



**Interreg**   
Balkan-Mediterranean  
INNOPLATFORM

2018

# INNOSCORECARD



**InnoScores for COUNTRY/  
BalkanMed Region**

*CYPRUS*

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The main aim of the BalkanMed Innoscorecard is twofold: to promote the opportunities of the BalkanMed region and to address its weaknesses when it comes to the innovation potential.

The main objectives of the BalkanMed Innoscorecard are:

- to adjust and introduce methodology and indicators for closely following the innovation potential of the BalkanMed region and nations in the Balkan Mediterranean area:
  - FYROM
  - Albania
  - Greece
  - Cyprus
  - Bulgaria
- to map the government stakeholders for each of the innovations indicators;
- to map the government documents which cover measures for each concerned indicator;
- to provide data for comparative analysis of the indicators at national and macro regional level;
- to identify the strengths and the weaknesses in the innovation potential of the BalkanMed region, BM nations and regions; and
- to provide an interactive tool for visualising the data.

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## Background

## Methodology

### Innovation within the Innovation Union Plan

Literature and practice provide no agreed definition on what is defined under the term innovation today. There is no one single definition, while the issue is explored on a larger scale and at many levels: organizational, regional, national, EU. Within this grand understanding for the Innovations and their impact, measuring and monitoring the concept is equally challenging and complex.

For the purpose of the project InnoPlatform, we will use the definition sustained in the Innovation Union plan. As described by the Innovation Union plan, Innovation “broadly means change that speeds up and improves the way we conceive, develop, produce and access new products, industrial processes and services. Changes that create more jobs, improve people's lives and build greener and better societies.”

Having in mind these expectations from the innovations, it is of no surprise that the “Innovation Union is key to achieving the goals of the Europe 2020 Strategy for a smart, sustainable and inclusive economy. It aims to improve conditions and access to finance for research and innovation in Europe, to ensure that innovative ideas can be turned into products and services that create growth and jobs.”

### General overview of the Methodology

The BalkanMed Innoscorecard is developed based on the methodology of the EU Innovation Scoreboard 2017 (EUIS, 2017). Several important drivers reflect the choice of the methodology:

1. Balkan Med countries are EU member countries, or EU applicant countries, it is important to be able to follow their progress when it comes to innovative potential against the other EU countries;
2. Compared to other available methodologies as are the methodologies behind the Global Competitiveness Report (2017/2018) and the WIPO Innovation index (2016), EU Innovation Scoreboard (2017) provides a focused methodology which is adjusted to the EU context. This is achieved through the use of selective, yet very significant indicators on the issue of concern i.e. the innovation potential of EU national economies.

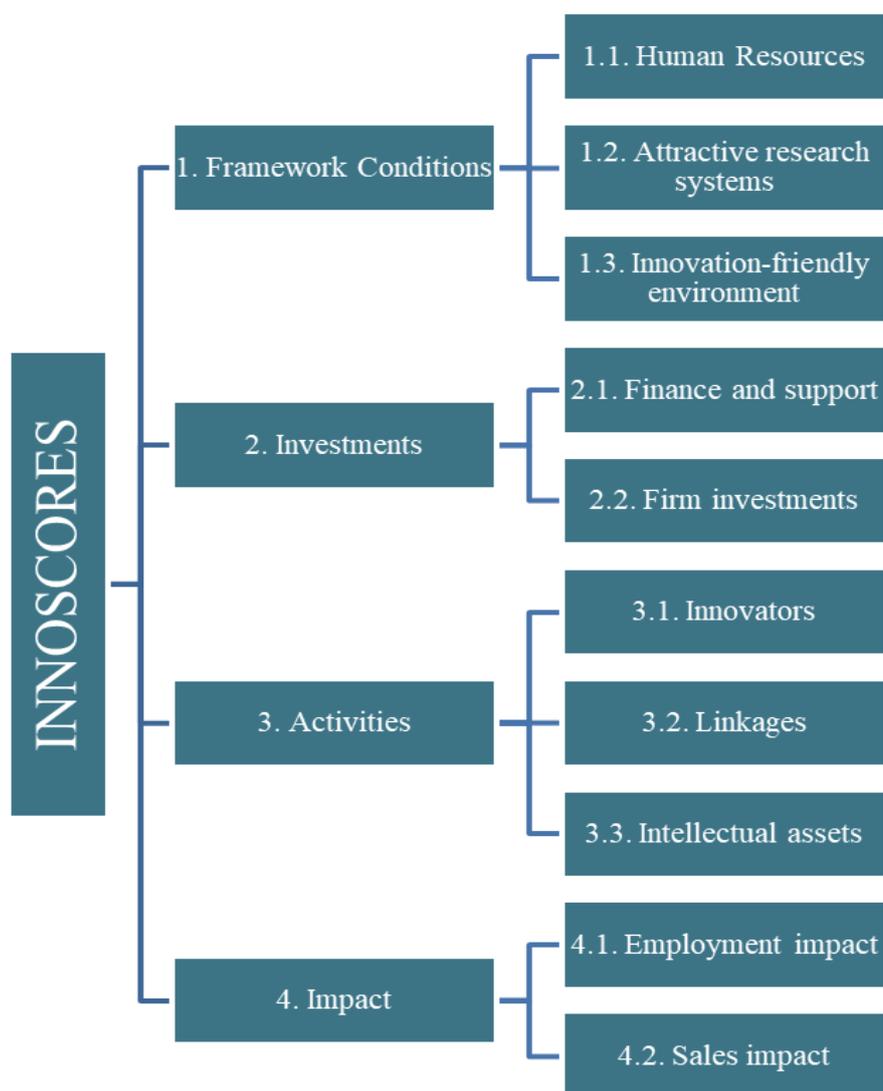
Based on the EU Innovation Scoreboard (2017), the BalkanMed Innoscorecard consists of two specific outputs:

1. National Summary Innovation Indexes for each of the BalkanMed countries with:

- a. Data repository on all important national and regional documents,
  - b. Mapping of government stakeholders; (FYROM, Albania, Greece, Bulgaria, Cyprus);
2. Balkan macro-regional Summary Innovation Index – developed for the purpose of the project Innoplatform.

In line with the EU Innovation Scoreboard 2017, both types of Innoscores (National and BalkanMed Score) will be based on four combined factors, i.e. pillars provided in Figure 1.1.

**Figure 1. InnoScorecard Indicators**



In the further elaboration of this document, each of the indicators is explained through the following key parameters:

- Name of the Indicator:
- Numerator:

- Denominator:
- Interpretation i.e. the basic principle (assumption) for its use:
- Source of data and available years for the concerned country:
- Remark: commentary which explains the numerator or describes certain specifics of the national context
- Results/Analysis based on the data collected with the excel document under D.3.x.2.
- Government stakeholders:
- Government strategies, programmes, and measures covering the indicator, if any:

*NOTE: The analysis of each of the four combined factors/pillars for the particular country is performed within the Deliverable 3.1. i.e. the National Study of the Business Environment and the National Innovation Potential.*

### National Summary Innovation Indexes

The National Summary Innovation Index is the unweighted average of the re-scaled scores for all indicators where all indicators receive the same weight (1/27 if data are available for all 27 indicators).

The EUIS (2017a) national summary innovation indexes need to be used for all BalkanMed countries for which there is a score in the EUIS (2017). A new one for Albania, will be constructed within this project, which fully follows the EUIS methodology (EUIS 2017b), if minimum 75% of the required data is collected.

For each indicator, a reference year is identified for all countries based on data availability for all those countries for which data availability is at least 75%. For most indicators, this reference year will be lagging for one or two years (EUIS, 2017b, p.22). ***The same should be noted in the Remark section for each of the indicators of the Innoscores.*** If data for a year-in-between are not available, missing values are replaced with the value for the previous year. If data are not available at the beginning of the time series, missing values are replaced with the next available year. If data are missing for all years, no data will be imputed. (EUIS, 2017, p.22).

Performance scores relative to the EU, and the other BalkanMed countries are then calculated in the following way:

- the SII of the respective country is divided by the SII of the EU multiplied by 100;

- the SII of the respective country is divided by the SII of the BalkanMed region multiplied by 100;

Relative performance scores are calculated for the full period (2010-2017) compared to the performance in 2010 and for the latest year also compared to that of the EU and BM.

### **BalkanMed Regional Summary Innovation Index**

The BalkanMed Regional Summary Innovation index covers data from all five countries involved in the project for the explored period (2010- 2017): Albania, Bulgaria, Cyprus, FYROM, and Greece. As the size of the population data might not be adequate for constructing the index based on the methodology used for the EU Composite Innovation Index, the methodology for constructing the BalkanMed Regional Summary Innovation index will be based on the assumption: that the macro region is one political and territorial unit, where each country is a specific region.

## 1. FRAMEWORK CONDITIONS

### 1.1 Human resources

Indicator	1.1.1. New doctorate graduates per 1000 population aged 25-34
<b>Numerator</b>	Number of doctorate graduates
<b>Denominator</b>	Population between and including 25 and 34 years
<b>Interpretation</b>	The indicator is a measure of the supply of new second-stage tertiary graduates in all fields of training (ISCED 8). For most countries, ISCED 8 captures PhD graduates.
<b>Source of data and available years for the concerned country</b>	European Innovation Scoreboard 2017 for the indicator; Eurostat for the values of the numerator and denominator; If not available use official national sources for the numerator and denominator. <a href="http://ec.europa.eu/eurostat/data/databaseEurostat">http://ec.europa.eu/eurostat/data/databaseEurostat</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

Cyprus had been increasing the number of doctorate holders in the years before its financial crisis. Despite a drop, both on absolute and relative terms, in 2013 that brought the numbers back to 2010 levels, over the few last years a steady increase of doctorate holders has led to the highest numbers, on absolute and relative terms, of the examined period, creating an overall positive trend.

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	10.283	11.410	13.932	10.881	12.579	14.228	
<b>Denominator</b>	137.000	144.700	146.300	143.700	139.900	139.100	140.300
<b>EUIS</b>	7,51%	7,89%	9,52%	7,57%	8,99%	10,23%	

**Government stakeholders:** Cyprus Ministry of Education and Culture (<http://www.moec.gov.cy/en/>)

**Important documents:**

## 1 FRAMEWORK CONDITIONS

### 1.1. Human resources

Indicator	1.1.2. Percentage population aged 25-34 having completed tertiary education
<b>Numerator</b>	Number of persons in age class with some form of post-secondary education
<b>Denominator</b>	Population between and including 25 and 34 years
<b>Interpretation</b>	This is a general indicator of the supply of advanced skills. It is not limited to science and technical fields, because the adoption of innovations in many areas, in particular in the service sectors, depends on a wide range of skills. The indicator focuses on a relatively young age cohort of the population, aged 25 to 34, and will therefore easily and quickly reflect changes in educational policies leading to more tertiary graduates.
<b>Source of data and available years for the concerned country</b>	European Innovation Scoreboard 2017 for the indicator; Eurostat for the values of the numerator and denominator; If not available use official national sources for the numerator and denominator. <a href="http://ec.europa.eu/eurostat/data/database">http://ec.europa.eu/eurostat/data/database</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

The number of persons with higher education skills in Cyprus has seen some fluctuation, especially during the economic crisis years, but in general has been increasing both in absolute and in relative numbers. As a result, the overall image, is that the end of the examined period finds Cyprus in a rise as to the examined indicator.

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	65.897	73.074	78.417	73.862	75.546	76.088	78.989
<b>Denominator</b>	137.000	144.700	146.300	143.700	139.900	139.100	140.300
<b>EUIS</b>	48,10%	50,50%	53,60%	51,40%	54,00%	54,70%	56,30%

**Government stakeholders:** Cyprus Ministry of Education and Culture (<http://www.moec.gov.cy/en/>)

**Important documents:**

## 1 FRAMEWORK CONDITIONS

### 1.1.Human resources

Indicator	1.1.3. Percentage population aged 25-64 participating in lifelong learning
<b>Numerator</b>	The target population for lifelong learning statistics refers to all persons in private households aged between 25 and 64 years. The information collected relates to all education or training, whether or not relevant to the respondent's current or possible future job. Data are collected through the EU Labour Force Survey. The reference period for the participation in education and training is the four weeks preceding the interview, as is usual in the Labour Force Survey.
<b>Denominator</b>	Total population of the same age group, excluding those who did not answer the question concerning participation in (formal and non-formal) education and training
<b>Interpretation</b>	Lifelong learning encompasses all purposeful learning activity, whether formal, non-formal or informal, undertaken on an ongoing basis with the aim of improving knowledge, skills and competence. The intention or aim to learn is the critical point that distinguishes these activities from non-learning activities, such as cultural or sporting activities.
<b>Source of data and available years for the concerned country</b>	European Innovation Scoreboard 2017 for the indicator; Eurostat for the values of the numerator and denominator; If not available use official national sources for the numerator and denominator. <a href="http://ec.europa.eu/eurostat/data/database">http://ec.europa.eu/eurostat/data/database</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

Lifelong learning activities in Cyprus have seen a slight decrease in numbers, while being below the EU average during the whole of the examined period. This can be linked with the increasing number of people receiving tertiary education in the recent years.

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	11.097	11.287	11.265	10.346	9.933	10.433	
<b>Denominator</b>	137.000	144.700	146.300	143.700	139.900	139.100	140.300

## INNOPLATFORM

Innovations Platform and Tools for increasing the innovation capacity of SMEs in the Balkan Mediterranean Area

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<b>EUIS</b>	8,10%	7,80%	7,70%	7,20%	7,10%	7,50%	
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**Government stakeholders:** Directorate General for European Programmes, Coordination and Development

**Important documents:** Directorate General for European Programmes, Coordination and Development, *National Strategic Plan of the Republic of Cyprus for Lifelong Learning 2014-2020*,  
([http://www.dgepcd.gov.cy/dgepcd/dgepcd.nsf/499A1CB95981643FC2257C7D00486172/\\$file/National%20Lifelong%20Learning%20Strategy%20in%20Greek.pdf](http://www.dgepcd.gov.cy/dgepcd/dgepcd.nsf/499A1CB95981643FC2257C7D00486172/$file/National%20Lifelong%20Learning%20Strategy%20in%20Greek.pdf))

## 1 FRAMEWORK CONDITIONS

### 1.2 Attractive research systems

Indicator	1.2.1. International scientific co-publications per million population
<b>Numerator</b>	Number of scientific publications with at least one co-author based abroad (where abroad is non-EU for the EU28)
<b>Denominator</b>	Total population
<b>Interpretation</b>	International scientific co-publications are a proxy for the quality of scientific research as collaboration increases scientific productivity.
<b>Source of data and available years for the concerned country</b>	Publication data provided by CWTS (Leiden University) as part of a contract to European Commission (DG Research and Innovation); Population data from Eurostat; <a href="http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en">http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

Cyprus shows a steady growth from 2010 to 2016, being over the EU average and also presenting a growth rate that is higher than any other comparable countries, especially given the fact that the higher education sector in the country is relatively new.

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	534	573	666	738	746	857	974
<b>Denominator</b>	839.800	862.000	865.900	858.000	847.000	847.000	854.800
<b>EUIS</b>	636	664	769	860	881	1.012	1.140

**Government stakeholders:** Cyprus Ministry of Education and Culture (<http://www.moec.gov.cy/en/>)

**Important documents:** Compendium of Bibliometric Science Indicators [www.oecd.org/sti/innno/Bibliometrics-Compendium.pdf](http://www.oecd.org/sti/innno/Bibliometrics-Compendium.pdf)

## 1 FRAMEWORK CONDITIONS

### 1.2. Attractive research systems

**1.2.2. Scientific publications among the top-10% most cited publications worldwide as percentage of total scientific publications of the country**

<b>Numerator</b>	Number of scientific publications among the top-10% most cited publications worldwide
<b>Denominator</b>	Total number of scientific publications
<b>Interpretation</b>	The indicator is a measure for the efficiency of the research system, as highly cited publications are assumed to be of higher quality. There could be a bias towards small or English-speaking countries given the coverage of Scopus' publication data.
<b>Source of data and available years for the concerned country</b>	Data provided by CWTS (Leiden University) as part of a contract to the European Commission (DG Research and Innovation); European Innovation Scoreboard 2017; <a href="http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en">http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

The indicator of scientific excellence indicates the amount (in %) of a unit's scientific output that is part of the set of the 10% most-cited papers within their respective scientific fields.

Cyprus had been lower than EU average for the examined period but has improved its performance in recent year, closing the gap and can be expected to keep up with the rest of the Member States over the next years, also given the improvement in the other education relating indicators.

**Results/Analysis:**

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	101	115	152	138	155	182	
<b>Denominator</b>	1.349	1.453	1.598	1.824	1.728	1.780	2.036
<b>EUIS</b>	7,51%	7,89%	9,52%	7,57%	8,99%	10,23%	

**Government stakeholders:** Cyprus Ministry of Education and Culture (<http://www.moec.gov.cy/en/>)

**Important documents:** Compendium of Bibliometric Science Indicators  
[www.oecd.org/sti/inn/Bibliometrics-Compendium.pdf](http://www.oecd.org/sti/inn/Bibliometrics-Compendium.pdf)

## 1 FRAMEWORK CONDITIONS

### 1.2. Attractive research systems

Indicator	1.2.3. Foreign doctorate students as a percentage of all doctorate students
<b>Numerator</b>	Number of doctorate students from foreign countries
<b>Denominator</b>	Total number of doctorate students
<b>Interpretation</b>	The share of foreign doctorate students reflects the mobility of students as an effective way of diffusing knowledge. Attracting high-skilled foreign doctorate students will secure a continuous supply of researchers.
<b>Source of data and available years for the concerned country</b>	European Innovation Scoreboard 2017 for the indicator; Eurostat for the values of the numerator and denominator; If not available use official national sources for the numerator and denominator. <a href="http://ec.europa.eu/eurostat/data/database">http://ec.europa.eu/eurostat/data/database</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

The number of foreign countries doctorate students in Cyprus has shown significant variation during the examined, most probably as a direct result of the economic and financial crisis of 2013. The indicator has since recovered to its pre-crisis level, being however still relatively low in comparison to EU average.

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	41	59	80				
<b>Denominator</b>	487	589	710				
<b>EUIS</b>	8,42%	10,02%	11,27%	4,83%	6,78%	11,36%	

**Government stakeholders:** Cyprus Ministry of Education and Culture (<http://www.moec.gov.cy/en/>)

**Important documents:** -

## 1 FRAMEWORK CONDITIONS

### 1.3 Innovation-friendly environment

Indicator	1.3.1. Broadband penetration
<b>Numerator</b>	Number of enterprises with a maximum contracted download speed of the fastest fixed internet connection of at least 100 Mb/s
<b>Denominator</b>	Total number of enterprises
<b>Interpretation</b>	Realising Europe's full e-potential depends on creating the conditions for electronic commerce and the Internet to flourish. This indicator captures the relative use of this e-potential by the share of enterprises that have access to fast broadband.
<b>Source of data and available years for the concerned country</b>	Eurostat; Community Survey of ICT Usage; E-commerce in Enterprises; European Innovation Scoreboard 2017; <a href="http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en">http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

This indicator has improved in the last years of the examined period, remaining however very low in comparison to Member States. This can also be a sign of the need for significant infrastructure improvement.

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	0	0	0	0	0	901,62	2791,98
<b>Denominator</b>	62125	92204	90905	89830	88346	90162	93066
<b>EUIS</b>	0%	0%	0%	0%	0%	1%	3%

**Government stakeholders:** Ministry of Transport, Communications and Work ([http://www.mcw.gov.cy/mcw/mcw.nsf/index\\_en/index\\_en?OpenDocument](http://www.mcw.gov.cy/mcw/mcw.nsf/index_en/index_en?OpenDocument))

**Important documents:** Innovation Union Scorecards (IUS) 2010-2016

## 1 FRAMEWORK CONDITIONS

### 1.3. Innovation-friendly environment

Indicator	1.3.2. Opportunity-driven entrepreneurship (Motivational index)
<b>Definition</b>	This index is calculated as the ratio between the share of persons involved in improvement-driven entrepreneurship and the share of persons involved in necessity-driven entrepreneurship.
<b>Interpretation</b>	Data from GEM distinguish between two types of entrepreneurship: 1) opportunity-driven entrepreneurship and 2) necessity-driven entrepreneurship. The first includes persons involved in TEA (Total Early-Stage Entrepreneurial Activity) who (i) claim to be driven by opportunity as opposed to finding no other option for work; and (ii) who indicate the main driver for being involved in this opportunity is being independent or increasing their income, rather than just maintaining their income; the second includes persons involved in TEA who are involved in entrepreneurship because they had no other option for work. GEM has constructed the Motivational index to measure the relative degree of improvement-driven entrepreneurship.
<b>Source of data and available years for the concerned country</b>	Global Entrepreneurship Monitor (GEM) for the numerator and denominator and European Innovation Scoreboard 2017 for the final value.

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

Insufficient National Data for Cyprus. According to European Innovation Scoreboard 2017, no change noted during the examined period.

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>							
<b>Denominator</b>							
<b>EUIS</b>							

**Government stakeholders:**

**Important documents:** Innovation Union Scorecards (IUS) 2010-2016

## 2. INVESTMENTS

### 2.1 Finance and support

Indicator	2.1.1. R&D expenditure in the public sector (percentage of GDP)
<b>Numerator</b>	All R&D expenditures in the government sector (GOVERD) and the higher education sector (HERD) (in mill Euro)
<b>Denominator</b>	Gross Domestic Product (in mill Euro)
<b>Interpretation</b>	R&D expenditure represents one of the major drivers of economic growth in a knowledge-based economy. As such, trends in the R&D expenditure indicator provide key indications of the future competitiveness and wealth of the EU. Research and development spending is essential for making the transition to a knowledge-based economy as well as for improving production technologies and stimulating growth.
<b>Source of data and available years for the concerned country</b>	European Innovation Scoreboard 2017 for the indicator; Eurostat for the values of the numerator and denominator; If not available, use official national sources for the numerator and denominator. <a href="http://ec.europa.eu/eurostat/data/database">http://ec.europa.eu/eurostat/data/database</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

The R&D expenditure as a percentage of the GDP for Cyprus remains steady as a percentage since 2010 despite the country's GDP drop. It is however in total, among the lowest in the EU.

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	€ 5.983	€ 6.117	€ 6.042	€ 5.986	€ 5.634	€ 5.323	
<b>Denominator</b>	€ 19.300	€ 19.731	€ 19.490	€ 18.140	€ 17.606	€ 17.742	€ 18.123
<b>EUIS</b>	31,00%	31,00%	31,00%	33,00%	32,00%	30,00%	

**Government stakeholders:** Ministry of Finance

**Important documents:** Innovation Union Scorecards (IUS) 2010-2016

## 2 INVESTMENTS

### 2.1. Finance and support

Indicator	2.1.2. Venture capital (percentage of GDP)
<b>Numerator</b>	Venture capital investment is defined as private equity being raised for investment in companies. Management buyouts, management buy-ins, and venture purchase of quoted shares are excluded. Venture capital includes early-stage (seed + start-up) and expansion and replacement capital.
<b>Denominator</b>	Gross Domestic Product
<b>Interpretation</b>	The amount of venture capital is a proxy for the relative dynamism of new business creation. In particular for enterprises using or developing new (risky) technologies, venture capital is often the only available means of financing their (expanding) business.
<b>Source of data and available years for the concerned country</b>	Venture capital data from Invest Europe as the numerator; GDP data from Eurostat as the denominator; European Innovation Scoreboard 2017 for the value of the indicator; <a href="http://ec.europa.eu/eurostat/data/database">http://ec.europa.eu/eurostat/data/database</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

After the economic and financial crisis of the 2012-2013 period venture capital has started operating again in the Cypriot economy. Despite surpassing the EU average in

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	€ 1.620	€ 235	€ 599	€ 515	€ 679	€ 1.257	
<b>Denominator</b>	5.262	5.639	6.012	6.067	6.266	6.318	6.504
<b>EUIS</b>	8,39%	1,19%	3,07%	2,84%	3,86%	7,08%	

**Government stakeholders:** Directorate General for European Programmes, Coordination and Development

**Important documents:** Innovation Union Scorecards (IUS) 2010-2016

## 2 INVESTMENTS

### 2.2 Firm investments

Indicator	2.2.1. R&D expenditure in the business sector (percentage of GDP)
<b>Numerator</b>	All R&D expenditures in the business sector (BERD) (in mill Euro)
<b>Denominator</b>	Gross Domestic Product (in mill Euro)
<b>Interpretation</b>	The indicator captures the formal creation of new knowledge within firms. It is particularly important in the science-based sectors (pharmaceuticals, chemicals and some areas of electronics) where most new knowledge is created in or near R&D laboratories.
<b>Source of data and available years for the concerned country</b>	European Innovation Scoreboard 2017 for the indicator; Eurostat for the values of the numerator and denominator; If not available use official national sources for the numerator and denominator. <a href="http://ec.europa.eu/eurostat/data/database">http://ec.europa.eu/eurostat/data/database</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

The business sector expenditure in R&D has been the lowest in the EU during the whole of the examined period. A slight increase after 2013 was enough only to bring it back to the 2010 levels. This is probably one of the most hindering elements regarding innovation, recorded in this report.

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	€ 1.543,96	€ 1.183,86	€ 1.169,38	€ 1.269,83	€ 1.408,47	€ 1.419,36	
<b>Denominator</b>	€ 19.300	€ 19.731	€ 19.490	€ 18.140	€ 17.606	€ 17.742	€ 18.123
<b>EUIS</b>	8,00%	6,00%	6,00%	7,00%	8,00%	8,00%	

**Government stakeholders:** Ministry of Finance, Directorate General for European Programmes, Coordination and Development

**Important documents:** Innovation Union Scorecards (IUS) 2010-2016

## 2 INVESTMENTS

### 2.2.Firm investments

Indicator	2.2.2. Non-R&D innovation expenditures (percentage of turnover)
<b>Numerator</b>	Sum of total innovation expenditure for enterprises, excluding intramural and extramural R&D expenditures (in mill Euro)
<b>Denominator</b>	Total turnover for all enterprises (in mill Euro)
<b>Interpretation</b>	This indicator measures non-R&D innovation expenditure as a percentage of total turnover. Several of the components of innovation expenditure, such as investment in equipment and machinery and the acquisition of patents and licenses, measure the diffusion of new production technology and ideas.
<b>Source of data and available years for the concerned country</b>	European Innovation Scoreboard 2017 for the indicator; Eurostat for the values of the numerator and denominator; If not available use official national sources for the numerator and denominator. <a href="http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en">http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

The 2012-2013 crisis was decisive in the slump of the examined indicator, which has not yet recovered, being well below the EU levels.

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	€ 484,05	€ 463,87	€ 442,92	€ 141,14	€ 142,85	€ 52,62	
<b>Denominator</b>	€ 27.990,50	€ 27.877,20	€ 26.618,50	€ 24.496,90	€ 24.794,60	€ 25.573,30	
<b>EUIS</b>	1,73%	1,66%	1,66%	0,58%	0,58%	0,21%	

**Government stakeholders:** Ministry of Finance, Directorate General for European Programmes, Coordination and Development

**Important documents:** Innovation Union Scorecards (IUS) 2010-2016

## 2 INVESTMENTS

### 2.2.Firm investments

Indicator	2.2.3. Enterprises providing training to develop or upgrade ICT skills of their personnel
<b>Numerator</b>	Number of enterprises that provided any type of training to develop ICT related skills of their personnel
<b>Denominator</b>	Total number of enterprises
<b>Interpretation</b>	ICT skills are particularly important for innovation in an increasingly digital economy. The share of enterprises providing training in that respect is a proxy for the overall skills development of employees.
<b>Source of data and available years for the concerned country</b>	Eurostat; Community Survey of ICT Usage; E-commerce in Enterprises; European Innovation Scoreboard 2017; Use of official national sources; <a href="http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en">http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

The high ranking of Cyprus during the pre-crisis years in the development of ICT related skills for personnel, meant that despite a sharp drop to expenditure, it remains over the EU average. It however necessary to step up the efforts in order to return to pre-crisis levels, as these are crucial innovation skills that can help improve relating indicators.

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	17.395	25.817	25.453	19.763	20.320	19.836	
<b>Denominator</b>	62125	92204	90905	89830	88346	90162	93066
<b>EUIS</b>	28,00%	28,00%	28,00%	22,00%	23,00%	22,00%	

**Government stakeholders:** Ministry of Finance, Directorate General for European Programmes, Coordination and Development

**Important documents:** Innovation Union Scorecards (IUS) 2010-2016

### 3. INNOVATION ACTIVITIES

#### 3.1 Innovators

Indicator	3.1.1. SMEs introducing product or process innovations (percentage of SMEs)
<b>Numerator</b>	Number of SMEs who introduced at least one new product or a new process to one of their markets
<b>Denominator</b>	Total number of SMEs
<b>Interpretation</b>	Technological innovation, as measured by the introduction of new products (goods or services) and processes, is a key ingredient to innovation in manufacturing activities. Higher shares of technological innovators should reflect a higher level of innovation activities.
<b>Source of data and available years for the concerned country</b>	Eurostat (Community Innovation Survey) for the numerator and the denominator; European Innovation Scoreboard 2017 for the value of the score; <a href="http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en">http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

SMEs are the backbone of Cypriot economy and the consequences of the 2012-2013 crisis are still profound, for they have yet to recover to their pre-crisis numbers. The various policy initiatives for their support, especially in innovation shows that this has been identified and recognised as an immediate priority. Results from recent reforms have yet to show, but the trend appears to be positive.

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	2.222	1.962	2.092	1.772	1.830	2.075	
<b>Denominator</b>	5.262	5.639	6.012	6.067	6.266	6.318	6.504
<b>EUIS</b>	42,24%	34,80%	34,80%	29,21%	29,21%	32,84%	

**Government stakeholders:** Ministry of Energy, Commerce, Industry and Tourism, Ministry of Finance, Directorate General for European Programmes, Coordination and Development

**Important documents:** Innovation Union Scorecards (IUS) 2010-2016

### 3 INNOVATION ACTIVITIES

#### 3.1. Innovators

Indicator	3.1.2. SMEs introducing marketing or organisational innovations (percentage of SMEs)
<b>Numerator</b>	Number of SMEs who introduced at least one new marketing innovation or organisational innovation to one of their markets
<b>Denominator</b>	Total number of SMEs
<b>Interpretation</b>	The Community Innovation Survey mainly asks firms about their technological innovation. Many firms, in particular in the services sectors, innovate through other non-technological forms of innovation. Examples of these are marketing and organisational innovations. This indicator captures the extent to which SMEs innovate through non-technological innovation.
<b>Source of data and available years for the concerned country</b>	Eurostat (Community Innovation Survey); European Innovation Scoreboard 2017 for the value of the score; <a href="http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en">http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

Cyprus remains relatively low on non-technical innovation among the SMEs. The nature of its businesses, heavily focused on services, though means that this should be expected in the future, as it is a clear necessity if those businesses wish to remain relevant. However, there are yet to clear signs of improvement to pre-crisis levels, or even of a stabilization, with the trend showing negative results.

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	2.491	2.086	2.224	2.159	2.230	1.966	-
<b>Denominator</b>	5.262	5.639	6.012	6.067	6.266	6.318	6.504
<b>EUIS</b>	47,34%	36,99%	36,99%	35,59%	35,59%	31,11%	-

**Government stakeholders:** Ministry of Energy, Commerce, Industry and Tourism, Ministry of Finance, Directorate General for European Programmes, Coordination and Development

**Important documents:** Innovation Union Scorecards (IUS) 2010-2016

### 3 INNOVATION ACTIVITIES

#### 3.1. Innovators

Indicator	3.1.3. SMEs innovating in-house (percentage of SMEs)
<b>Numerator</b>	Number of SMEs with in-house innovation activities. Innovative enterprises are defined as enterprises which have introduced new products or processes either in-house or in combination with other firms.
<b>Denominator</b>	Total number of SMEs
<b>Interpretation</b>	This indicator measures the degree to which SMEs, that have introduced any new or significantly improved products or production processes, have innovated in-house. The indicator is limited to SMEs, because almost all large firms innovate and because countries with an industrial structure weighted towards larger firms tend to do better.
<b>Source of data and available years for the concerned country</b>	Eurostat (Community Innovation Survey) for the numerator and the denominator; European Innovation Scoreboard 2017 for the value of the score; <a href="http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en">http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

The number of SMEs with in-house innovation activities was traditionally at the context of 40% and to drop swiftly in crisis years to 30% and lower. In recent years a slight improvement appears to be in place, but the competitiveness of an SME during present circumstances requires more effort to be restored.

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	2.187	2.343	2.498	1.694	1.750	1.926	
<b>Denominator</b>	5.262	5.639	6.012	6.067	6.266	6.318	6.504
<b>EUIS</b>	41,55%	41,55%	41,55%	27,93%	27,93%	30,48%	

**Government stakeholders:** Ministry of Energy, Commerce, Industry and Tourism, Ministry of Finance, Directorate General for European Programmes, Coordination and Development

**Important documents:** Innovation Union Scorecards (IUS) 2010-2016

### 3 INNOVATION ACTIVITIES

#### 3.2 Linkages

Indicator	3.2.1. Innovative SMEs collaborating with others (percentage of SMEs)
<b>Numerator</b>	Number of SMEs with innovation co-operation activities, i.e. those firms that had any co-operation agreements on innovation activities with other enterprises or institutions in the three years of the survey period
<b>Denominator</b>	Total number of SMEs
<b>Interpretation</b>	This indicator measures the degree to which SMEs are involved in innovation co-operation. Complex innovations, in particular in ICT, often depend on the ability to draw on diverse sources of information and knowledge, or to collaborate in the development of an innovation. This indicator measures the flow of knowledge between public research institutions and firms, and between firms and other firms. The indicator is limited to SMEs, because almost all large firms are involved in innovation co-operation.
<b>Source of data and available years for the concerned country</b>	Eurostat (Community Innovation Survey) for the numerator and the denominator; European Innovation Scoreboard 2017 for the value of the score; <a href="http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en">http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

As with the previous indicators, the percentage of the total number of Cypriot SME's cooperating with other SMEs was higher the EU average (2010-2012), there has been a constant drop in the period between 2013-2016. A stabilization of this trend has yet to appear, with the total negative change in relation to the EU 2010 base having reached 96,6%.

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	1.121	1.212	1.292	927	957	738	-
<b>Denominator</b>	5.262	5.639	6.012	6.067	6.266	6.318	6.504
<b>EUIS</b>	21,31%	21,49%	21,49%	15,28%	15,28%	11,67%	-

**Government stakeholders:** Ministry of Energy, Commerce, Industry and Tourism, Ministry of Finance, Directorate General for European Programmes, Coordination and Development

**Important documents:** Innovation Union Scorecards (IUS) 2010-2016

### 3 INNOVATION ACTIVITIES

#### 3.2.Linkages

Indicator	3.2.2. Public-private co-publications per million population
<b>Numerator</b>	Number of public-private co-authored research publications. The definition of the "private sector" excludes the private medical and health sector. Publications are assigned to the country/countries in which the business companies or other private sector organisations are located.
<b>Denominator</b>	Total population
<b>Interpretation</b>	This indicator captures public-private research linkages and active collaboration activities between business sector researchers and public sector researchers resulting in academic publications.
<b>Source of data and available years for the concerned country</b>	Publication data provided by CWTS (Leiden University) as part of a contract to European Commission (DG Research and Innovation); Population data from Eurostat; European Innovation Scoreboard 2017; <a href="http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en">http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

Cyprus began the examined period in an average position compared to most EU Members but, with a small improvement in 2011, has seen the number of public-private co-authored scientific publications declining from 2012 and forth.

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	235.801	195.034	170.767	118.908	59.231	59.999	-
<b>Denominator</b>	839.800	862.000	865.900	858.000	847.000	847.000	854.800
<b>EUIS</b>	28,08%	22,63%	19,72%	13,86%	6,99%	7,08%	-

**Government stakeholders:** Cyprus Ministry of Education and Culture

**Important documents:** Innovation Union Scorecards (IUS) 2010-2016

### 3 INNOVATION ACTIVITIES

#### 3.2.Linkages

Indicator	3.2.3. Private co-funding of public R&D expenditures (percentage of GDP)
<b>Numerator</b>	All R&D expenditures in the government sector (GOVERD) and the higher education sector (HERD) financed by the business sector
<b>Denominator</b>	Gross Domestic Product
<b>Interpretation</b>	This indicator measures public-private co-operation. University and government R&D financed by the business sector are expected to explicitly serve the more short-term research needs of the business sector.
<b>Source of data and available years for the concerned country</b>	Eurostat; European Innovation Scoreboard 2017; <a href="http://ec.europa.eu/eurostat/data/database">http://ec.europa.eu/eurostat/data/database</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

No available data

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	0	0	0	0	0	0	-
<b>Denominator</b>	5.262	5.639	6.012	6.067	6.266	6.318	6.504
<b>EUIS</b>	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	-

**Government stakeholders:** Ministry of Energy, Commerce, Industry and Tourism, Ministry of Finance, Directorate General for European Programmes, Coordination and Development

**Important documents:** Innovation Union Scorecards (IUS) 2010-2016

### 3 INNOVATION ACTIVITIES

#### 3.3 Intellectual assets

Indicator	3.3.1. PCT patent applications per billion GDP (in PPS)
<b>Numerator</b>	Number of patent applications filed under the PCT, at international phase, designating the European Patent Office (EPO). Patent counts are based on the priority date, the inventor's country of residence and fractional counts.
<b>Denominator</b>	Gross Domestic Product in Purchasing Power Standard (in billion)
<b>Interpretation</b>	The capacity of firms to develop new products will determine their competitive advantage. One indicator of the rate of new product innovation is the number of patents. This indicator measures the number of PCT patent applications.
<b>Source of data and available years for the concerned country</b>	Patent data from the OECD; Population data from Eurostat; European Innovation Scoreboard 2017; <a href="http://ec.europa.eu/eurostat/data/database">http://ec.europa.eu/eurostat/data/database</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

Cyprus has shown a significant improvement on the patent application indicator in the post 2013 period, remaining however very low in comparison with overall EU image.

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	122	60	109	68	125	160	-
<b>Denominator</b>	21.089	21.302	20.832	19.384	19.105	20.062	20.407
<b>EUIS</b>	0,58%	0,28%	0,52%	0,35%	0,66%	0,80%	-

**Government stakeholders:** Ministry of Energy, Commerce, Industry and Tourism, Ministry of Finance, Directorate General for European Programmes, Coordination and Development

**Important documents:** Innovation Union Scorecards (IUS) 2010-2016

### 3 INNOVATION ACTIVITIES

#### 3.3. Intellectual assets

Indicator	3.3.2. Trademark applications per billion GDP (in PPS)
<b>Numerator</b>	Number of trademark applications applied for at European Union Intellectual Property Office (EUIPO) plus number of trademark applications applied for at World Intellectual Property Office (WIPO) ("yearly Madrid applications by origin")
<b>Denominator</b>	Gross Domestic Product in Purchasing Power Standard (in billion)
<b>Interpretation</b>	Trademarks are an important innovation indicator, especially for the service sector. The Community trademark gives its proprietor a uniform right applicable in all Member States of the European Union through a single procedure which simplifies trademark policies at European level. It fulfils the three essential functions of a trademark: it identifies the origin of goods and services, guarantees consistent quality through evidence of the company's commitment vis-à-vis the consumer, and it is a form of communication, a basis for publicity and advertising.
<b>Source of data and available years for the concerned country</b>	Trademark data from European Union Intellectual Property Office (EUIPO) and World Intellectual Property Office (WIPO); Population data from Eurostat; European Innovation Scoreboard 2017; <a href="http://ec.europa.eu/eurostat/data/database">http://ec.europa.eu/eurostat/data/database</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

One of the most innovative sector identified in this study, Cyprus provides for very high absolute and relative numbers. It is ranked in the top 3 of EU Member States on the subject, showing that a possible improvement in other business relating innovation indicators can meet up a high multiplier.

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	3.522	4.533	5.768	5.599	5.816	7.272	-
<b>Denominator</b>	21.089	21.302	20.832	19.384	19.105	20.062	20.407
<b>EUIS</b>	16,70%	21,28%	27,69%	28,89%	30,44%	36,25%	-

**Government stakeholders:** Ministry of Energy, Commerce, Industry and Tourism, Ministry of Finance, Directorate General for European Programmes, Coordination and Development

**Important documents:** Innovation Union Scorecards (IUS) 2010-2016

### 3 INNOVATION ACTIVITIES

#### 3.3. Intellectual assets

Indicator	3.3.3. Design applications per billion GDP (in PPS)
<b>Numerator</b>	Number of individual designs applied for at European Union Intellectual Property Office (EUIPO)
<b>Denominator</b>	Gross Domestic Product in Purchasing Power Standard (in billion)
<b>Interpretation</b>	A design is the outward appearance of a product or part of it resulting from the lines, contours, colours, shape, texture, materials and/or its ornamentation. A product can be any industrial or handicraft item including packaging, graphic symbols and typographic typefaces but excluding computer programmes. It also includes products that are composed of multiple components, which may be disassembled and reassembled. Community design protection is directly enforceable in each Member State and it provides both the option of an unregistered and a registered Community design right for one area encompassing all Member States.
<b>Source of data and available years for the concerned country</b>	Design data from European Union Intellectual Property Office (EUIPO); Population data from Eurostat; European Innovation Scoreboard 2017; <a href="http://ec.europa.eu/eurostat/data/database">http://ec.europa.eu/eurostat/data/database</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

This indicator has been relatively low for Cyprus and still is, although there is a quite significant increase especially in 2016 to levels surpassing the pre-crisis ones.

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	261	427	380	445	527	388	-
<b>Denominator</b>	21.089	21.302	20.832	19.384	19.105	20.062	20.407
<b>EUIS</b>	1,24%	2,00%	1,82%	2,29%	2,76%	1,93%	3,34%

**Government stakeholders:** Ministry of Energy, Commerce, Industry and Tourism, Ministry of Finance, Directorate General for European Programmes, Coordination and Development

**Important documents:** Innovation Union Scorecards (IUS) 2010-2016

## 4. IMPACT

### 4.1 Employment impact

Indicator	4.1.1. Employment in knowledge-intensive activities (percentage of total employment)
<b>Numerator</b>	Number of employed persons in knowledge-intensive activities in business industries. Knowledge-intensive activities are defined, based on EU Labour Force Survey data, as all NACE Rev.2 industries at 2-digit level where at least 33% of employment has a tertiary education degree (ISCED 5-8).
<b>Denominator</b>	Gross Domestic Product in Purchasing Power Standard (in million)
<b>Interpretation</b>	Knowledge-intensive activities provide services directly to consumers, such as telecommunications, and provide inputs to the innovative activities of other firms in all sectors of the economy.
<b>Source of data and available years for the concerned country</b>	European Innovation Scoreboard 2017 for the indicator; Eurostat for the values of the numerator and denominator; If not available, use official national sources for the numerator and denominator. <a href="http://ec.europa.eu/eurostat/data/database">http://ec.europa.eu/eurostat/data/database</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

The employment in knowledge-intensive activities in Cyprus has traditionally been high and above to the EU28 average, due to the service nature of the Cypriot economy. This highlight the importance of transforming the economy into a more innovative driven one, to further capitulate on the available personnel capacities.

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	3.184	3.600	3.583	3.334	3.095	3.270	-
<b>Denominator</b>	21.089	21.302	20.832	19.384	19.105	20.062	20.407
<b>EUIS</b>	15,10%	16,90%	17,20%	17,20%	16,20%	16,30%	-

**Government stakeholders:** Ministry of Energy, Commerce, Industry and Tourism, Ministry of Finance, Directorate General for European Programmes, Coordination and Development

**Important documents:** Innovation Union Scorecards (IUS) 2010-2016

## 4 IMPACT

### 4.1 Employment impact

Indicator	4.1.2. Employment in fast-growing enterprises (percentage of total employment)
<b>Numerator</b>	Number of employees in high-growth enterprises in 50% ‘most innovative’ industries, defined as: B06 (Extraction of crude petroleum and natural gas) B09 (Mining support service activities) C11 (Manufacture of beverages) C12 (Manufacture of tobacco products) C19 (Manufacture of coke and refined petroleum product) C20 (Manufacture of chemicals and chemical products) C21 (Manufacture of basic pharmaceutical products and pharmaceutical preparations) C26 (Manufacture of computer, electronic and optical products) C27 (Manufacture of electrical equipment) C28 (Manufacture of machinery and equipment not elsewhere classified) C29 (Manufacture of motor vehicles, trailers and semi-trailers) C30 (Manufacture of other transport equipment) C32 (Other manufacturing) D35 (Electricity, gas, steam and air conditioning supply) E39 (Remediation activities and other waste management services) G46 (Wholesale trade, except of motor vehicles and motorcycle) H51 (Air transport) J58 (Publishing activities) J59 (Motion picture, video and television programme production, sound recording and music publishing activities) J60 (Programming and broadcasting activities) J61 (Telecommunications) J62 (Computer programming, consultancy and related activities) J63 (Information service activities) K64 (Financial service activities, except insurance and pension funding) K65 (Insurance, reinsurance and pension funding, except compulsory social security) K66 (Activities auxiliary to financial services and insurance activities) L68 (Real estate activities)

M69 (Legal and accounting activities)  
 M70 (Activities of head offices; management consultancy activities)  
 M71 (Architectural and engineering activities; technical testing and analysis)  
 M72 (Scientific research and development)  
 M73 (Advertising and market research)  
 M74 (Other professional, scientific and technical activities)  
 M75 (Veterinary activities)  
 N79 (Travel agency, tour operator and other reservation service and related activities)

**Denominator** Total employment for enterprises with 10 or more employees  
**Interpretation** This indicator provides an indication of the dynamism of fast-growing firms in innovative sectors as compared to all fast-growing business activities. It captures the capacity of a country to rapidly transform its economy to respond to new needs and to take advantage of emerging demand.  
**Source of data and available years for the concerned country** Calculations by European Commission (Joint Research Centre); European Innovation Scoreboard 2017; [http://www.mof.gov.cy/mof/cystat/statistics.nsf/index\\_en/index\\_en](http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en)

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

Cyprus has a well recorded deficit of fast-growing firms of innovative sectors, and this is well reflected on the present indicator, being at the bottom of the relating EU list. This is identified as one of the structural problems of Cypriot Economy, regarding innovation.

**Results/Analysis:**

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	2.958	3.038	2.901	2.734	1.167	1.633	-
<b>Denominator</b>	229.315	235.495	224.866	211.914	204.792	212.084	223.408
<b>EUIS Values</b>	1,29%	1,29%	1,29%	1,29%	0,57%	0,77%	-

**Government stakeholders:** Ministry of Energy, Commerce, Industry and Tourism, Ministry of Finance

**Important documents:** -

## 4 IMPACT

### 4.2 Sales impact

Indicator	4.2.1. Exports of medium and high technology products as a share of total product exports
<b>Numerator</b>	Value of medium and high tech exports, in national currency and current prices, including exports of the following SITC Rev.3 products: 266, 267, 512, 513, 525, 533, 54, 553, 554, 562, 57, 58, 591, 593, 597, 598, 629, 653, 671, 672, 679, 71, 72, 731, 733, 737, 74, 751, 752, 759, 76, 77, 78, 79, 812, 87, 88 and 891
<b>Denominator</b>	Value of total product exports
<b>Interpretation</b>	The indicator measures the technological competitiveness of the EU, i.e. the ability to commercialise the results of research and development (R&D) and innovation in international markets. It also reflects product specialisation by country. Creating, exploiting and commercialising new technologies are vital for the competitiveness of a country in the modern economy. Medium and high technology products are key drivers for economic growth, productivity and welfare, and are generally a source of high value added and well-paid employment.
<b>Source of data and available years for the concerned country</b>	Eurostat (ComExt) for Member States; UN ComTrade for non-EU countries; European Innovation Scoreboard 2017; <a href="https://comtrade.un.org/data/">https://comtrade.un.org/data/</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

Despite having an above average profile in the employment in knowledge-intensive enterprises' indicator, Cypriot economy does not translate that into exportable products. Related to the previous indicator, it shows the need for transformation of the spirit of Cypriot entrepreneurship to more innovative friendly business, in sectors beyond services.

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	432	498	487	657	955	1.279	-
<b>Denominator</b>	1.058	1.306	1.354	1.520	2.374	2.961	2680,6
<b>EUIS</b>	40,80%	38,12%	35,99%	43,20%	40,24%	43,18%	-

## **INNOPLATFORM**

Innovations Platform and Tools for increasing the innovation capacity of SMEs in the Balkan Mediterranean Area

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**Government stakeholders:** Ministry of Energy, Commerce, Industry and Tourism, Ministry of Finance

**Important documents:** Innovation Union Scorecards (IUS) 2010-2016

## 4 IMPACT

### 4.2.Sales impact

Indicator	4.2.2. Knowledge-intensive services exports as percentage of total services exports
<b>Numerator</b>	Exports of knowledge-intensive services is defined as the sum of credits in EBOPS 2010 (Extended Balance of Payments Services Classification) items: SC1 (Sea transport) SC2 (Air transport) SC3A (Space transport) SF (Insurance and pension services) SG (Financial services) SH (Charges for the use of intellectual property) SI (Telecommunications, computer, and information services) SJ (Other business services) SK1 (Audio-visual and related services)
<b>Denominator</b>	Total value of services exports
<b>Interpretation</b>	The indicator measures the competitiveness of the knowledge-intensive services sector. Competitiveness-enhancing measures and innovation strategies can be mutually reinforcing for the growth of employment, export shares, and turnover at the firm level. The indicator reflects the ability of an economy, notably resulting from innovation, to export services with high levels of value added, and successfully take part in knowledge-intensive global value chains.
<b>Source of data and available years for the concerned country</b>	Calculations by European Commission (Joint Research Centre); European Innovation Scoreboard 2017; <a href="https://comtrade.un.org/data/">https://comtrade.un.org/data/</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

Traditionally, a services heavy economy Cyprus remains close to EU average, even during the crisis years of 2012-2013. Knowledge-intensive services, remain the major exportable product, however they appear to have capped their potential in the context of Cypriot economy, being its main element and solemn growth factor.

### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	4.833	5.117	5.089	5.468	5.553	5.862	-
<b>Denominator</b>	7.005 €	7.416 €	7.376 €	7.924 €	8.118 €	8.570 €	9.196 €
<b>EUIS</b>	69,00%	69,00%	69,00%	69,00%	68,40%	68,40%	-

**Government stakeholders:** Ministry of Energy, Commerce, Industry and Tourism,  
Ministry of Finance

**Important documents:** Innovation Union Scorecards (IUS) 2010-2016

## 4 IMPACT

### 4.2.Sales impact

Indicator	4.2.3. Sales of new-to-market and new-to-firm innovations as percentage of turnover
<b>Numerator</b>	Sum of total turnover of new or significantly improved products, either new-to-the-firm or new-to-the-market, for all enterprises (in mill Euro)
<b>Denominator</b>	Total turnover for all enterprises (in mill Euro)
<b>Interpretation</b>	This indicator measures the turnover of new or significantly improved products and includes both products which are only new to the firm and products which are also new to the market. The indicator thus captures both the creation of state-of-the-art technologies (new-to-market products) and the diffusion of these technologies (new-to-firm products).
<b>Source of data and available years for the concerned country</b>	European Innovation Scoreboard 2017 for the indicator; Eurostat for the values of the numerator and denominator; If not available use official national sources for the numerator and denominator. <a href="http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en">http://www.mof.gov.cy/mof/cystat/statistics.nsf/index_en/index_en</a>

**Remark** (commentary which explains the numerator or describes certain specifics of the national context):

In close correlation with the non services sector, new marketable innovation is seriously lacking in Cyprus. Policy reforms and incentives are targeted to extend innovation into new sectors to expand the economy basis beyond services.

#### Results/Analysis:

Year	2010	2011	2012	2013	2014	2015	2016
<b>Nominator</b>	9.984	13.555	13.364	10.241	10.071	4.052	-
<b>Denominator</b>	€ 62.125	€ 92.204	€ 90.905	€ 89.830	€ 88.346	€ 90.162	€ 93.066
<b>EUIS</b>	16,07%	14,70%	14,70%	11,40%	11,40%	4,49%	-

**Government stakeholders:** Ministry of Energy, Commerce, Industry and Tourism, Ministry of Finance

**Important documents:** Innovation Union Scorecards (IUS) 2010-2016

## 5. Conclusions – National Summative Innovation Score

### Summary Innovation Index for CYPRUS

<b>Year</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>SII</b>	87,5	90,9	86,4	86,6	74,4	74,7	74,8

Cyprus has been traditionally classified as a moderate innovator during the whole of the examined (2010-2017) period. However, up to 2013 it was nearing the borderline of strong innovator category, having succeeded a strong innovator status in 2011. As a result of its financial crisis, it has since relatively fallen behind and its index is relatively stable in the middle of the said category. In total, Cyprus innovation performance has declined by 12.7% relative to the EU in 2010 (base).

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