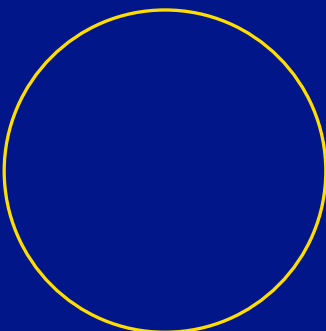
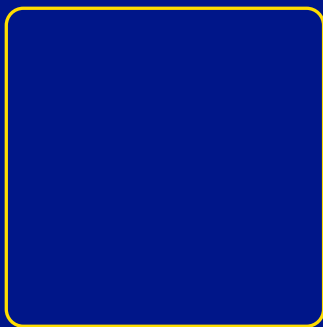
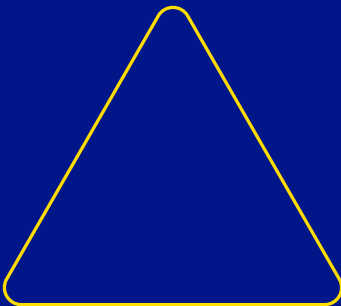


Startup Nations Standard Scoreboard 2022

BASELINE VERSION

Executive Summary of Main Conclusions



December 2022



The views expressed in this report, as well as the information included in it, do not necessarily reflect the opinion or

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More information on the European Startup Nations Alliance is available on

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Foreword

On the “2030 Digital Compass: The European way for the Digital Decade”, the European Commission identifies 4 axes for mapping out the EU’s Digital trajectory:

(1) A digitally skilled population and highly skilled digital professionals, (2) Secure and performant sustainable digital infrastructures, (3) Digital Transformation of businesses, and (4) Digitalisation of public services.

If we look to each one of the axes, we see that a skilled population and professionals are addressing the ever more demanding job market for a varied digital skill set, where startups are spearheading in this regard. The digital infrastructures and digitalisation of public services rely on some of the innovations and solutions that will be generated in the startup ecosystem. As for the digital transformation of businesses, they will come, in a way, from the upgrade of companies doing business through digital (processes, e-commerce, marketing, etc.) and through the renovation of the business fabric, by having a higher number of digital native companies.

This strategy indicates that Europe prioritizes the digital area as a lever for a better society, where the startup ecosystem will play a crucial role in Europe’s economic sustainability and competitiveness. With this mindset and knowing the fact that Europe is lagging in comparison to other competing regions, regarding its startup ecosystem indicators (lower number per capita of startups, employees, and market value), it is time to make a clear bet on this ecosystem.

One key step towards that objective was the creation of Europe Startup Nations Alliance – ESNA. This entity with a European scope was launched during the Portuguese Presidency of the EU, back in the first semester of 2021, being the result of a particularly important declaration that is the “EU Startup Nations Standards of Excellence”, which had wide commitment of Member States, where 26 countries plus Iceland signed it.

This declaration points out 8 best practices of “Startup friendly” public policies that aim to implement standards that go from facilitating business creation, addressing talent necessities, Tax incentives through Stock Options, better financing schemes or promoting innovation in regulation frameworks that foster innovation. The present scoreboard exercise, that starts with the present baseline, is a fundamental step to understand, first, and then improve the level of achievement of these standards by European countries, in order to achieve a true Startup Nations Alliance in our continent.



Arthur Jordão

Interim Manager of European
Nations Startup Alliance

A handwritten signature in blue ink, consisting of stylized, overlapping loops and lines.

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Introduction

1. Introduction

The Baseline as the start of something bigger.

Amongst the Action Areas defined for the European Startup Nation Alliance (ESNA) is to start the process to support the development of the 8 Startup Nations Standards in all signatory countries from the Startup Nations Standard (SNS) declaration¹.

One of the first measures related to this provision of support is the accurate and regular measure of the level of implementation of the standards in each signatory country. This measure is foreseen in the ESNA workplan through the development of a 'SNS Scoreboard', which should publish its first report in 2023.

Previous to the actual realisation of this exercise, which first output is foreseen for 2023, it has been considered as a useful and necessary first step to undergo the development of a 'baseline study' for this scoreboard, identifying and compiling existing and comparable statistical sources which are relevant for the Standards on one side, and on the other highlighting gaps, whenever such sources could not be identified as a call for attention for future exercises.

This Baseline Study, now presented in this report, gathers and analyses the publicly online data available directly or indirectly related to the Startup Nation Standards together with the data collected from signatory countries in response to a specific request from the European Commission launched in August 2021 (herein with referred to as 'DG CONNECT Survey'). The goal of this baseline is not to be a first scoreboard, but instead to highlight the starting point, in terms of trends related to SNS accomplishment (whenever relevant data is publicly available) but also in terms of data unavailability and gaps, in order to allow to refine data collection methods for the future scoreboard editions to be carried by ESNA. The analysis of the information in this report

makes its authors confident that both these objectives have been achieved.

*In terms of trends for Standard Levels of Implementation, the compilation of available data sources in combination to the replies received to the DG CONNECT Survey allow to draw **an incomplete but still relevant view** of the level of achievement of implementation of the Startup Nation Standard in the 27 signatory countries, which shows that Europe as a whole is still far from full achievement and with an uneven level of accomplishment between countries.*

This first view appears to confirm the conclusion from concurring studies on startup policies at European level, with Europe as whole showing a delay towards the more competitive third-country startup ecosystems, such as the US, UK or Israel – which is confirmed in this report for those few areas where there is comparable data available – delay that is less evident in some Nordic and Baltic states.

These results are supported by a full analysis of the whole range of identified indicators, but such a comparative analysis is beyond the point of this Baseline (although it may be relevant in future scoreboard exercises) and is also largely irrelevant due to the significant data availability limitations for several countries in many standard and substandard that prevents direct comparison between signatory countries.

As such, the main conclusions presented in this report focus instead on the overall level of achievement of the ESNA signatory countries as a whole and, which is equally or more important, on the picture drawn by this baseline in terms of unavailability of relevant data for several indicators, a failure that must be addressed in future scoreboard exercises.

¹ <https://startupnationsstandard.eu/files/SNS-declaration.pdf>

1.1 Summary of methodology

One of the purposes of this Baseline is to start a discussion between ESNA members on the relevance and mission of this SNS Scoreboard.

On the Startup Nations Standard (SNS) declaration, the 27 signatories welcome the establishment of a Startup Nations' hub which should promote and enable exchange of best practices among signatory countries and the creation of a common data platform for all Member States, that will provide valuable information across the EU, including facilitation of measuring and monitoring of progress based on regular reporting from Member States in implementing best practices and so help each country become an 'EU Startup Nation'. The role of the Startup Nations' hub has since been taken by ESNA and the SNS scoreboard is one the measures within its implementation plan to achieve the objective above or measurement and monitoring of the level of achievement of best practices implementation.

ESNA has defined, as 1st objective of its implementation strategy, to “gather data from members and provide up to data key information on the ecosystem through a data driven open platform and analytics” and as 2nd objective to “improve National Policy Frameworks of Member States through monitoring of SNS adoption and best practice benchmarking, sharing and exchange”

To implement these objectives, the ESNA implementation plan foresees the procurement and deployment of the digital platform for data gathering and display on the members startup ecosystems and the production of analytical reports on the basis of such data, which one of its outcomes will be the SNS Scoreboard. The development and publication of an annual SNS Scoreboard which a specific task within the work programme of the Horizon Europe contract n° 101072644 signed between the European Commission and ESNA, and that has as deliverables two editions of the SNS

Scoreboard, in Months 11 and 18 (D4.2 and D4.3). Taking in consideration the start date of the contract, such deliverables are more meaningful now in Month 16 (October 2023) and 24 (June 2024).

The SNS Scoreboard will bring together the following aspects: indicators, events and methods. In effect, the different Startup Nation Standards themes (standards divided into indicators, as proposed in the picture below) are measured within different events (unit of analysis) using different ways to collect data (methods).

This structure led to the selection of the key dimensions, with their underlying indicators as shown below in [Figure 1](#).

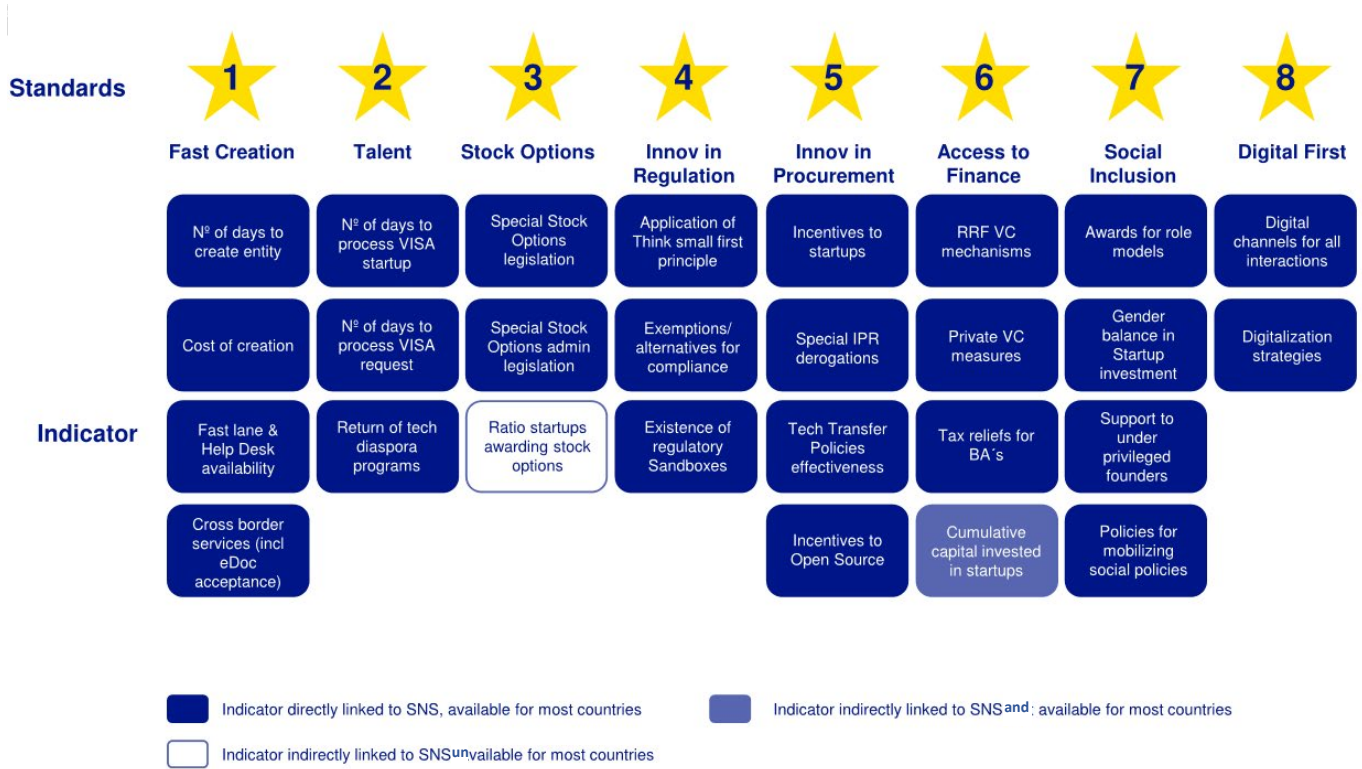
For the future and based on the notorious absence of robust indicators for many of the indicators defined², the SNS Scoreboard must rely on an annual survey as main method for gathering of indicator data. For the purpose of the annual survey, the ESNA implementation contract foresees the creation of a network of focal points in all signatory countries from the SNS declaration, who shall gather local information (including from public statistics) and answer the survey.

Such a network should only be operational in 2023 (also considering the process of membership adhesion of the different countries to ESNA), after which one European-wide survey will be organized every year in May – June, making use of the Network of Focal Points, in order to gather national information that will ensure the feeding of digital platform. In parallel, and building on findings of Baseline and refined methods, Focal Points should carry out on-going desk research for existent statistical data of relevance.

2

On this subject, see also the conclusions from the State of the European Tech 22 report on the absence of data on government intervention to implement pro-startup policy initiatives

Figure 1 – Standards and measurable dimensions ('indicators')



1.2 Presentation of Data Sources

The Baseline is purposely based on publicly available indicators to the maximum possible extent, in order to highlight the data gaps that may exist and that justify the ESNA intervention.

A total of 27 measurable dimensions or 'sub-standards' have been defined across the 8 Standard, to match the best practices defined in the SNS Declaration. For these 27 dimensions, the desk research carried out for this baseline study has been able to

The DG CONNECT Survey has been used for 13 dimensions, while for 1 dimension (percentage of national startups using stock options) it has not been possible to find any data, and hence it is not considered.

This highlights the need to establish a reliable network of focal points in all SNS Declaration Signatory Countries that can collect and validate robust data at national level from both authorities and the local startup ecosystem, as foreseen in the ESNA workplan.

The information in this baseline will also allow to design the uniformed survey that should be completed each year by this network of Focal Points in preparation of each year scoreboard

and may also help to better define the profile and level of expertise required for the Focal Points.

While some indicators correspond quite linearly to the SNS or its subdimensions, others provide a broader, or only partial, picture of the objective intended, but have been selected or suggested on the basis of its relevance. This selection of indicators is open for discussion and can and should be changed in future editions of the Scoreboard (also because some of the selected indicators are no longer available, e.g. the World Bank "Doing Business" Report that has been discontinued since 2021).

The selected indicators have been complemented by the informal survey carried out by DG CONNECT in 2021 specifically on the level of achievement of SNS, and to which 19 Member States have answered so far.

Table 1 – Data Sources

Standard	Sub-standard	Source	Indicator	Reference Year
Fast Startup Creation, Smooth Marker Entry	Time to create entity (days)	World Bank “Doing Business” Report 2020	‘Time Required to start a business (days)’	2019
	Cost to create entity (USD)	World Bank “Doing Business” Report 2020	‘Cost of business startup procedures’	2019
	Startup Fast Lane	DG CONNECT Survey	Q: “Is a Startup fast-lane service (including Market Access Helpdesk) available? (Y/N)”	2021
	Cross-border services (incl. eDocs acceptance)	European Commission eGovernment Benchmark 2022	Benchmark of cross-border services	2021
Attracting and Retaining Talent	N° of days to complete VISA applications from founders	Scale-Up Europe Talent Report 2022	National Legal Provisions	2021
	N° of days to complete VISA applications from qualified workers	Scale-Up Europe Talent Report 2022	National Legal Provisions	2021
	Existence of return of tech diaspora programmes	DG CONNECT Survey	Q: “Are programmes and incentives in place to encourage the return of EU tech-talent who emigrated to third countries? (Y/N)”	2021
Stock Options	Tax legislation	Index Ventures “Rewarding Talent” Report	Employee Tax (timing)	2021
	Administrative legislation	Index Ventures “Rewarding Talent” Report	Minority’s holders voting rights	2021
	Percentage of national startups awarding stock-options	N/A	N/A	N/A
Innovation in Regulation	“Think Small Principle”	European Commission SBA Fact Sheets & Scoreboard – country reports	Implementing the SBA in Europe	2018
	Compliance Exemptions	DG CONNECT Survey	Q: “Are exemptions confirmed and in place for startups in areas such as, but not limited to, impact assessment? (Y/N)”	2021
	Existence of Regulatory Sandboxes	DG CONNECT Survey	Q: “Is experimentation and innovation for startups promoted and enabled through regulatory sandboxes? (Y/N)”	2021
Innovation Procurement	Public Procurement for Startups	EC SBA Fact Sheets & Scoreboard – country reports	State aid and Public Procurement	2018
	Ownership of IPR for startups	DG CONNECT Survey	Q: “Can ownership of IPR normally be retained by the startup/scaleup participating in innovation procurement opportunities? (Y/N)”	2021
	Tech Transfer Policies	WIPO Global Innovation Index 2022	Intellectual property receipts as % total trade	2021
	Open-Source Incentives	DG CONNECT Survey	Q: “Are startups actively supported to contribute to - and benefit from - open source assets stimulating permission-less innovation and access to trustworthy and affordable technologies? (Y/N)”	2021
	RRF funding to enhance VC access	DG CONNECT Survey	Q: “Does your country use part of its RRF funding to	2021

<i>Access to Finance</i>			enhance access to venture capital for startups? (Y/N)	
	Policy initiatives to increase the amount/diversity of private capital	DG CONNECT Survey	Q: "Do authorities in your country have policy initiatives that aim to increase the amount and diversity of private capital? (Y/N)	2021
	Tax relief measures for BAs	DG CONNECT Survey	Q: "Are there tax relief measures in place aimed towards Business Angels to stimulate and support early-stage funding?"	2021
	Cumulative capital invested per capita by country in startups, 2017-2021	Atomico/SLUSH "State of European Tech 2021"	Cumulative capital invested per capita by country in startups, 2017-2021	2021
<i>Social Inclusion, diversity and protection of democratic values</i>	National awards and polices for startup role models	DG CONNECT Survey	Q: "Do authorities in your country promote role models in the startup community? (Y/N)	2021
	Gender Variety	Atomico/SLUSH "State of European Tech 2021"	Deals by mixed and women teams, as % of total deals	2021
	Support to founders from under-privileged backgrounds	DG CONNECT Survey	Q: "Is support provided to founders from under-privileged backgrounds to create companies? (Y/N)	2021
	Mobilisation of startups to address	DG CONNECT Survey	Q: "Are startups mobilised by state or regional authorities to address (social issues)? (Y/N)	2021
<i>Digital First</i>	Availability of Digital channels for all interactions	European Commission eGovernment Benchmark 2022	Online availability of services	2021
	Strategies and programmes to mobilize startups towards digitalization	DG CONNECT Survey	Q: "Are startups and scaleups proactively approached and engaged by state authorities for the sharing of knowledge and best practices regarding digitalisation? (Y/N)	2021

1.3 Brief Analysis of Country Frameworks (including third countries) and Impact on Measurement of Standards Achievement

One of the main goals of this baseline has been to obtain data on all the SNS Signatory Countries and also on a number of relevant third countries that could serve as benchmarks, as being considered amongst the most developed national startup ecosystems in the world and/or major economic powers: China, Israel, Singapore, United Kingdom and United States.

However, none of the sources above mentioned offers a full and comprehensive picture of all the envisaged countries. Priority in the identification of publicly available indicators has fallen, by order of importance, first on the relevance of the indicator for the dimension of the standard under appreciation, second to the year of publication, excluding all indicators based on data older than 2018, and only third to the number of countries included. This has resulted in the selection of a majority of indicators which do not cover the full range of countries envisaged (only possible in the case of the World Bank indicators, used in 3 sub standards), or even the full range of SNS Declaration Signatory countries, and even not the whole EU Member States. Furthermore, the DG CONNECT Survey that has been used extensively to cover data gaps from publicly available indicators, has received replies from national authorities of only 19 countries, which means that 8 countries are systematically excluded from the analysis whenever this data sources is used, which happened in 13 of the 27 sub-standards considered.

These facts, and the result that not all the indicators are available for all the countries – and with a far larger scale in some countries than others - obviously impacts any possible benchmarking or relevant comprehensive comparison between countries.

It adds to this fact that, as a processual methodological decision and in order to safeguard the relevance of aggregated or average data – across each standard – such aggregated or average data is only calculated for one country when data is available in at least two sub-standards (of the 3 or 4 that compose each standard). These results that

for most countries it has not been possible to calculate the aggregate or average data in several of the 8 standards – e.g. in the case of Iceland it has only been possible to calculate for the standard of ‘Fast Creation/Smooth Market Entry’.

As a result of these limitations – which were assumed from the start of the Baseline exercise, which is in part intended to highlight them so that they can be later sorted out – the following countries have been particularly impacted, and their information should be treated with special care:

Iceland: this country, as not an EU Member, is not included in most of the indicators and statistical reports that are periodically published with a focus on the EU territory. As such, and with the exception of the World Bank data sources, Iceland is not included in any of the publicly available data sources used in this report. Furthermore, Iceland was not included in the DG CONNECT informal survey on the SNS level of implementation carried out in 2021. As a result there is very few reliable data for Iceland available, and its average results could only be considered for one standard, which affects negatively its aggregate level of achievement (resulting from the sum of the level of achievement in each standard) and potentially positively its overall average, as it is calculated on the basis of a single standard where Iceland performs rather well in comparison with other European countries (‘Faster Creation/Smooth Market Entry’).

Croatia, Luxembourg, Malta: due to either their small size and subsequent lack of critical mass in terms of an overall European picture (Luxembourg and Malta) or their late entrance as an EU Member State (Croatia), also these countries are not considered in several publicly available indicators and

statistical reports. Furthermore, neither Luxembourg nor Malta have provided replies to DG CONNECT informal survey, resulting in the absence of reliable data source for a majority of indicators. As a result, aggregated and average data is only available for a few standards, which impacts their overall appreciation.

Finland, Ireland, Poland, Spain, The Netherlands: in addition to the four countries mentioned earlier, also this group of six countries has not replied to the DG CONNECT Survey from 2021, which represents their automatic exclusion from the analysis of 11 of the 27 dimensions/sub-standards considered. This means that, even if those countries were considered in all the publicly available data sources (which is generally the case, with one exception for Poland), the aggregated or average data could not be considered for at least 2 standards where the survey plays a relevant factor (such as ‘Social Inclusion, Diversity and protection of Democratic Values’ and ‘Digital First’), which puts them in a less favourable comparative analysis in relation to other countries. Ireland, Spain and The Netherlands have aggregated and average data for 6 standards, while Poland has for only 5.

Bulgaria, Cyprus, Denmark, Germany, Lithuania, Romania, Slovakia, Slovenia, Sweden: while all these countries have responded to the DG CONNECT Survey and feature in most of the publicly available data sources used, they still miss data in order to calculate its aggregated and average data in one (Denmark, Germany, Lithuania, Romania, Sweden), two (Cyprus, Slovakia, Slovenia) or even three (Bulgaria) standards. This is generally due to the fact of lack to response to surveys that serve as main data basis for some of the considered publicly available data sources (e.g. the SUE Talent Report 2022). Again, this affects in different scale their comparability with other countries.

Austria, Belgium, Czechia, Estonia, France, Italy, Latvia, Portugal: these eight countries have sufficient data cross all indicators in order to calculate their aggregate of average data for each one of

them. This impacts positively their overall aggregated result (calculated on the basis of the sum of the 8 average values), but potentially negatively their overall average value (as calculated over a larger basis than for other countries).

China, Israel, Singapore, United Kingdom, United States: these 5 third countries have been included in the assessment of the different standards whenever it has been possible to find relevant data on the selected publicly available data sources, due to their relevance as startup ecosystems or as an economic power.

This has been the case in Standard ‘Fast Creation/Smooth Market Entry’ (sub-standards ‘time’ and ‘cost’ for creating a new legal entity), ‘Stock Options’, ‘Innovation in Regulation’ (sub-standard ‘existence of regulatory sandboxes’), ‘Innovation Procurement’ (sub-standard ‘Tech Transfer Policies’) and ‘Access to Finance’ (sub-standard ‘Cumulative capital invested per capita by country, 2017-2021’, but only for UK).

In the first of these standards, and for the two first dimensions where data is available, the benchmark countries perform in general better than the European countries analysed. This is also the case in ‘Cumulative capital invested per capita by country, 2017-2021’. In ‘Tech Transfer Policies’ the situation in the analysed third countries is very similar to those of the majority of European countries, and they are all outperformed by the best EU country which is The Netherlands (which ranks 1st in the world in this indicator), while in ‘Stock Options’, EU countries perform better in the sub-standard ‘timing of tax’ and similar in ‘voting rights’.

The future editions of the SNS Scoreboard will of course aim at a much more uniform analysis of countries and, whenever possible, also at a more extended benchmark exercise with relevant third countries.



SNS Adoption: Baseline Status

2. SNS Adoption: Baseline Status

An incomplete but still relevant view of the level of achievement of implementation of the Startup Nation Standard across the 26 Member States and Iceland.

Due to significant data availability limitations for several countries in many standard and substandard, any exercise of overall comparison of countries across the eight standards loses relevance. For instance, the DG Connect Informal Survey to Member States (2021) has been used, due to lack of more relevant indicators, for 13 of the total 27 substandard considered (48%), but only 19 out of the 27 countries under analysis (70%) have replied to this survey. For the remaining 8 the overall picture is necessarily much more blur that for the other 19, impacting any significant benchmark or direct comparison between countries.

If direct comparison between countries is too early at this baseline stage, the analysis of the aggregated data for all SNS signatory countries offers an incomplete but relevant first overview of how the ESNA countries as a whole, are behaving in relation to the different standards.

The results of this analysis, with the average behaviour of all countries for each of the 8 standards, are presented in Figure 2.

Based on these results, the average figures for ESNA for level of accomplishment of the SNS range between a maximum of 80% for the Standard “Talent Attraction & Retention”, and a minimum of 47% for Standard “Access to Finance”

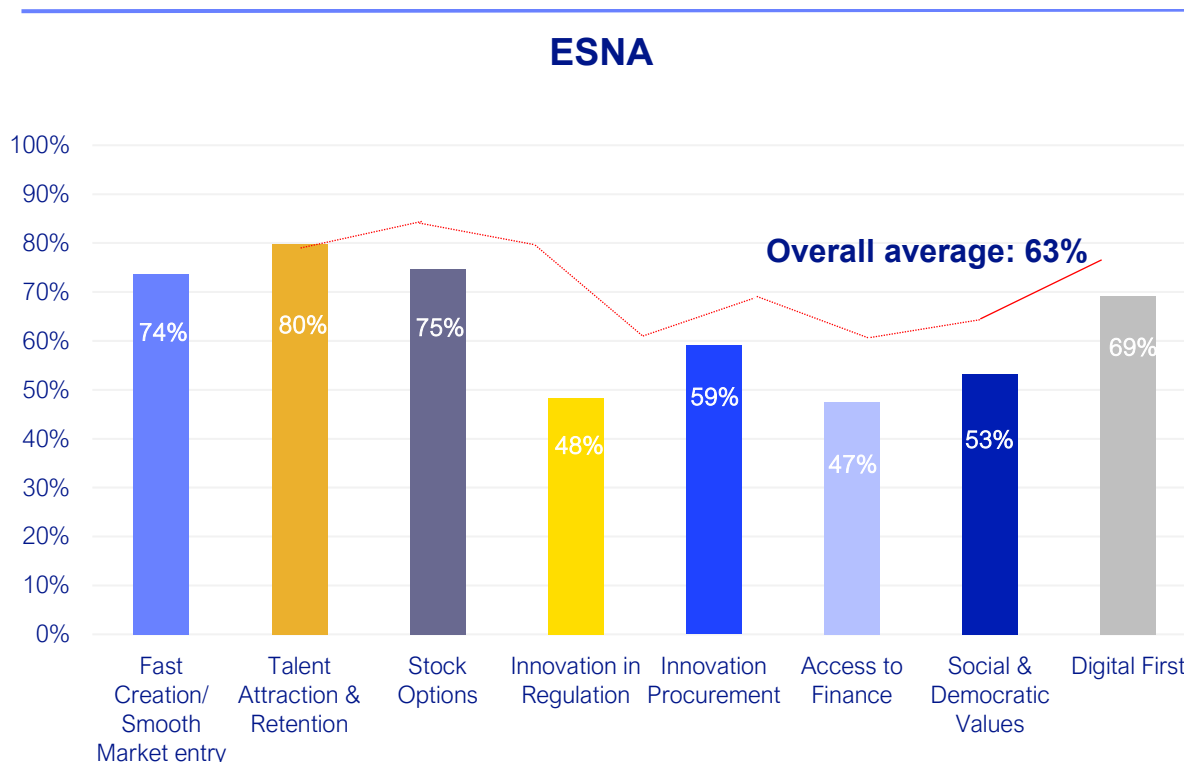


Figure 2 – Behaviour of ESNA (as an average of its signatory countries) in each of the SNS

Other Standard with good levels of achievement (above 70%) include “Stock Options” (75%) and Fast Creation/Smooth Market Entry (74%), while on the opposite side of the scale, with average levels of achievement below 50%, we can find “Innovation in Regulation”.

These results appear to confirm the overall picture that is often portrayed of Europe as a startup hub: a growing attractive place to start a new endeavour, more and more open to worldwide talent, but that still struggles to provide scale-ups with the level of funding and dedicated legislation that they need to grow to a global scale, which leads many of them to displace to the US in search of a ‘more explosive’ growth.

The group portrait of Europe in comparison with its main competitors still reveals an unfavourable picture

In this regard, the comparison of ESNA results with benchmark third countries is of great interest. However, and as explained above and due to the scarcity of publicly available data for many indicators, a comparison with the selected third countries at Standard level

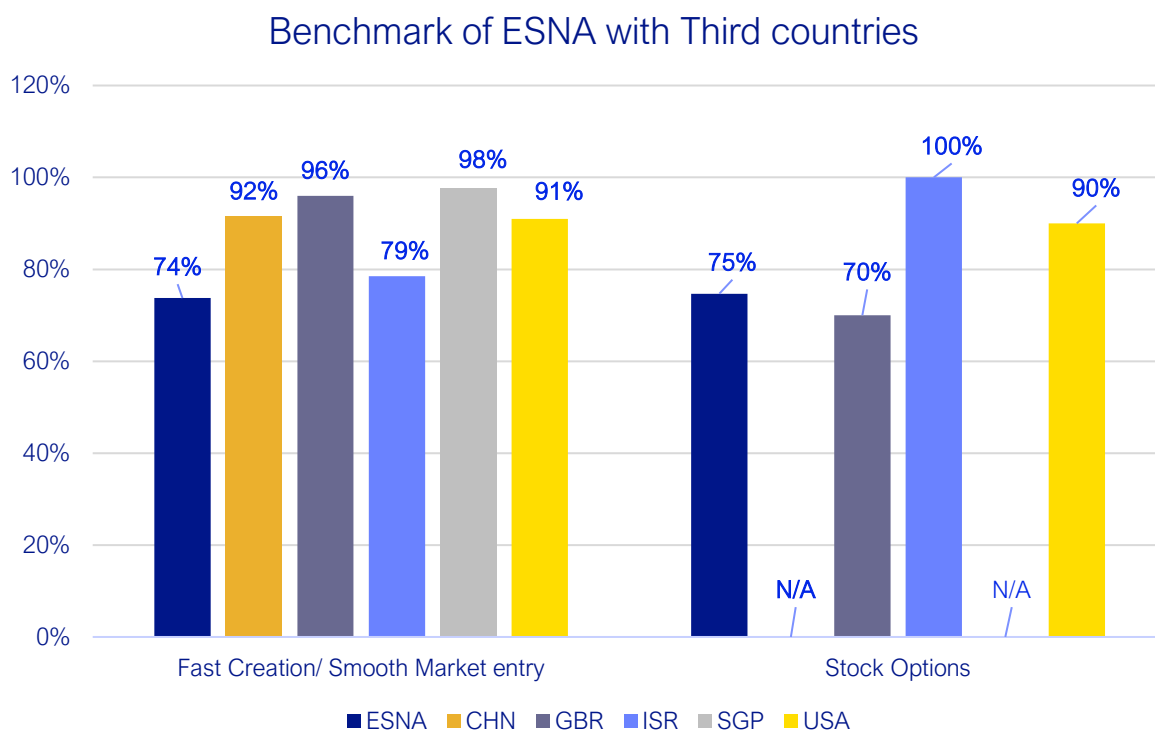
can only be made in two cases: in “Fast Creation/Smooth Market Entry” (with all the 5 selected third countries) and in “Stock Options” (in this case only with Israel, United Kingdom and the USA).

The next sections provide a more in-depth analysis of the baseline results for each

The results are presented in Figure 3 are not very favourable for Europe: in “Fast Creation/Smooth Market Entry”, the ESNA average is below that for all the 5 third countries considered, and for “Stock Options”, it ranks above the UK but below Israel and the USA.

indicator that may prove a more relevant exercise in terms of policy lessons to be extracted, and also for future steps in terms of the SNS Scoreboard.

Figure 3 – Behaviour of ESNA (as an average of its signatory countries) in comparison with third countries



2.1 Standard “Fast Startup Creation, Smooth Market Entry”

Europe is still struggling to improve the level of cross-border services.

The first Best Practice presented in the Declaration on the EU Startup Nations Standard of Excellence relates to the easiness of startup creation and market entry, a fundamental issue for any entrepreneur wishing to startup an economic activity. The SNS defines the target Best Practices for this standard as:

(a) An entrepreneur being able to establish a startup (legal entity) both online and offline in one day for a fee of no more than 100 EUR.

(b) The availability of a startup fast-lane (including Market Access Helpdesk) where:

(i) Aspiring startups and entrepreneurs can find all relevant information about national administrative requirements and funding opportunities in one place on the Internet – linking also to efforts under the Single Digital Gateway in this context.

(ii) MS will provide a (virtual) helpdesk for startups and scaleups from other EU Member States who, when trying to enter its

market, have come across regulatory issues and/or impediments.

(c) Legal documents from other EU jurisdictions can be submitted as proof for the incorporation of a startup (or creation of a subsidiary of an existing startup expanding in the single market).

For the purpose of this Baseline, these Best Practices have been converted into the following indicators:

(1) Number of days³ to create a legal entity

(2) Cost⁴ of creating a legal entity

(3) Existence⁵ of a Startup fast lane and of a virtual helpdesk for startups as declared by consulted Member States

(4) Level of cross-border services, including acceptance of eDocuments, as measured in the EC eGovernment Benchmark.

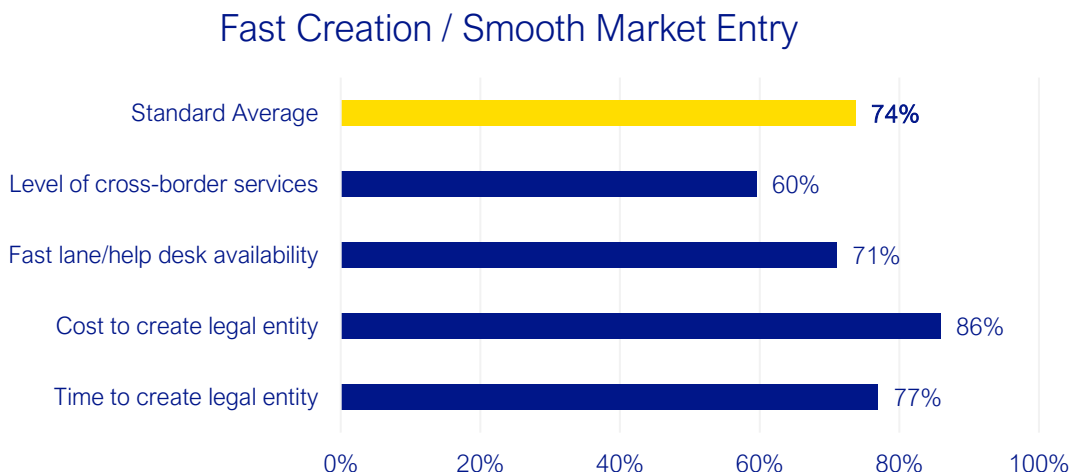
The average results across ESNA countries on each of these 4 indicators are presented in [Figure 4](#), together with the aggregated average for the standard.

³ where 1 day represents an achievement of 100% of the substandard

⁴ where a cost of 100€ represents an achievement of 100% of the substandard

⁵ where the declared existence of both a Fastlane and Help-Desk represents an achievement of 100% of the substandard

Figure 4 – Behaviour of ESNA for Standard “Fast Creation/Smooth Market Entry” and its indicators



Some countries already meet some of the best practices, but the level of achievement across Europe remains uneven.

The overall reasonable performance of ESNA in this standard is driven by the good level of accomplishment of some countries, in particularly for the first two indicators, but the performance across Europe remains very uneven.

In what refers to “Number of days to create a startup as a legal entity”, Denmark, Estonia, France and Greece are the top performers in the EU with a level of achievement of 94% (corresponding to 4 days), while Canada and Singapore are the world’s benchmarks with 2 days.

For the sub-standard of “Cost of Creating a startup”, the same data source (Doing Business, WB 2019) has been used, there are already 7 EU countries that already meet the standard: Bulgaria, Denmark, Croatia, Ireland, Lithuania, Romania and Slovenia (where the creation process is free for a minimum founding capital of 7.500€).

For the sub-standard of “Startup Fast Lane/Help-Desk”, for which there is no consistent data source available from the desk review, data from the survey carried out by the European Commission (DG CONNECT) with national authorities responsible for startup policies, has been used. In the survey two questions have been

placed to national authorities, one related to the existence of a Startup Fast Lane service and other related to the existence of a virtual Help Desk, and there have been 11 countries (in 19) that have replied “YES” to both questions: Belgium, Czechia, Germany, Denmark, Estonia, France, Italy, Lithuania, Latvia, Portugal and Sweden.

The weakest link in this standard is undoubtedly the level of cross-border services.

For measuring this best practice, defined as the possibility that “legal documents from other EU jurisdictions can be submitted as proof for incorporation of a startup”, the EC eGovernment Benchmark (latest report from 2022) has been used. This indicator measures the level of cross-border services of EU Member States through a life event that assesses the availability of services to foreigners and international businesses relative to the national availability. It comprises 4 sub-indicators: Cross-border Online Availability, Cross-border User Support, Cross-border eID and Cross-border eDocuments. ‘Online Availability’ measures whether the service can be found and/or performed online, ‘User Support’ assesses to what extent cross-border users have access to support functionalities, ‘Cross-border eID’

checks whether cross-border users can use their national eID for authentications and 'eDocuments' evaluates if these can be downloaded /submitted.

This indicator goes beyond the standard but captures well the essence of the requirement

with a comprehensive view of all EU countries. Results show Malta and Luxembourg as top performers in Europe, but the overall average for all ESNA countries is the lowest for the standard.

2.2 Standard “Attracting and Retaining Talent”

Results from this standard show that Europe is aware of the need to attract qualified talent and taking action on this regard.

An essential element of the framework conditions to help startups stay and flourish in Europe and grow to compete globally is the capacity to attract and retain talent. The Scale-Up Europe initiative, created by France during its Presidency of the EU council, formed a Talent Group that has produced a Talent Report (August 2022) where it provided the bulk of the data for this baseline on this standard, and analysis of data shows that the level of achievement of Standard requisites is progressing well in Europe but still with significant discrepancies across Member States. The SNS defines the target Best Practices for this standard as:

(a) Visa applications, as a general rule, are processed within a month for:

(i) founders from third countries supported by a trusted partner in the Member State;

and (ii) experienced staff from third countries, submitted by startups (which may also be pre-approved as a ‘trusted party’).

(b) Programmes and incentives are in place to encourage the return of EU tech talent who emigrated to third countries.

Such Best Practices have been converted into the following measurable indicators:

(1) Maximum delay foreseen in national legislation⁶ to complete VISA applications from startup founders from 3rd countries

(2) Maximum delay foreseen in national legislation⁷ to complete VISA applications from qualified workers from 3rd countries

(3) Existence⁸ of a programme or incentive scheme at national level for returning talent.

The average results across ESNA countries on each of these 3 indicators are presented in [Figure 5](#), together with the aggregated average for the standard.

⁶ where a legal maximum delay foreseen in national legislation of 30 days represents an achievement of 100% of the substandard

⁷ where a legal maximum delay foreseen in national legislation of 30 days represents an achievement of 100% of the substandard

⁸ where the declared existence of such a programme represents an achievement of 100% of the substandard

Talent Attraction & Retention

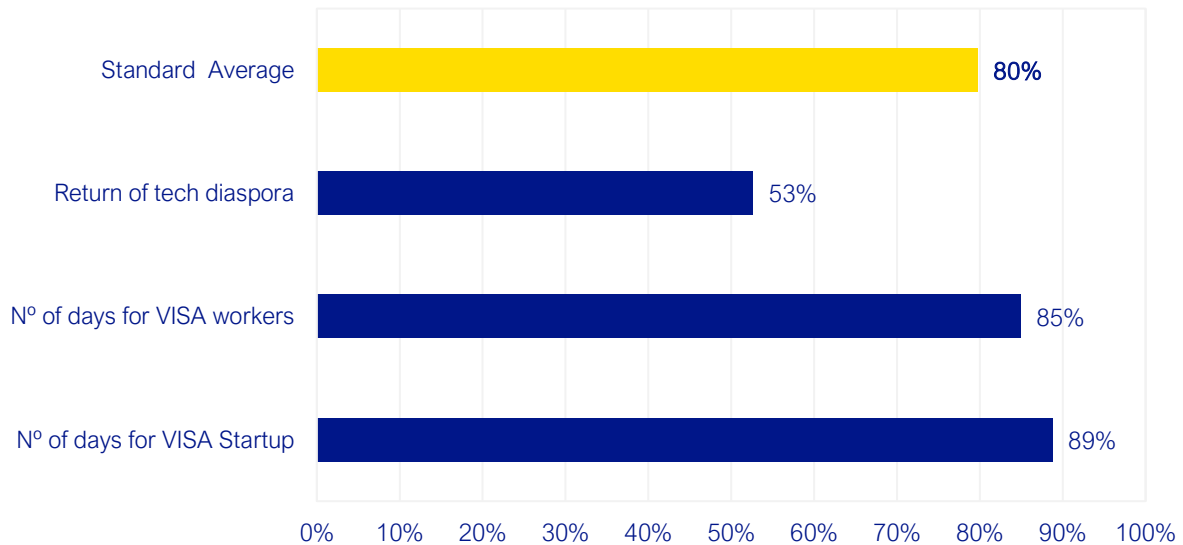


Figure 5 – Behaviour of ESNA for Standard “Talent Attraction & Retention” and its indicators

Countries are taking action to attract qualified founders and workers for their ecosystems but return of the technological diaspora is only an issue for some countries.

The Scale-Up Europe initiative and its Talent Group has produced a Talent Report that has been made available in August 2022 and that provides the bulk of the data for this baseline and intends to establish a European Tech Talent service desk by the end of current year, which can be essential in the provision of data for future versions of the SNS scoreboard.

This report shows that several Member States have established “Startup Visa” or similar programmes which legislation foresees a maximum delay of 1 month for the VISA processing, in line with the SNS Standard, amongst other incentives. This is the case for Cyprus, Czechia, France, Latvia, The Netherlands, Portugal and Spain. Most of the other countries still foresee slightly longer periods, while data could not be found for a significant number of countries.

Also, for qualified workers, many Member States have been working on implementing “tech visas” for tech employees to come work in their tech ecosystems. In the global race for talent, such regulations allow start-ups and scale-ups to recruit international talent with ease.

However, in both cases – founders and workers – and for a considerable number of countries, comparable data is not available, something that should be addressed within the future Talent Helpdesk foreseen under the recommendation made by ScaleUp Europe initiative Talent Group .

In several countries, general administrative regulations are similar for tech talent and for founders, with similar maximum delays for processing of VISA established in national legislation. This is the case for Cyprus, The Netherlands, Portugal and Spain which again comply with the SNS Standard of a 1 month maximum.

The third substandard under ‘Talent attraction and retention’ relates to the existence of programmes and incentives at national level to encourage the return of EU tech talent who emigrated to third countries.

This measure is particularly relevant for countries with a large diaspora due to large volumes of emigration in the mid late century, such as Greece, Poland, Portugal, or earlier, such as Ireland and most Nordic countries,

but within the global mobility context can be relevant for all European countries.

In the absence of more formal data sources, information for this substandard has been extracted from the replies submitted to the informal survey on the SNS level of implementation carried out by DG CONNECT.

From the respondent countries, Belgium, Estonia, France, Croatia, Italy, Latvia, Portugal, Romania, Slovakia and Slovenia declared to have such programmes or incentives, corresponding to a 100% level of achievement.

2.3 Standard “Stock Options”

Founder philosophy, technical DNA, and the maturity of the local startup ecosystem can all have a big impact on a startup’s approach to employee ownership. But on a practical level, the tax and regulatory framework they operate still makes a big difference, as European countries are mostly aware.

Each country in Europe has its own legal framework and tax codes, as well as a unique set of cultural norms. There is no common EU standard, as of yet. A country per country analysis is performed under Index Ventures, “Rewarding Talent” 2022 report which is taken as the data source for this standard. The report evaluates and score countries stock options polices, scoring each on a five-point scale (5 = the most positive and beneficial, and made correspond in this baseline to an achievement level for 100%) for different elements, including ‘timing of tax’ and ‘Minority shareholders & bureaucracy’ which correspond nearly linearly to the 2 substandard defined in the SNS Declaration.

The SNS defines the target Best Practices for this standard as:

(a) Stock options are recognised and subject to capital gains tax at the moment of cash receipt and not before.

(b) Allow startups to issue stock options with non-voting rights, to avoid the excessive burden of having to consult large numbers of minority shareholders.

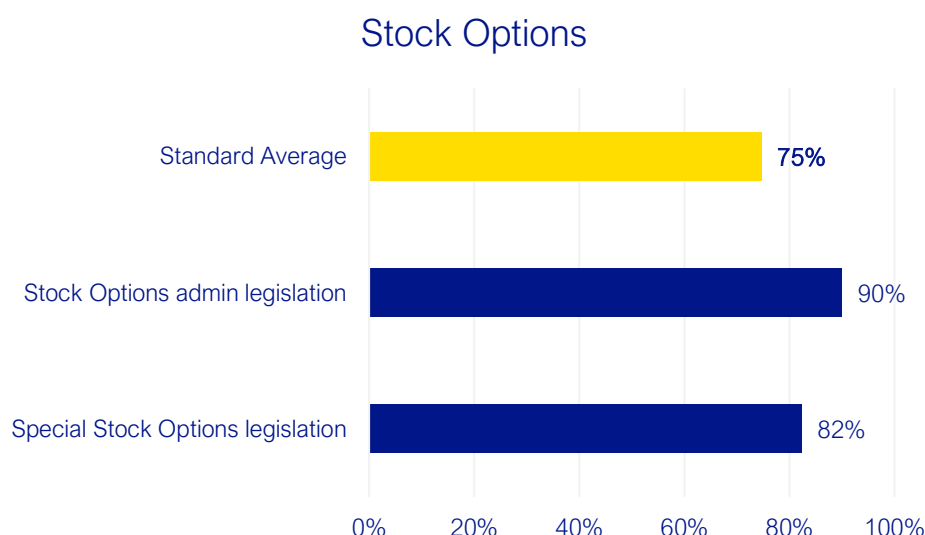
For the purpose of this Baseline, these Best Practices have been converted into the following measurable indicators:

(1) Existence of special stock options tax legislation⁹

(2) Existence of special stock options administrative legislation for non-voting rights’ stocks¹⁰

The average results across ESNA countries on each of these 2 indicators are presented in Figure 6, together with the aggregated average for the standard.

Figure 6 – Behaviour of ESNA for Standard “Stock Options” and its indicators



⁹ Where the level of 100% achievement corresponds to the country classification of “5” in the source report

¹⁰ Where the level of 100% achievement corresponds to the country classification of “5” in the source report

Stock Options is one of the areas in Europe where 'startup friendly' legislation is more advanced.

For the first indicator “Existence of special stock options tax legislation”, the Index Ventures ‘Rewarding Talent’ 2022 report, which has been used as main source, reviews for each covered country, the timing at which employees receiving stock options are taxed - if only when they sell shares, or when they exercise, or even at the point of grant – and scores countries accordingly.

The ‘Rewarding Talent’ report scores with 5 (corresponding to a level of achievement of 100%) Estonia, France, Italy, Latvia, Lithuania, Portugal, and Sweden.

Third countries are also included in the report, with Israel being scored 5, and the UK and US, 4, which shows that Europe front-runners are in line with its main competitors on this regard.

For the second indicator “Existence of special stock options administrative legislation for non-voting stock”, the same data source has been used. The “Rewarding Talent” report evaluates the fact that when option holders exercise, they become minority shareholders, who may need to be consulted on various company decisions and assesses the respective legislation in each covered country to see how this makes stock options unattractive to companies, how does this affect the treatment of leavers and how much administrative burden and cost is associated with creating and maintaining the plan.

The following countries are scored with 5, and assessed as leaders in this area: Estonia, France, Lithuania, Latvia and Portugal¹¹, while from third countries, also Israel and the USA are assessed with 5, and the UK with 3.

¹¹ In Portugal, legislation on stock options has been approved that has been the basis for this assessment, but it is still to be implemented which may affect future assessments.

2.4 Standard “Innovation in Regulation”

Europe is still adapting to the changes of regulation as an essential part of the policy frameworks that can support more competitive startups and scale-ups in Europe, as their potential for success can be enhanced or stifled by government policies and regulations in areas such as e.g. Public Procurement.

The SNS Declaration invites European governments to apply the “Think Small First” principle that derives from the Small Business Act (SBA) and to consider positive exemptions for startups and mechanisms as regulatory sandboxes for easier development of new products and services. The SNS defines the target Best Practices for this standard as:

(a) Legal provisions and policies are in place explicitly targeting startups that promote a rigorous application of the ‘Think Small First’ principle in view of avoiding unnecessary administrative burden/red tape.

(b) Exemptions – or alternative ways of achieving compliance - are confirmed and in place for startups in areas such as, but not limited to, impact assessment.

(c) Experimentation and innovation for startups is promoted and enabled through regulatory sandboxes: there is an agreed policy or programme (with rules and capacities, administrative support and

guidance) and concrete examples for the use of regulatory sandboxes by sectors in which innovations can be tested in cooperation with supervisory authorities.

These Best Practices have been converted into the following measurable indicators:

(1) Application of “Think Small Principle” as measured in the European Commission “SBA Fact Sheets & Scoreboard” 2019

(2) Declared compliance exemptions for startups in legislation, as declared by the countries in their replies to the DG CONNECT survey.

(3) Existence of regulatory sandboxes, as declared by the countries in their replies to the DG CONNECT survey.

The average results across ESNA countries on each of these 3 indicators are presented in [Figure 7](#), together with the aggregated average for the standard.

Innovation in Regulation

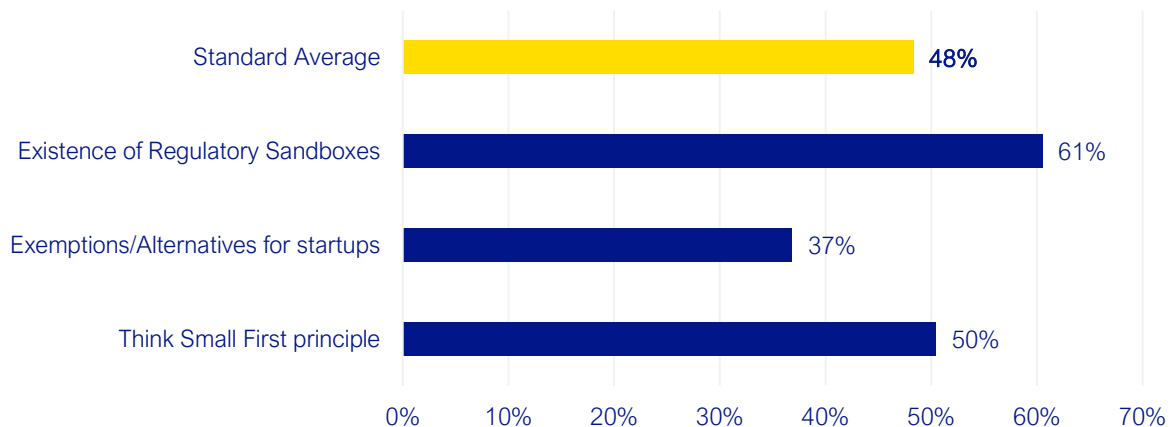


Figure 7 – Behaviour of ESNA for Standard “Innovation in Regulation” and its indicator

The full application of the “Think Small First” principle in Europe is still far from concretization in all EU countries, and the inclusion of specific compliance exemptions for startups also remains as challenging.

The European Commission “SBA Fact Sheets & Scoreboard” report for 2019 has been selected as main data source for this standard, even if later reports are available, as this is the last year where national fact sheets provide detailed and quantified information on the comparative level of achievement within the EU-28 for the implementation of the Small Business Act and adoption of “Think Small First” principles in policy design, and that is the source that is taken for this indicator. The results show The Netherlands as the top-performer, followed by Denmark.

Overall results show that the level of implementation of the different “Think Small First” principles are still uneven achieved across Europe, with several delays in some countries.

For the substandard “Existence of compliance exemptions for startups” e.g. in Impact Assessment and other legislated areas, the DG CONNECT informal survey has been the only data source possible to verify.

A total of 19 countries have responded to te survey, out of which 7 – Austria, Denmark, France, Italy, Latvia, Portugal and Slovenia – have declared to possess such exemptions in national legislation and awarded a level of achievement of 100%.

The third and final substandard under this item concerns the existence of regulatory sandboxes through a national policy or programme (with rules and capacities, administrative support and guidance) and concrete examples for the use of regulatory sandboxes by sectors in which innovations from startups and other firms can be tested in cooperation with supervisory authorities.

Again, in the absence of more robust publicly available indicators, the DG CONNECT survey has been used as source, with 11 countries declaring the existence of such sandboxes: Austria, Belgium, Bulgaria, Germany, Denmark, France, Italy, Lithuania, Latvia, Portugal and Sweden.

2.5 Standard “Innovation Procurement”

Startups should have at least the same opportunities than larger firms in accessing innovative public procurement and innovations from the research sector, but the picture across Europe is still not that sharpen.

The SNS defines the following Best Practices for this standard:

(a) There are no legal or administrative impediments that would put startups/scaleups at a disadvantage compared to other participants in innovation procurement opportunities. Public buyers and procurement services are officially encouraged to procure innovations from startups.

(b) Ownership of IPR can normally be retained by the startup/scaleup participating in innovation procurement opportunities to enable further commercial exploitation (unless exceptional cases that require public sector to retain IPR ownership).

(c) Policies are in place to ensure technology developed at research sector can be transferred without obstacles, leading to a new wave of venture-building activity, opening up pathways to pursue – inter alia - innovation procurement opportunities.

(d) Startups are actively supported to contribute to and benefit from open-source

assets stimulating permission-less innovation and access to trustworthy and affordable technologies.

These Best Practices have been converted into the following measurable indicators:

(1) Level of implementation of public procurement policies for startups¹² measured by EC “SBA Fact Sheets & Scoreboard” 2019

(2) Declared existence of policies for protecting IPR of startups in public procurement process¹³

(3) Efficiency of tech transfer policies¹⁴ measured by the WIPO “Global Innovation Index”, 2022, Indicator “Intellectual property receipts, % total trade

(4) Declared existence of incentives to open source¹⁵

The average results across ESNA countries on each of these 4 indicators are presented in [Figure 8](#), together with the aggregated average for the standard.

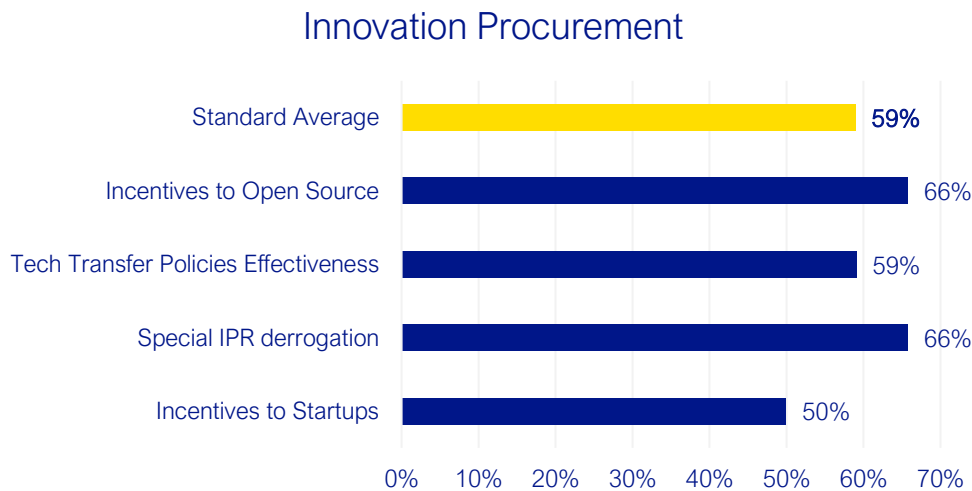
¹² Where a ranking in the source report within the EU average corresponds to 50%

¹³ Where the declared existence of such policies corresponds to 100%

¹⁴ Where an output of “8%” in the designated indicators has been made correspond to 100%

¹⁵ Where the declared existence of such incentives corresponds to an achievement level of 100%

Figure 8 – Behaviour of ESNA for Standard “Innovation Procurement” and its indicators



Member States have been slow in adopting specific incentives in Public Procurement Policies for startups, while the effectiveness of Technology Transfer policies remains also an issue in most countries, with some notable exceptions.

The data source for its first indicator on public procurement policies is the already mentioned European Commission “SBA Fact Sheets & Scoreboard” report for 2019, and in particular the data for the subset ‘State Aid & Public Procurement’, with levels of achievement being calculated in terms of variation from the EU average. Results for the indicator show Latvia and Lithuania, closely followed by Czechia and Malta, as the top performers in Europe under this criterion, and those that are clearly above the EU average, as presented in the cited report.

The second best practice within this standard calls for Member States to foresee specific Public Procurement regulation through which ownership of intellectual property rights (IPR) can normally be retained by the startup/scaleup participating in innovation procurement opportunities to enable further commercial exploitation (unless there are exceptional cases with overriding public interests that require the public sector to retain IPR ownership). In the absence of a more relevant indicator, the replies to the DG CONNECT informal survey (2021) have been used as main data source, with a positive reply to the question “Can ownership of intellectual property rights (IPR) normally be retained by the startup/scaleup participating in innovation procurement opportunities?” being considered as a 100% level of achievement.

There are 12 countries with a 100% level of achievement: Austria, Belgium, Germany, Denmark, Estonia, France, Croatia, Lithuania, Latvia, Sweden Slovenia and Slovakia.

The substandard on “Technology Transfer Policies” calls for Signatory States to have policies in place to ensure technology developed at universities and research institutes can be transferred without obstacles leading to a new wave of venture-building activity (spinoffs / startups), opening up pathways to pursue – inter alia - innovation procurement opportunities.

This is an indicator for which it is particularly difficult to establish the 100% level of achievement. Considering that most countries have some kind of measures in place for this, or related purposes, and in order to more adequately measure this substandard in terms of the effectiveness of the policies in place, the indicator on “Intellectual Property Receipts as a percentage of total trade” from the WIPO Global Innovation Index Report 2022 has been used, where an output of 8% (slightly above the maximum value for the indicator across all world countries) has been made correspond to a level of achievement of 100%.

The fourth and final substandard for this item refers to the existence of support to startups at national level so that they can contribute to and benefit from open-source assets stimulating permission-less innovation and access to trustworthy and affordable technologies.

These results in The Netherlands, as the top-performer in Europe (and in the world) on Tech Transfer Policies, with a level of achievement of 98%, well above third country benchmarks such as the USA (with 77%) or China (with 52%).

Once again, considering the specificity of the substandard and in the absence of a more relevant indicator, the replies to the DG CONNECT informal survey (2021) have been used as main data source, with a positive reply to the question “Are startups actively supported to contribute to - and benefit from - open-source assets (...)?” being considered as a 100% level of achievement, for which there are 12 countries: Austria, Estonia, France, Greece, Croatia, Italy, Lithuania, Latvia, Portugal, Sweden, Slovenia and Slovakia.

2.6 Standard “Access to Finance”

An effective access to finance is mandatory for startup success and growth, but this an area that is widely acknowledged as one of Europe’s weak points in relation to the US or UK.

The SNS defines the target Best Practices for this standard as:

(a) Direct access to finance: Member States use part of their Recovery and Resilience Facility (RRF) funding to enhance access to venture capital for startups through the European Investment Bank (EIB), Promotional Banks or other dedicated vehicles, leveraging private investments, and distributing funds to established/professional VC firms.

(b) Indirect access to finance: Member States introduce or improve policy initiatives that aim to increase the amount and diversity of private capital (for example from European Pension Funds) available for co-investing in high growth startups.

(c) Tax relief measures aimed towards Business Angels are in place to stimulate and support early-stage funding.

For the purpose of this Baseline, these Best Practices have been converted into the following measurable indicators, that includes a specific indicator, not directly addressed on the SNS, on the cumulative capital invested in each country into startups:

(1) Declared existence of RRF funding for enhancing VC access to capital¹⁶

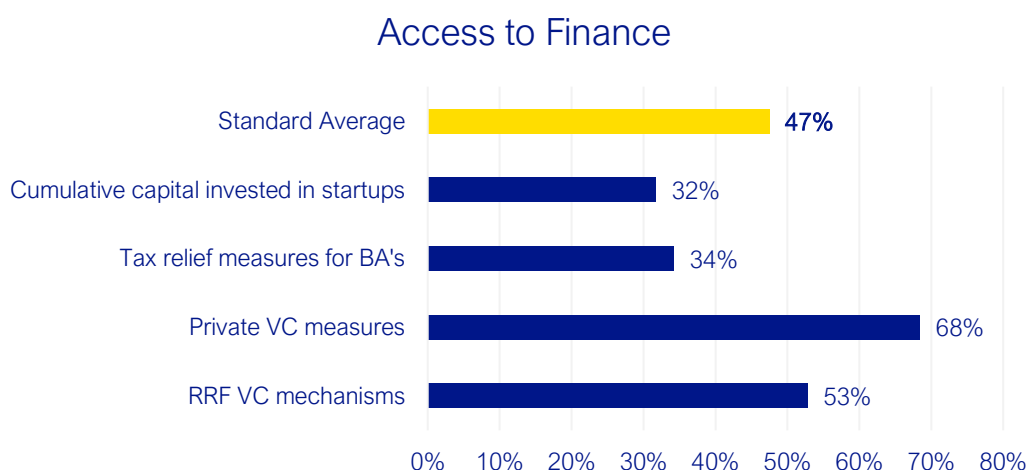
(2) Declared existence of policy initiatives to increase the amount/diversity of private venture capital¹⁷

(3) Declared existence of tax relief measures for BAs¹⁸

(4) Cumulative capital invested per capita by country, 2017-2021 (suggested indicator)¹⁹ from the ‘State of European Tech’ 2021.

The average results across ESNA countries on each of these 4 indicators are presented in Figure 9, together with the aggregated average for the standard.

Figure 9 – Behaviour of ESNA for Standard “Access to Finance” and its indicators



¹⁶ Where the declared existence of such funding mechanisms corresponds to 100%

¹⁷ Where the declared existence of such policy initiatives corresponds to a level of 100%

¹⁸ Where the declared existence of such tax reliefs corresponds to an achievement level of 100%

¹⁹ Where the indicator output for the UK is taken as the reference value (100%).

The Recovery and Resilience Facility (RRF) is helping Member States to reinforce public and private funding mechanisms for startups, but Member States remain slow in the adoption of tax relief measures for Business Angels and the cumulative capital (2017-2021) invested in Startups across all ESNA countries remains disappointing low.

The SNS calls for signatory states to reinforce both direct and indirect sources of funding for startups, namely by facilitating Venture Capitalists access to capital through specific RRF instruments, which is measured in the first indicator.

Considering the novelty of the topic and the lack of robust public indicators, the substandard relies on the DG CONNECT informal survey, where countries have been asked if whether part of its Recovery and Resilience Facility (RRF) funding to enhance access to venture capital for startups.

Countries replying positively received an achievement level of 100% - this is the case for 10 countries: Belgium, Bulgaria, Czechia, France, Greece, Croatia, Italy, Lithuania, Portugal and Slovakia.

The second substandard refers to the creation or improvement at national level of policy initiatives that aim to increase the amount and diversity of private capital (for example from European Pension Funds) available for co-investing in high-growth startups.

Once again, and in the absence of other credible indicators, the data source used has been the DG CONNECT informal survey, where countries have been asked if whether they have policy initiatives that aim to increase the amount and diversity of private capital.

Countries replying positively received an achievement level of 100% - this is the case for Austria, Belgium, Czechia, Denmark, France, Estonia, Germany, Italy, Latvia, Portugal Sweden, Slovenia and Slovakia.

The third substandard in the SNS calls for signatory states to introduce Tax relief measures aimed towards Business Angels to stimulate and support early-stage funding.

Again, in the absence of more robust publicly available indicators, the DG CONNECT survey has been used as source, with 6 countries declaring the existence of such tax benefits within tax regulation: Belgium, Cyprus, Estonia, Greece, Italy and Sweden.

Finally, and in order to better capture the essence of this standard, related to the effectiveness of access to finance for startups in the ESNA countries, a fourth indicator has introduced for this standard in this baseline, which presents the cumulative capital invested per capita and per country in startups in the period 2017 to 2021.

While not directly linked to any of the substandards included in the SNS the indicator provides a relevant quantitative indication of the amount of both public and private capital that is captured by startups in each country, taking in consideration its size. The indicator is provided in quantitative terms in the report “State of European Tech” (2021) published by atomic/SLUSH.

To convert it to levels of achievement, the figure for the United Kingdom, usually considered as the benchmark in Europe for Venture Capital and Business Angel Investments, has been taken as the reference value for the 100% level of achievement.

The results show that Sweden and Estonia, which are above the reference value, are placed in the 100% level as top EU performers, but that the average for all ESNA countries included in the report corresponds to a consolidated level of achievement of only 32%, one of the lowest across all standards and best practices.

2.7 Standard “Social Inclusion, Diversity and Protecting Democratic Values”

This standard calls for policies on social inclusion, diversity and democratic values to be promoted through role models, targeted incentives and support measures – but measured results in terms of gender diversity are still disappointing.

In this baseline these dimensions are mostly measured through the responses to the DG CONNECT informal survey, but also by the percentage of deals by mixed and all-women teams in the total number of deals in each country. The SNS defines the target Best Practices for this standard as:

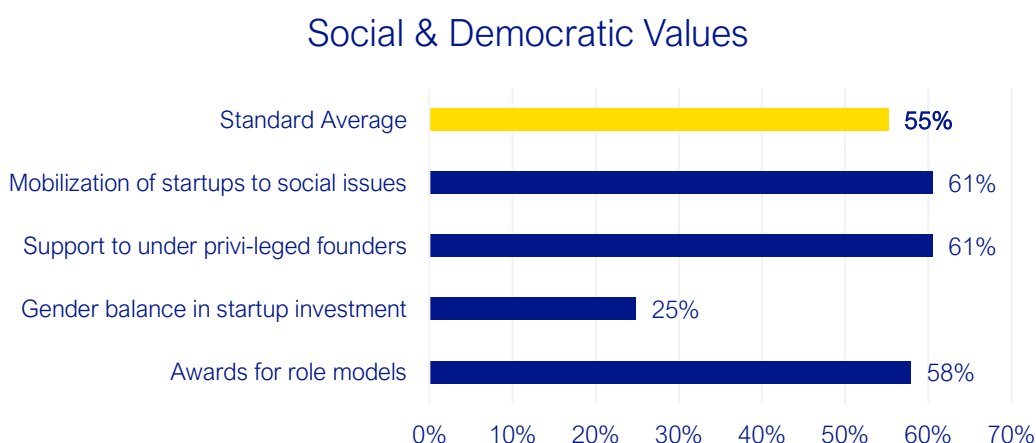
- (a) Promotion of role models (e.g. by giving awards that promote and recognise diversity in the startup community).
- (b) Provision of targeted incentives for Startups to hire on diversity of ethnicity, gender, religion, age and sexual orientation.
- (c) Provision of support to founders from under-privileged backgrounds to create companies.
- (d) Mobilisation of startups to address marginalisation and social exclusion linked to low income, limited education, location, culture, or disability.

For the purpose of this Baseline, this Best Practices have been converted into the following measurable indicators:

- (1) Existence of national awards and schemes for promoting role models²⁰
- (2) Percentage of deals by mixed and women-only teams in total number of deals²¹ as measured in “State of European Tech”, 2021, Atomico/SLUSH
- (3) Existence of national measures for provision of support to founders from under-privileged backgrounds²²
- (4) Existence of national measures for mobilisation of startups to social issues²³

The average results across ESNA countries on each of these 4 indicators are presented in Figure 10, with ESNA average.

Figure 10 – Behaviour of ESNA for Standard “Social & Democratic values” and its indicators



²⁰ Where the declared existence of such funding mechanisms corresponds to 100%
²¹ Where a percentage of 75% corresponds to an achievement level of 100%

²² Where the declared existence of such measures corresponds to a level of 100%
²³ Where the declared existence of such measures corresponds to a level of 100%.

The analysis of this standard shows that Europe still faces a serious gender divide when it comes to startups.

The substandard of “National awards and policies for startup role models” aims at promoting diversity and inclusion in their startup policies, whilst protecting democratic values through the creation or improvement of schemes for promotion of role models (e.g. by giving awards that promote and recognise diversity in the startup community).

As there could not be identified any suitable indicators or recent pan-European studies on this specific absence, the data source used has once again been the DG CONNECT informal survey, where countries have been asked “Do authorities in your country promote role models in the startup community?”.

Countries replying positively received an achievement level of 100% - this is the case for Austria, Belgium, Czechia, Germany, Denmark, Estonia, France, Croatia, Portugal, Slovenia and Sweden.

The substandard “Diversity” calls for SNS Signatory States to implement targeted incentives for Startups to hire on diversity of ethnicity, gender, religion, age and sexual orientation.

To better capture this requirement, it has been decided to use the publicly available indicator on by the percentage of deals by mixed and all-women teams in the total number of deals in each country (available in “State of European Tech”, 2021 by Atomico/SLUSH) as a tangible indicator of gender variety, and in the absence of other similar indicators for ethnicity, religion, sexual orientation or social background.

For calculating the level of achievement, a percentage of 75% of mixed and all-women deals has been made correspond to 100% of achievement, as it would represent a perfectly balanced result. The results show Portugal as the top performer country in Europe with a level of achievement of 52%.

For the substandard of “Provision of support to founders from under-privileged backgrounds to create companies” it has also not been possible to find relevant indicators or recent studies with a pan-European dimension that across this topic in a direct way and with quantified data.

As such, and as done in similar cases in this baseline study, the data source used has once again been the DG CONNECT informal survey, where the question has been directly asked to national authorities under the form “Is support provided to founders from under-privileged backgrounds to create companies?”

Countries replying positively received an achievement level of 100% - this is the case for Austria, Belgium, Czechia, Denmark, Estonia, France, Greece, Croatia, Latvia, Portugal, Slovenia and Sweden.

Finally, for the substandard of “Mobilisation of startups to address social issues”, that calls for the mobilisation of startups at national level – through campaigns, programmes or other incentives - to address marginalisation and social exclusion linked to low income, limited education, location, culture, or disability, it has not been possible to find suitable indicators or relevant studies with a European Dimension.

This confirms that this Standard is one that should receive special attention in terms of data collection in the future editions of the Scoreboard.

As in other cases, the data source used has been the DG CONNECT informal survey, where the question has been directly asked to national authorities.

Countries replying positively received an achievement level of 100% - this is the case for Austria, Belgium, Denmark, Estonia, France, Croatia, Latvia, Portugal, Slovenia and Sweden.

2.8 Standard “Digital First”

The full availability and mainstream use of digital channels and the widespread of digitalization across all economic actors are cornerstones of Europe’s competitiveness policies, but digitalization strategies towards startups in EU are still developing.

This standard calls for availability of digital channels in all interactions between startups and the state, something that is adequately measured in the European Commission eGovernment benchmark, and also for the creation or improvement of national strategies and programmes to mobilize startups towards digitalization, that in this baseline is measured through replies to the DG CONNECT informal survey (2021).

The SNS defines the target Best Practices for this standard as:

(a) All day-to-day interactions between startups and authorities (such as company creation, filing of taxes, participation in public procurement opportunities, electronic ID and digital signatures) are designed to be carried out in a digital first manner.

(b) Startups and scaleups are proactively approached and engaged for the sharing of knowledge and best practices regarding digitalisation.

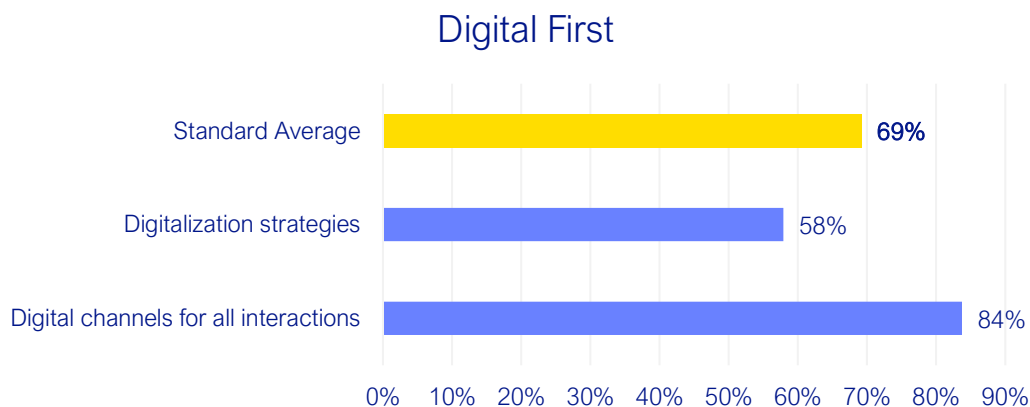
For the purpose of this Baseline, this Best Practices have been converted into the following measurable indicators:

(1) Availability of Digital channels for all interactions²⁴ as measured in the EC eGovernment Benchmark, 2022

(2) Existence of national strategies and programmes to mobilize startups towards digitalization²⁵

The average results across ESNA countries on each of these 2 indicators are presented in Figure 11, together with the aggregated average for the standard.

Figure 11 – Behaviour of ESNA for Standard “Social & Democratic values” and its indicators



²⁴ As measured in the source report

²⁵ Where the declared existence of such measures corresponds to an achievement level of 100%

The first dimension of the “Digital First” Standard on the establishment of a digital context where all day-to-day interactions between startups and authorities are designed to be carried out in a digital first manner, is very well measured in the EC eGovernment benchmark – and shows uneven results across Europe.

The EC eGovernment benchmark uses different measures, including the ‘mystery shopper’ principle where a country representative tests the services of another country, to assess the level of online availability of services for different processes, including business ones.

The correlation between the eGovernment indicator and the level of achievement for the substandard is direct, i.e. a 100% level of online availability of services corresponds to a level of achievement of the substandard of 100%.

On the basis of this report, Malta is the top performer in Europe with a level of achievement of 99% in this first best practice.

The SNS also calls for – in its second dimension of the “Digital First” Standard - the existence of measures to ensure that startups and scaleups are proactively approached and engaged for the sharing of knowledge and best practices regarding digitalisation, with average results below the 60% mark.

For this specific issue, also the data source used has been the DG CONNECT informal survey, where the question on the existence of such measures has been directly asked to national authorities.

Countries replying positively received an achievement level of 100% - this is the case for Belgium, Bulgaria, Denmark, Estonia, Croatia, Italy, Latvia, Portugal, Slovenia and Sweden.

Like for other topics which are very specific to the SNS, this one should be given a special attention in terms of data collection in future scoreboard editions.

Conclusions

3. Conclusions

The outcomes of the present Baseline Report confirm the need for a regular and methodical mechanism of follow up of the development of the 8 Startup Nation Standards in each and all of the SNS Declaration Signatory Countries.

In fact, the desk research carried out for the preparation of this Baseline indicates that there are at present not sufficiently mature and robust indicators, published regularly by reliable sources, in order to allow a comprehensive follow-up of the level of implementation achieved across the whole 8 standards to be performed either by the signatory countries' authorities themselves or by external authorities. This is true for all the 8 Standards, as there wasn't a single one for which publicly available indicators could be found for all its dimensions (or sub-standards), having been necessary in all the cases to use the specific informal survey carried out by DG CONNECT on this subject. This has been true even extending the search range for suitable data sources until as far as 2018 and will be further aggravated by the termination of relevant data sources such as the World Bank "Doing Business" Report, that has been used in this baseline as source for two dimensions in the Standard "Fast Creation/Smooth Market Entry", and which publication has been interrupted after the 2021 edition.

This in its turn confirms that the creation of a specific mechanism and methodology for data collection, analysis and reporting on the SNS Implementation, under the supervision and coordination of a pan-European 'umbrella' entity – as foreseen in the ESNA mission and workplan – is the only way to fill an existent gap at European level.

Other key take-aways from this Baseline exercise and from the data collected and analysed in this report and that deserve a special call for attention in these concluding remarks, include:

(a) The confirmation that to some degree, the vast majority of SNS Declaration Signatory Countries have been investing efforts to adopt the best practices listed in the SNS Declaration.

(b) The evidence on the basis of the available data that 'Fast Startup Creation/Smooth Market Entry', 'Talent Attraction and Retention' and 'Stock Options' have been the Standards with a higher level of achievement, while 'Social Inclusion, Diversity and protecting Democratic Values', 'Innovation in Regulation' and 'Access to Finance' have been those with the lowest percentage of achievement.

(c) That for most standards, including those with best collective performance, and whenever data is comparable with third-country benchmarks such as China, Israel, Singapore, United Kingdom and United States, Europe as a whole is still lagging behind and must progress at a faster pace in order to catch up with its main rival startup ecosystems worldwide.

The future, far more complete and comprehensive editions of the SNS Scoreboard, should allow to further explore these trends and extract more and more relevant lessons that can help European Countries is developing together more competitive startup ecosystems.

The two sources together – yearly survey and desk research – should allow to put together a complete database of indicators that can trace a complete picture of the level of SNS implementation across Europe.

Additional Remarks:

The development and publication of an annual SNS Scoreboard which a specific task within the work programme of the Horizon Europe contract n° 101072644 signed between the European Commission and ESNA, and that has as deliverables two editions of the SNS Scoreboard, in Months 11 and 18 (D4.2 and D4.3). Taking in consideration the start date of the contract, such deliverables are more meaningful now in Month 16 (October 2023) and 24 (June 2024), and this shift will be proposed to the European Commission.

This SNS Scoreboard is an additional deliverable, not foreseen in the Horizon Europe Contract, but deemed necessary for elaboration of future contractual deliverables, and also for gearing up the discussion on the SNS Scoreboard topic with ESNA members at the 2022 ESNA Forum. It has been prepared with support from external consultants.

