<b>Employment of highly qualified human resources</b>		56	337 038 €	49	317 000 €	218 427 €
<b>Technological Specialisation Courses</b>		13	713 651 €	13	670 601 €	556 525 €
<b>Higher Technical Professional Courses (including acquisition of equipment)</b>		31	1 084 374 €	29	853 994 €	638 194 €
		<b>7 703</b>	<b>1 224 296 €</b>	<b>3 777</b>	<b>1 229 717 €</b>	<b>560 456 €</b>

**Table 14** – Applications evaluated by Centro RIS3 technical body

In the charts presented in the next pages some more information about the alignment of projects with Centro RIS3 can be found.

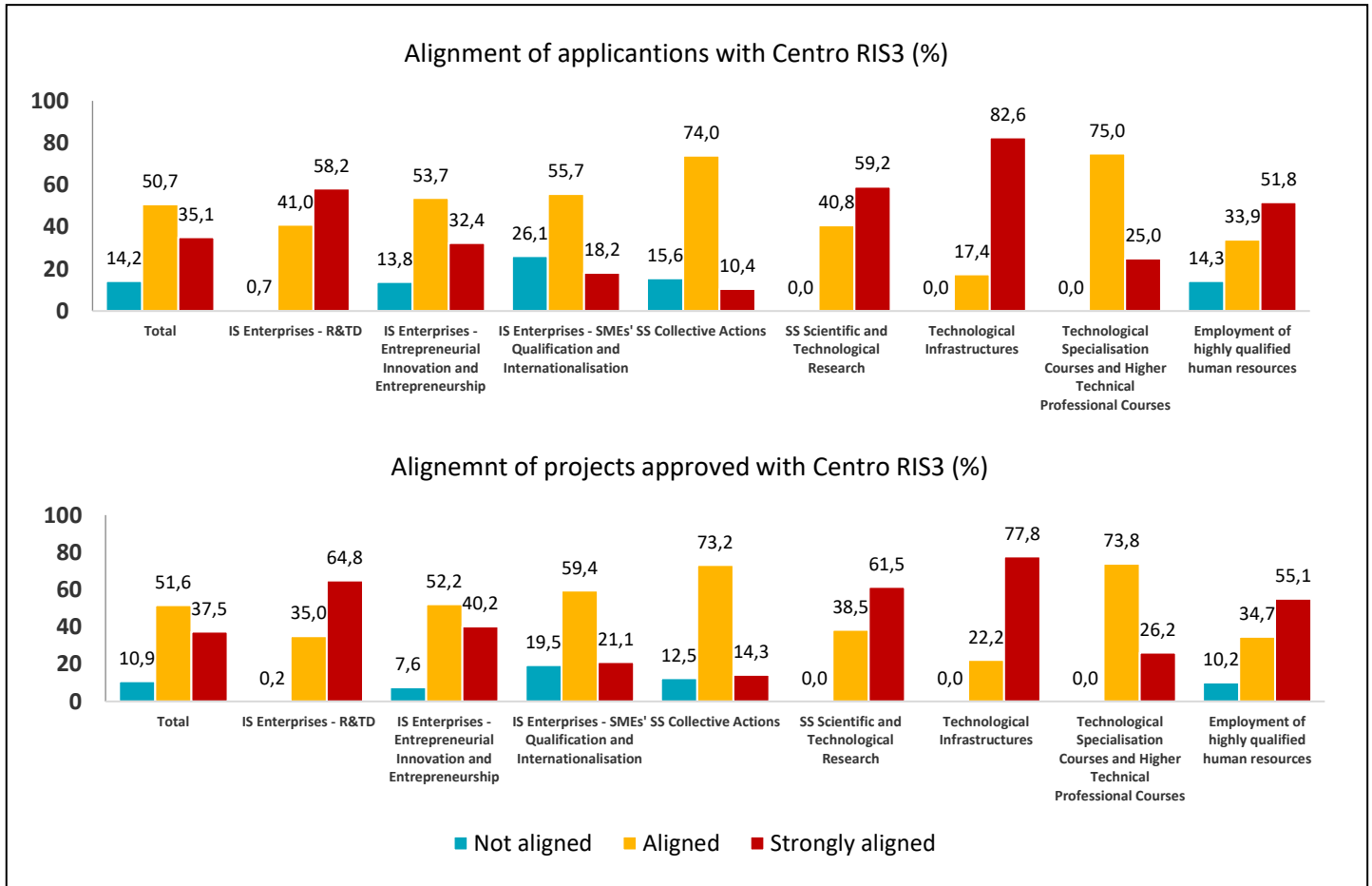


Chart 6 – Alignment of applications and projects approved with Centro RIS3

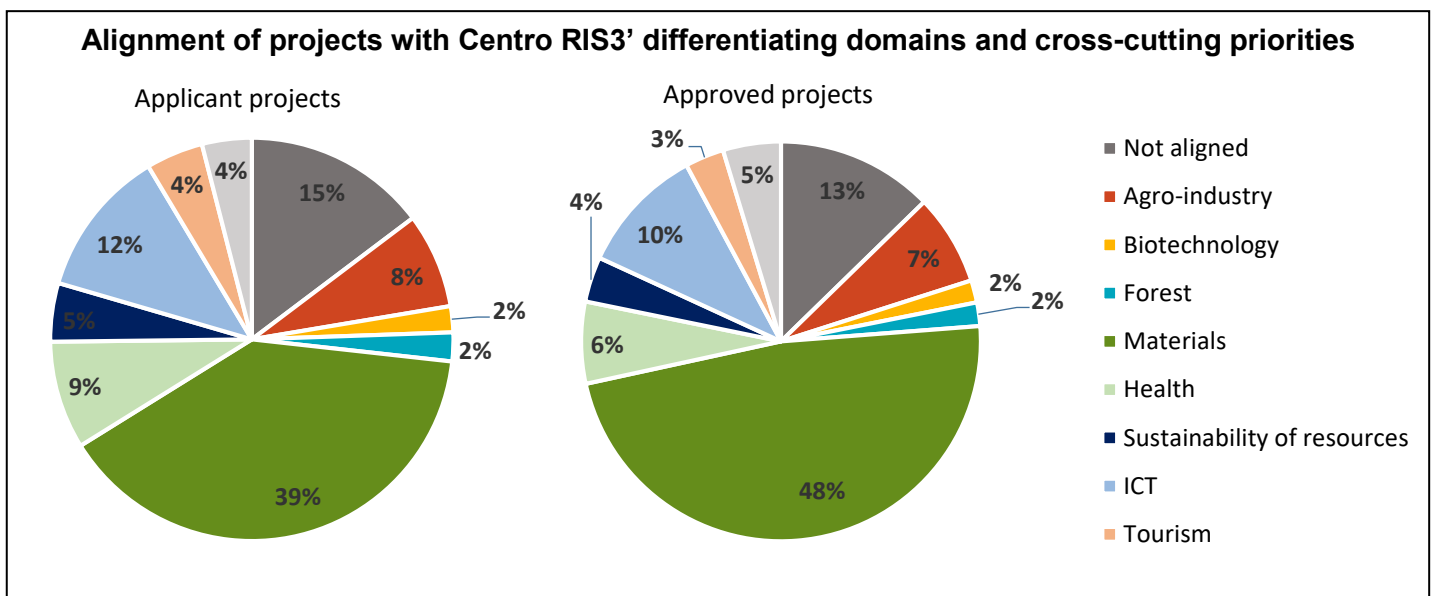


Chart 7 – Alignment of projects with Centro RIS3' differentiating domains and cross-cutting priorities

### Alignment of projects with Centro RIS3' specific objectives

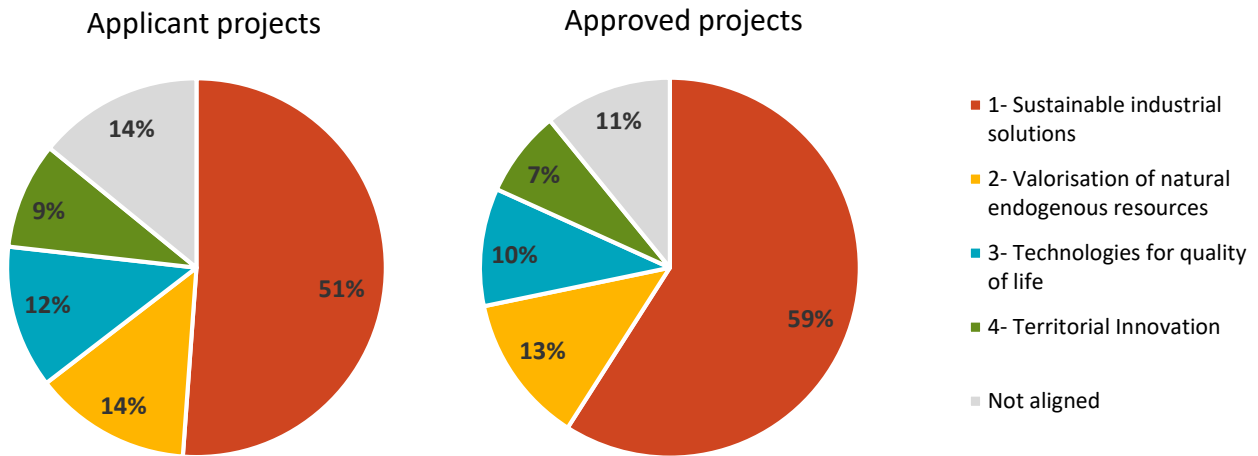


Chart 8 – Alignment of projects with Centro RIS3' specific objectives

## 6. SWOT analysis of the policy mix

This SWOT analysis will be focused on the Strengths, Weaknesses, Opportunities and Threats identified for the proper and successful implementation of Centro RIS3, through the Regional Operational Programme, and more specifically, through its Thematic Objectives 1 and 3.

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>The high level of involvement of regional stakeholders in RIS3 process contributes to the alignment of project proposals with RIS3 priorities.</li> <li>The existing policy-mix is rather complete and covers the innovation cycle, promotes some synergies between funds and stimulates cooperation between entities.</li> <li>The level of maturity of the existing instruments (most of them already available in past programming periods) assures a good level of effectiveness.</li> <li>As TO1 and TO3 are coordinated at the national level, applicants do not need to navigate the complex system of PT2020 calls. Applicants apply to a call and then the system will direct the application to the right entities to evaluate and fund.</li> </ul>	<ul style="list-style-type: none"> <li>The policy-mix of instruments was designed without completely taking into consideration the specifications of the regional smart specialisation strategy.</li> <li>As TO1 and TO3 are coordinated at the national level, the Regional Operational Programme has almost no room to open dedicated calls in these specific Thematic Objectives.</li> <li>Non-existence of multi-instrument calls for TO1 and TO3 – where enterprises could fund all the innovation process (including research, creation and production of new products, as well as their promotion and internationalisation); instead they have different applications for different instruments to fund the several dimensions of the same strategy.</li> <li>The absence of a regional budget to allow for regional initiatives able to meet the needs felt.</li> </ul>



Opportunities	Threats
<ul style="list-style-type: none"> <li>• Centro RIS3 is not implemented only through TO1 and TO3. TO8, TO10 and even TO11 also play important roles in Centro RIS3 operationalisation and might be the key to some of the difficulties faced with the national coordination of TO1 and TO3.</li> <li>• Being in the final phase of the present programming period (when there are always some leftovers with little time to be used) opens the opportunity to launch pilot calls, test some new instruments and/or new governance/coordination methods.</li> <li>• The competitiveness and internationalisation agenda (where TO1 and TO3 stand out) is the key agenda to implement RIS3 and accounts for almost half of ESIF allocation in Portugal.</li> </ul>	<ul style="list-style-type: none"> <li>• The pressure on PT2020 to increase the liquidity in the economy in 2015, due to the economic crisis the country was facing back then, might have led to the funding of company projects not aligned with RIS3 priorities (in TO3 where RIS3 alignment is not compulsory).</li> <li>• The present crisis due to COVID-19 might have the same effect, although the funding available is now much lower.</li> <li>• Desk Portugal 2020 and the RECI (the Portuguese common regulatory framework for companies and non-business entities of the regional innovation system), designed with the aim of reducing the red tape, actually created difficulties in the application process.</li> </ul>

**Table 15** – SWOT analysis

## 7. Main conclusions and areas for improvement

The main objective of this project is to improve the management and implementation of Structural Funds Programmes to ensure a better and more efficient delivery of R&D&i policies, with a special focus on Smart Specialisation Strategies. In Portugal, and therefore in Centro, RIS3 is implemented mainly through TO1 (Strengthening research, technological development and innovation), TO3 (Enhancing the competitiveness of small and medium-sized enterprises), TO8 (Promoting sustainable and quality employment and supporting labour mobility) and TO10 (Investing in education, training and vocational training for skills and lifelong learning).

However, TO1 and TO3 deserved a special attention in this report as they are the ones more relevant both in terms of implementation of RIS3 (for supporting, directly, the development of research and innovation activities in enterprises and in non-business entities of the regional research and innovation system) and in terms of funding available. TO1 and TO3 together represent 38,43% of the total value allocated to Centro 2020 (the Regional Operational Programme of Centro).

However, in Portugal, TO1 and TO3 are coordinated at the national level by two different networks. The Science Network manages TO1 calls for research, development and innovation (in the scientific dimension). The Incentives Scheme Network manages all TO3 calls and TO1 calls for companies.

This does not mean that the managing authority of an Operational Programme, like Centro 2020, is forbidden to launch a TO1 or TO3 call, independent from all other OPs. This means that all decisions

related to these TOs are discussed in these networks and should be highly consensual. When the MA of an Operational Programme wants to open a new and different call, that is more unusual and that seeks to address specific needs (e.g. when the MA of the ROPs want to target regional stakeholders needs), there is a very complicated and discouraging process that hampers this possibility.

And even though the policy-mix established in Portugal to TO1 and TO3 is quite complete (allowing companies to fund their innovation and research activities and supporting non-business entities from the research and innovation system in the development of their scientific and technological research activities), the fact that TO1 and TO3 are coordinated at national level, creates a gap between the needs felt regionally and the instruments available in the policy-mix.

These, combined with the fact that in Portugal there is no multi-instruments calls (where enterprises could fund all the innovation process - including research, creation and production of new products, as well as their promotion and internationalisation - instead of having different applications, to different instruments, to fund the several dimensions of the same strategy) and that the degree of coordination between regional and national smart strategies is rather low, creates great opportunities to improve.

This improvement could be achieved through:

- The launch of dedicated calls;
- The launch of multi-instruments calls;
- Better coordination between the national and regional levels.

Therefore, in this context, and trying to take advantage of being in the final phase of the present programming period (which creates an opportunity to develop some pilot calls and test new forms of governance), the goal of CCDRC, within this project, is to create awareness, at national level, about the challenges faced at regional level to properly implement RIS3 and, ideally, to launch a dedicated RIS3 call.

# Annexes

## Annex 1 – Detailed information about the Investment Priorities of TO1 and TO3 and their specific objectives

Thematic Objective	Investment Priority (IP) and Specific Objectives (SO)
TO1	<p><b>ERDF IP 1.a)</b> Enhancing research and innovation (R&amp;I) infrastructure and capacities to develop R&amp;I excellence, and promoting centres of competence, in particular those of European interest.</p> <p><b>SO 1</b> – Increase the scientific production of recognised quality at the international level, oriented to the smart specialisation and aiming at boosting an economy of technological basis and of high added value, favouring the excellence, the cooperation and the internationalisation.</p> <p><b>ERDF IP 1.b)</b> Promoting business investment in R&amp;I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies.</p> <p><b>SO 1</b> – Strengthen the scientific and technological knowledge transfer for the entrepreneurial sector, promoting a higher effectiveness in the national system of research and innovation and the creation of value.</p> <p><b>SO 2</b> – Increase the entrepreneurial investment in R&amp;I strengthening the connection between companies and the other entities of the regional R&amp;I system and promoting the increasing of knowledge intensive economic activities and the creation of values based in innovation.</p> <p><b>SO 3</b> – Strengthen the networks and other forms of partnership and cooperation that aim at the internationalisation of companies and of the other value chains.</p> <p><b>SO 4</b> – Increase the entrepreneurial investment in innovative activities (product, process, organisational methods and marketing), promoting the increment of tradable and internationalised production and the modification of the economic tissue productive profile.</p>
TO3	<p><b>ERDF IP 1.a)</b> Promoting entrepreneurship, in particular by facilitating the economic exploitation of new ideas and fostering the creation of new firms, including through business incubators.</p> <p><b>SO 1</b> – Promote the qualified and creative entrepreneurship.</p> <p><b>ERDF IP 1.b)</b> Developing and implementing new business models for SMEs, in particular regarding internationalisation.</p> <p><b>SO 1</b> – Strengthen the entrepreneurial capacitation for the internationalisation, promoting the increase of exports and the international visibility of Centro Region.</p> <p><b>ERDF IP 1.c)</b> Supporting the creation and the extension of advanced capacities for product and service development.</p> <p><b>SO 1</b> – Strengthen the entrepreneurial capacitation of micro and SME for the development of goods and services.</p>

## Annex 2 - Incentives System for Enterprises

### Entrepreneurial Innovation and Entrepreneurship

Productive Innovation for non-SMEs	
Thematic Objective 1	Investment Priority 1.b)
<p><u>Specific objective:</u> To strengthen the entrepreneurial investment in innovative activities, promoting the increase of the tradable and internationalised production and the modification of the productive profile of the economic tissue. Is also an objective of this area to contribute for the internationalisation and tradable orientation of the economy and for the creation of qualified jobs.</p> <p><u>Typologies of projects:</u></p> <ul style="list-style-type: none"> <li>• Production of new goods and services or implementation of significant improvements in the current productions through knowledge transfer and application.</li> <li>• Adoption on new, or significantly improved, processes or methods of production.</li> </ul> <p><u>Calls already launched:</u></p> <ul style="list-style-type: none"> <li>• Productive Innovation for non-SMEs – individual projects</li> <li>• Productive Innovation for non-SMEs – individual projects – projects in low density territories</li> <li>• Productive Innovation for non-SMEs – individual projects – projects of fast execution</li> <li>• Productive Innovation for non-SMEs – individual projects – suppliers club</li> </ul> <p><u>Beneficiaries:</u> non-SMEs</p> <p><u>Funding boundary criteria:</u></p> <ul style="list-style-type: none"> <li>• Centro 2020 will support: projects from non-SMEs with an investment equal or lower than €3 million.</li> <li>• Compete 2020 will support: projects from non-SMEs with an investment higher than €3 million.</li> </ul>	
Productive Innovation for SMEs	
Thematic Objective 3	Investment Priority 3.c)
<p><u>Specific objective:</u> to promote innovation in the entrepreneurial tissues, translating this into the production of new, or significantly improved, goods and services that are tradable and internationalised, differentiating and of quality, creating internationalisation opportunities or strengthening the quality of entrepreneurial tissue.</p> <p><u>Typologies of projects:</u></p> <ul style="list-style-type: none"> <li>• Production of new goods and services or implementation of significant improvements in the current productions through knowledge transfer and application.</li> <li>• Adoption on new, or significantly improved, processes or methods of production, logistics and distribution, as well as organisational or marketing methods.</li> </ul> <p><u>Calls already launched:</u></p> <ul style="list-style-type: none"> <li>• Productive Innovation for SMEs – individual projects</li> <li>• Productive Innovation for SMEs – individual projects – low density territories</li> <li>• Productive Innovation for SMEs – individual projects – projects of fast execution</li> </ul>	

<ul style="list-style-type: none"> <li>Productive Innovation for SMEs – individual projects – suppliers club</li> </ul> <p><u>Beneficiaries:</u> SMEs</p> <p><u>Funding boundary criteria:</u></p> <ul style="list-style-type: none"> <li>Centro 2020 will support: SME's projects with an investment equal or lower than €3 million.</li> <li>Compete 2020 will support: SME's projects with an investment higher than €3 million; multi-regional projects.</li> </ul>	
Qualified and Creative Entrepreneurship	
Thematic Objective 3	Investment Priority 3.a)
<p>Specific objective: to promote the qualified and creative entrepreneurship.</p> <p><u>Typologies of projects:</u> projects from SMEs, with less than two years, that aim, with their activity, at boosting sectors with strong dynamics of growth. This includes SMEs integrated in creative and cultural industries, and/or sectors with a higher technology and knowledge intensity or that value the application of R&amp;D results in the production of new goods and services.</p> <p><u>Calls already launched:</u></p> <ul style="list-style-type: none"> <li>Qualified and Creative Entrepreneurship – individual projects</li> <li>Qualified and Creative Entrepreneurship – individual projects – low density territories</li> <li>Vouchers of Entrepreneurship</li> <li>Vouchers of incubation</li> </ul> <p><u>Beneficiaries:</u> SMEs</p> <p><u>Funding boundary criteria:</u> As only individual projects are accepted, they will be supported by Centro 2020</p>	

The **form of the supports** to be given in these areas is loans (refundable incentives), except for the vouchers that are grants (non-refundable incentives). About the **values** of the projects approved, no minimum or maximum amounts are foreseen. Only the vouchers have a maximum amount of €15.000 *per project*. The **funding rate** goes from 30% up to 75%.

### SMEs' qualification and internationalisation

SMEs' internationalisation	
Thematic Objective 3	Investment Priority 3.b)
<p><u>Specific objective:</u> to strength the SMEs entrepreneurial capacitation through the development of their qualification processes for internationalisation, valuing the immaterial competitiveness factors, allowing to increase their exporting basis and capacity.</p> <p><u>Typologies of projects:</u> SMEs projects of promotion of internationalisation that seek: the knowledge of know external markets; the web presence, through digital economy, including the launch of virtual catalogues of goods</p>	

and services; the knowledge and promotion of international brands; the prospection and presence in international markets; international marketing; the introduction of new organisational methods in the commercial practices ou in the external relations; specific certifications to external markets.

Calls already launched:

- SMEs' internationalisation – individual projects
- SMEs' internationalisation – individual projects – low density territories
- SMEs' internationalisation – joint projects
- Voucher internationalisation
- Voucher internationalisation opportunities

Beneficiaries: SMEs. In the case of joint projects, non-profit public or private entities, with an associative nature and with activities directed to SMEs, namely business associations, chambers of commerce and industry, regional agencies of touristic promotion, as well as other non-business entities from the research and innovation system, can also be beneficiaries.

Funding boundary criteria:

- Centro 2020 will support: individual projects of micro and small regional enterprises.
- Compete 2020 will support: individual projects of medium enterprises; collaborative projects; multi-regional projects.

SMEs' qualification	
Thematic Objective 3	Investment Priority 3.c
<p><u>Specific objective:</u> to strength the SMEs entrepreneurial capacitation through organisational innovation, applying new organisational methods and processes, and increasing the flexibility and the responsiveness in the global market, relying on immaterial investments in the competitiveness area.</p> <p><u>Typologies of projects:</u> SMEs projects for the qualification of strategies of companies that apply for the increasing of their competitiveness, flexibility and capacity of responsiveness in the global market, in the following immaterial domains of competitiveness: organisational innovation and management; digital economy and information and communication technologies; development and engineering of products, services and processes; industrial property protection; quality; knowledge transfer; distribution and logistics; creation of brands and design; professional formation; eco-innovation; employment of highly qualified human resources, associated to innovation activities.</p> <p><u>Calls already launched:</u></p> <ul style="list-style-type: none"> <li>• SMEs' qualification – individual projects</li> <li>• SMEs' qualification – individual projects – suppliers club</li> <li>• SMEs' qualification – individual projects – low density territories</li> <li>• Voucher innovation</li> <li>• Voucher circular economy</li> <li>• Voucher commerce</li> <li>• Voucher industry 4.0</li> <li>• SMEs' qualification – joint projects</li> </ul>	

**Beneficiaries:** SMEs. In the case of joint projects, non-profit public or private entities, with an associative nature and with activities directed to SMEs, namely business associations, chambers of commerce and industry, regional agencies of touristic promotion, as well as other non-business entities from the research and innovation system, can also be beneficiaries.

**Funding boundary criteria:**

- Centro 2020 will support: regional and individual projects of micro and small companies.
- Compete 2020 will support: individual projects of medium companies; collective or joint projects; multi-regional projects.

The **form of the supports** to be given in these areas is grants (non-refundable incentives). About the **values** of the projects approved: maximum of €500.000 for individual projects; €180.000 as a maximum average per company, in the case of joint projects; maximum of €15.000 for vouchers. The **funding rate** goes from 45% up to 85%.

## Research and Technological Development

Research and Technological Development	
Thematic Objective 1	Investment Priority 1.a)
<p><b>Specific objective:</b> to increase the entrepreneurial investment in Research and Innovation (R&amp;I), aligned with the domains of the Research and Innovation Smart Specialisation Strategy, strengthening the connection between companies and the entities from the R&amp;I system and promoting the increase of economic activities knowledge intensive and the creation of value based in innovation, through the following specific objectives: a) increase the intensity of R&amp;I in companies and its economic valorisation; b) increase the projects and activities in copromotion between companies and the entities from the R&amp;I system; c) develop new products and services, especially in activities of higher technologic and knowledge intensity; d) reinforce actions of economic valorisation of R&amp;D projects successfully; increase the national participation in R&amp;I international programmes and initiatives.</p> <p><b>Typologies of projects:</b></p> <ul style="list-style-type: none"> <li>• Companies R&amp;D projects (including proof of concept)</li> <li>• Demonstrator projects</li> <li>• Mobilising programmes</li> <li>• Nucleus of R&amp;D</li> <li>• Protection of intellectual and industrial property</li> <li>• Internationalisation of R&amp;D</li> <li>• Voucher R&amp;D</li> </ul> <p><b>Calls already launched:</b></p> <ul style="list-style-type: none"> <li>• R&amp;TD – individual projects</li> <li>• R&amp;TD – individual projects – Internationalisation</li> </ul>	



- R&TD – individual projects - industrial property
- R&TD – individual projects – intellectual and industrial property
- R&D – R&D projects at the European scale (for companies and non-business entities from the research and innovation system)
- Voucher R&TD
- Voucher research opportunities
- R&TD – Copromotion projects
- R&TD – Copromotion projects – suppliers club
- R&TD – Copromotion projects – mobilising programmes
- R&TD – Copromotion projects – international partnerships (two different calls: MIT-Portugal, UTA-Portugal, CMU-Portugal; projects between companies and Polytechnic Institutions – national and international)
- R&TD – Demonstrator projects – individual
- R&TD – Demonstrator projects – individual – seals of excellence
- R&TD – Demonstrator projects – copromotion
- R&TD – Nucleus of R&D – individual projects
- R&TD – Nucleus of R&D – copromotion projects
- R&TD – COVID 19 (for companies – individual or copromotion and for non-business entities from the research and innovation system)

Beneficiaries: companies of any form and legal nature. In the case of copromotion projects, non-business entities from the R&I system can also be beneficiaries, namely: a) higher education institutions, their institutes and R&D units; b) Laboratories from the State or international ones with headquarters in Portugal; c) non-profit private institutions that have as main objective to develop R&D activities; d) other non-profit public or private institutions that develop or participate in activities of scientific research.

Funding criteria:

- Centro 2020 will support: individual projects from micro and small companies located in Centro; copromotion projects led by regional micro and small enterprises; regional collective and mobilising projects.
- Compete 2020 will support: individual projects from medium and big companies; individual multi-regional projects from micro and small companies; copromotion projects led by medium and big enterprises; collective and mobilising multi-regional projects.

The **form of the supports** to be given in the R&TD projects, this will depend of the promotor. Thus:

- For companies:
  - i) For projects with an incentive lower than 1M€ (by partner) the incentive is non-refundable / nonrepayable.
  - ii) For projects with an incentive higher than 1M€ (by partner) the incentive is:
    - Non-refundable until 1M€.

- For what exceeds the 1M€ amount - 75% of this is non-refundable; 25% is refundable (a loan) – if this 25% amount is lower than 50.000€, this parcel will be non-refundable as well.
- For non-business entities from the R&I system, the incentive is nonrefundable.

It is important to notice that this rule has exceptions: for nucleus of R&D projects, protection of intellectual and industrial property projects and, internationalisation of R&D projects the incentive is non-refundable (always).

About the **values** of the projects approved, no minimum or maximum amounts are foreseen. Only the vouchers have a maximum amount of €15.000 per project. The **funding rate** goes from 25% up to 85%.

## Annex 3 - Support System for Scientific and Technological Research

Support System for Scientific and Technological Research	
Thematic Objective 1	Investment Priority 1.a)
<p><u>Specific objective:</u> increase the scientific and technological production of quality, internationally recognised in strategic domains aligned with RIS3, in a multilevel, national or regional perception, and to boost an economy based on knowledge of high added value, favouring excellence, cooperation and internationalisation, through:</p> <p>a) the increase of creation of knowledges to answer to entrepreneurial and societal challenges; b) exploitation of ideas or concepts with originality and or innovation potential; c) increase of the participation in R&amp;D programmes funded by the European Union; d) creation and reinforcement of the competences of the research infrastructures integrated in the national roadmap of research infrastructures of strategic interest; e) strength of the economic orientation of the research infrastructures network, having as basis the RIS3 priorities.</p> <p><u>Typologies of projects:</u></p> <ul style="list-style-type: none"> <li>• Scientific Research and Technological Development (SR&amp;TD) projects</li> <li>• Programmes of joint activities</li> <li>• Integrated programmes of SR&amp;TD</li> <li>• Proof of concept projects</li> <li>• Intellectual property rights protection</li> <li>• Projects of development and implementation of research infrastructures integrated in the national roadmap of research infrastructures of strategic interest</li> <li>• R&amp;D internationalisation projects</li> </ul> <p><u>Calls already launched:</u></p> <ul style="list-style-type: none"> <li>• Integrated programmes of SR&amp;TD (individual or copromotion projects)</li> <li>• SR&amp;TD projects (individual or copromotion projects)</li> <li>• SR&amp;TD projects in copromotion</li> <li>• Programmes of joint activities (copromotion projects)</li> <li>• Research Infrastructures projects (individual projects)</li> <li>• Internationalisation of R&amp;D (individual projects)</li> <li>• Industrial property (individual projects)</li> </ul> <p><u>Beneficiaries:</u></p> <ul style="list-style-type: none"> <li>• Non-business entities from the R&amp;I system, namely: a) higher education institutions, their institutes and R&amp;D units; b) Laboratories from the State or international ones with headquarters in Portugal; c) non-profit private institutions that have as main objective to develop R&amp;D activities; d) other non-profit public or private institutions that develop or participate in activities of scientific research; e) other non-profit public or private entities that develop or participate in scientific research activities.</li> <li>• Companies of any form and legal nature, as long as they are integrating SR&amp;TD projects del by non-business entities from the R&amp;I system, in the scope of a “real collaboration”.</li> </ul> <p><u>Funding boundary criteria:</u></p>	

- Centro 2020 will support: projects from mono-regional infrastructures, or the regional component from multi-regional infrastructures that only include one less developed region of the mainland (Norte, Centro and Alentejo).
- Compete 2020 will support: projects of infrastructures located in more than one less developed region of the mainland (Norte, Centro and Alentejo) but only the investment located in the territory of those regions.

The **form of the supports** to be given in these areas is grants (non-refundable incentives). About the **values** of the projects approved, no minimum or maximum amounts are foreseen. The **funding rate** is 85% for non-profit public and private entities and for companies it goes from 40% up to 85%.

## Annex 4 - Support System for Collective Actions

Support System for Collective Actions	
Thematic Objective 1	Investment Priority 1.b)
<p><u>Specific objective – Scientific and Technological Knowledge Transfer:</u></p> <ol style="list-style-type: none"> <li>1) To reinforce the scientific and technological knowledge for the business sector and to promote the economic valorisation of R&amp; results produced by the R&amp;I system.</li> <li>2) To reinforce the networks and other forms of partnership and cooperation in the scope of collective efficiency strategies.</li> </ol> <p><u>Typologies of projects:</u></p> <ul style="list-style-type: none"> <li>• For Specific Objective 1: <ul style="list-style-type: none"> <li>○ Initiatives of interaction and knowledge transfer</li> <li>○ Actions of technological demonstration and development</li> <li>○ Dissemination actions of new knowledges and technologies generated in R&amp;D projects (for the business tissue)</li> <li>○ Dissemination actions in experimental environment of European successful R&amp;D projects</li> <li>○ Actions of economic valorisation of research results, namely, patenting and licensing of industrial property</li> <li>○ Promotion of seed and spin-offs projects seeking to transform innovative ideas into entrepreneurial initiatives</li> <li>○ Promotion of initiatives that enhance the acquisition and production of relevant information in the context of technology valorisation and transfer.</li> </ul> </li> <li>• For Specific Objective 2: <ul style="list-style-type: none"> <li>○ Coordination and management of strategic partnerships of collective efficiency of networks and clusters</li> <li>○ Participation in European initiatives of collaboration and exchange of experiences between Member States in the clustering and R&amp;D domains</li> </ul> </li> </ul> <p><u>Typologies of calls already launched:</u></p> <ul style="list-style-type: none"> <li>• Scientific and Technological Knowledge Transfer (individual or copromotion projects)</li> <li>• Scientific and Technological Knowledge Transfer – Invitation Knowledge Transfer Initiative (individual project)</li> <li>• Clusters of competitiveness (individual projects)</li> </ul> <p><u>Beneficiaries:</u></p> <ul style="list-style-type: none"> <li>• For Specific Objective 1: non-business entities from the R&amp;I system.</li> <li>• For Specific Objective 2: non-profit private entities or public entities that promote the management of a cluster, network, or other form of cooperation in the scope of collective efficiency strategies.</li> </ul> <p><u>Funding boundary criteria:</u></p> <ul style="list-style-type: none"> <li>• Centro 2020 will support: regional projects.</li> <li>• Compete 2020 will support: multi-regional projects.</li> </ul>	

Thematic Objective 3	Investment Priority 3.a)
<p><u>Specific objective – Promotion of the entrepreneurial spirit:</u> through the reinforcement of cooperation, partnerships, and networks of support of the qualified and creative entrepreneurship; enhance the support to the creation of innovative ideas, entrepreneurial initiatives, and to the creation of new companies.</p> <p><u>Typologies of projects:</u></p> <ul style="list-style-type: none"> <li>• Promote initiatives of detection, incentive and support to entrepreneurship to the capacitation of entrepreneurial initiatives and to creation of new companies.</li> <li>• Promote of mentoring and coaching initiatives for the support and development of innovative ideas.</li> <li>• Promote structural projects for the entrepreneurship support, involving acceleration and incubation infrastructures as well as other entities from the entrepreneurship boosting ecosystem.</li> </ul> <p><u>Calls already launched:</u></p> <ul style="list-style-type: none"> <li>• Promotion of the Entrepreneurial Spirit (individual or copromotion projects)</li> <li>• Promotion of the Entrepreneurial Spirit – Invitation Voucher StarUp (individual project)</li> </ul> <p><u>Beneficiaries:</u></p> <ul style="list-style-type: none"> <li>• Business associations</li> <li>• Non-business entities from the R&amp;I system</li> <li>• Public entities and agencies, including the ones with an associative nature, with competences in the domains of knowledge valorisation, entrepreneurship and collaborative networks promotion, entrepreneurial development, internationalisation and tourism</li> <li>• Non-profit private entities, that aim at fulfilling public interest objectives</li> <li>• Other non-profit entities, when participating in copromotion projects with one of other entities already mentioned</li> </ul> <p><u>Funding boundary criteria:</u></p> <ul style="list-style-type: none"> <li>• Centro 2020 will support: regional projects.</li> <li>• Compete 2020 will support: multi-regional projects.</li> </ul>	
Thematic Objective 3	Investment Priority 3.b)
<p><u>Specific objective - Internationalisation:</u> to increase the collective international recognition of goods and services produced in Portugal; to boost, even that indirectly, the success of SMEs internationalisation; to increase the knowledge on markets; to increase the collective initiatives of entrepreneurial cooperation.</p> <p><u>Typologies of projects:</u></p> <ul style="list-style-type: none"> <li>• Prospection, knowledge and access to new markets</li> <li>• Collaborative processes of internationalisation, knowledge sharing and capacitation to internationalisation</li> <li>• International integrated promotion of Portuguese goods and services</li> <li>• International promotion of touristic destinations and other products, equipment and resources</li> </ul> <p><u>Typologies of calls already launched:</u></p> <ul style="list-style-type: none"> <li>• Internationalisation (individual or copromotion projects)</li> <li>• Internationalisation – Invitation Integrated Promotion of the Destiny Portugal (individual projects)</li> </ul>	

- Internationalisation – Invitation Plan of External Promotion 2017 – 2019 (individual projects)

Beneficiaries:

- Business associations
- Non-business entities from the R&I system
- Public entities and agencies, including the ones with an associative nature, with competences in the domains of knowledge valorisation, entrepreneurship and collaborative networks promotion, entrepreneurial development, internationalisation and tourism
- Non-profit private entities, that aim at fulfilling public interest objectives
- Other non-profit entities, when participating in copromotion projects with one of other entities already mentioned

Funding boundary criteria:

- Centro 2020 will support: regional projects.
- Compete 2020 will support: multi-regional projects.

**Thematic Objective 3**

**Investment Priority 3.c)**

Specific objective - Qualification: to increase, even that indirectly the entrepreneurial competences; to facilitate the access to relevant information in the competitiveness domains; to increase the visibility and the information related to goods and services produced in Portugal; to boost consolidation and entrepreneurial transmission processes; to reduce information asymmetries at the entrepreneurial level to facilitate strategic choices and the early diagnosis.

Typologies of projects:

- Action of identification and awareness to critical competitiveness factors, in particular in the innovation domains
- Actions of information about the Portuguese offer of goods and services
- Promotion of collaboration processes and *coopetition* between SMEs
- Promotion of the entrepreneurial consolidation through processes of generational succession
- Promotion of initiatives that boost the acquisition and production of economic information about sectors, positioning of product/service, markets and funding in strategic areas for the sustainable and competitive growth

Calls already launched:

- Invitation “Portugal is me” (individual project)
- Qualification (individual or copromotion projects)

Beneficiaries:

- Business associations
- Non-business entities from the R&I system
- Public entities and agencies, including the ones with an associative nature, with competences in the domains of knowledge valorisation, entrepreneurship and collaborative networks promotion, entrepreneurial development, internationalisation and tourism
- Non-profit private entities, that aim at fulfilling public interest objectives

- Other non-profit entities, when participating in copromotion projects with one of other entities already mentioned

Funding boundary criteria:

- Centro 2020 will support: regional projects.
- Compete 2020 will support: multi-regional projects.

The **form of the supports** to be given in these areas is grants (non-refundable incentives). About the **values** of the projects approved, no minimum or maximum amounts are foreseen. The **funding rate** is 85% for non-profit public and private entities and for companies it goes from 50% up to 85%.