Europe Startup Nations Alliance

Technical Report

SNS Report – Comparing the methodologies from 2023 and 2024 editions

April 2025

CONTENTS

IMAGES AND TABLES

1. Introductory Note

The annual EU Startup Nations Standards (SNS) flagship report tracks the adoption and implementation of the eight SNS in European countries, providing an overview of startup policies across Europe. To assess the degree of implementation of the best practices described in the SNS Declaration, a composite index is used. Composite indicators provide a single measure that summarises several indicators into one, allowing for a holistic view and for comparative analysis between countries.

Respecting the principles of the EU SNS Declaration, the overall index is calculated as the simple average of the eight standards. Each standard score results from the simple average of its respective substandards, which, in turn, are the simple average of the indicators they comprise.

A survey directed at ESNA's focal points (FPs) network, designated by national governments, is the primary source of information for the indicators, complemented by data from reliable third-party sources.

The scoring criteria entails a 0-100% categorical scale with 100% denoting full implementation, 0% meaning non-implementation and intermediate results following distinct criteria, illustrating a gradual approach towards full implementation of the SNS. Indicators expressed in different units were rescaled to a values ranging from 0% to 100%, using the min-max transformation.

The EU SNS Report 2024 introduced improvements to ensure a more reliable analysis and accurate reflection of the SNS. Among the key methodological enhancements, the 2024 edition expanded the number of indicators from 36 to 40, allowing for a more comprehensive assessment of the SNS implementation. Additionally, the number of countries covered in the analysis increased from 21 to 24, and the scoring criteria was revised incorporating intermediate scoring levels to better capture varying degrees of implementation across different national contexts.

As is evident given the methodology used, these changes may impact the results. Therefore, in analysing these outcomes, and particularly comparing 2024 with 2023, it is essential to distinguish between what stems from an actual shift in public policies and what results from the methodological changes outlined.

The following structural sensitivity analysis employing counterfactual simulations provides an overview of how the adoption of new indicators, the change in covered countries, and the modification of the scoring methodology influenced the results between editions. These simulations assess "**what would have happened if certain changes had not taken place**". The report contemplates both their isolated and joint influences on the SNS results.

While the 2024 scoring criteria are more robust, applying them retrospectively to 2023 proved impractical, due to the lack of available data from the prior year. Hence, the employed simulations re-ran the scores from the 2024 report. For consistency's sake, combining the effects of the outlined changes also required applying the 2023 methodology to the 2024 dataset, as it is not possible to retroactively obtain 2023 values for indicators introduced in 2024.

2. Structural Sensitivity Analysis

Starting by comparing the actual results of SNS 2024 with the previous year, the implementation level of the Standards stands at 61%, marking an increase of 6.3 percentage points (from 55%). Figure 1 illustrates the contribution of each Standard to the observed variation. This increase is primarily driven by the improved implementation of most Standards, particularly of SNS #7 (2.7 p.p.) and SNS #6 (2.0 p.p.).

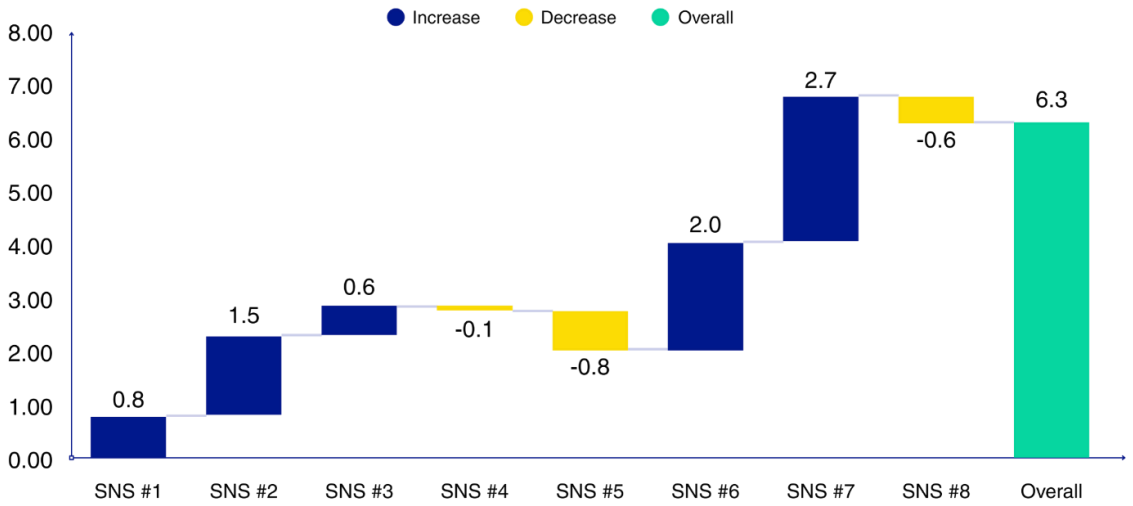

Figure 1 - Decomposition of 2024 overall index by standards' contribution

SOURCE: ESNA (2025)

2.1. Country Coverage

The first simulation **assesses the impact of the change in country coverage** between editions on the results. In comparison with the 2023 edition, the 2024 report included four additional countries-Germany, Italy, the Netherlands, and Ukraine-and excluded Greece.

When **restricting the analysis to the 20 countries present in both editions** of the exercise, the overall index remains at 61%, indicating that the inclusion of new countries and the exclusion of others had no significant impact on the average score.

At the standard level, Figure 2 shows the variation derived from the change in country coverage from 2023 to 2024 by comparing the actual results with simulated ones. The decomposition of this variation across the standards resembles the one presented in Figure 1, not leading to conclusions substantially different. Further analysis revealed that at the indicator level, the change in country coverage does also not significantly explain the observed changes between editions.

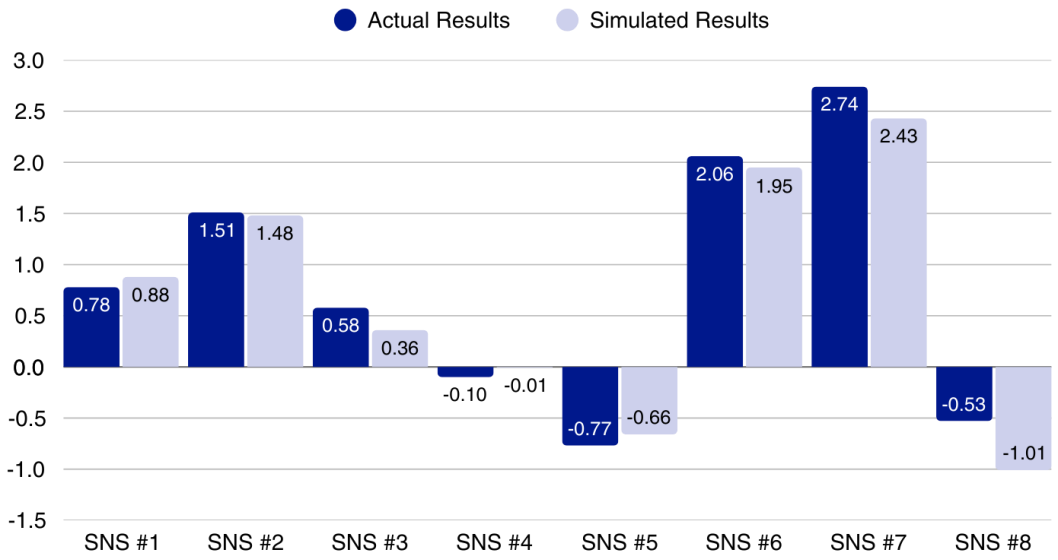

Figure 2 - Decomposition of 2024 overall index by standards' contribution: actual vs. simulated considering only countries that responded in both years

SOURCE: ESNA (2025)

2.2 Introduction of new indicators

The second simulation **aims to capture the effect of introducing new indicators**. In 2024, three entirely new indicators were added: 2.1.2 Time to complete visa applications for experienced workers, 3.2.2 Minority shareholders & bureaucracy, and 5.1.2 Existence of incentives for public buyers and procurement services to procure innovation from startups. To isolate the impact of these additions, the 2024 calculations were re-run without considering these three indicators.

Indicators 1.1.1 Number of days to establish a business online and 1.1.2 Number of days to establish a business in the commercial registers were also introduced in 2024, nonetheless, they are considered a division of the previously existing indicator 1.1.1 Number of days to establish a business. Therefore, the 2024 simulated score for the 2023 indicator 1.1.1 will be the higher value between the actual 2024 scores of indicators 1.1.1 and 1.1.2.

The simulated results suggest that **the introduction of new indicators in 2024 had a measurable but not transformative effect on the overall assessment of the startup policy ecosystem**. The simulated overall index for 2024 is 62%, which is 7 pp. higher than in 2023 (55%).

As illustrated in Figure 3, most standards and substandards exhibit only minor deviations between the actual and simulated values, although 3.2 and 5.1 show a more noticeable difference.

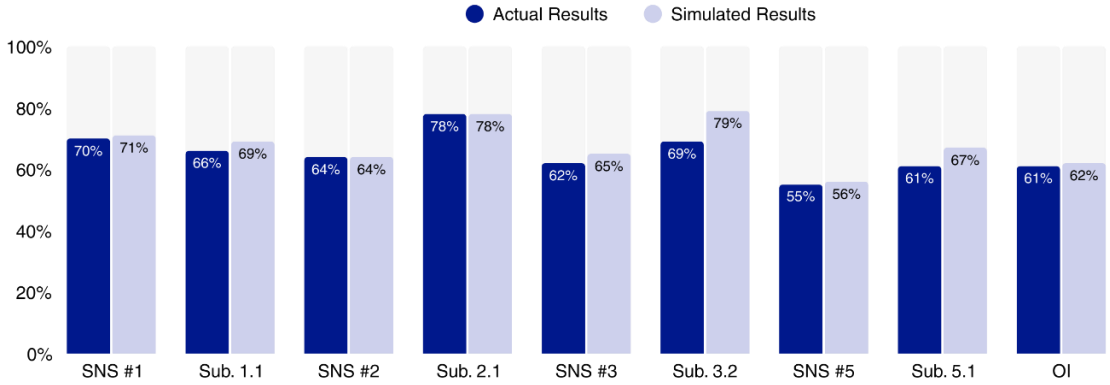

Figure 3 - (Sub)standards scores in 2024: actual vs. simulated considering only 2023 indicators

SOURCE: ESNA (2025)

Additionally, correlation matrices contributed to determining the degree of new additional information supplied by new indicators into the index. The results reveal a moderate correlation of 0.48 between indicators 2.1.2 and 2.1.1, suggesting some alignment between the new and existing measures in that substandard. In the case of 5.1.2 and 5.1.1, the correlation is slightly lower, at 0.39, still pointing to a moderate, though weaker relationship. The weakest correlation is observed between 3.2.2 and 3.2.1, with a coefficient of just 0.26, indicating that these two indicators are relatively independent in the way they capture policy implementation.

2.3. Scoring criteria

The third simulation **captures the effects of improvements in the scoring criteria**. The most significant modifications concern the introduction of an intermediate scoring criterion of 50% in 2024 for indicators 4.1.1, 4.2.1, 5.2.1, 5.3.1, 5.4.1, 7.1.1, and 8.2.1, and an added penalty of 25% on the scoring criterion of indicator 1.2.3 for situations where the helpdesk is only available in the local language. Other scoring criteria changes do not allow or require counterfactual simulations. For instance, building a counterfactual for indicator 5.2.3 was not feasible, as the scoring scale in 2023 featured more tiers than in 2024. In the case of indicator 1.3.2, the scoring criteria change consisted of a specification of a previously contemplated scenario, and hence did not require a counterfactual simulation.

The change in scoring criteria appears to have had a more significant impact, affecting eight indicators, along with their respective substandards and standards. Given that the 2024 revision introduced an intermediate score of 50% for certain responses that previously received 100%, the simulated values (applying the 2023 methodology) could not be lower than the actual scores. Figure 4 shows the scores that would have been obtained using the 2023 methodology and the difference compared to those calculated under the updated scoring criteria. Indicator 5.2.1 stands out, as its simulated score is significantly higher than its actual score. A similar pattern is observed for indicators 7.1.1 and 8.2.1, reflecting the stricter approach adopted in 2024.

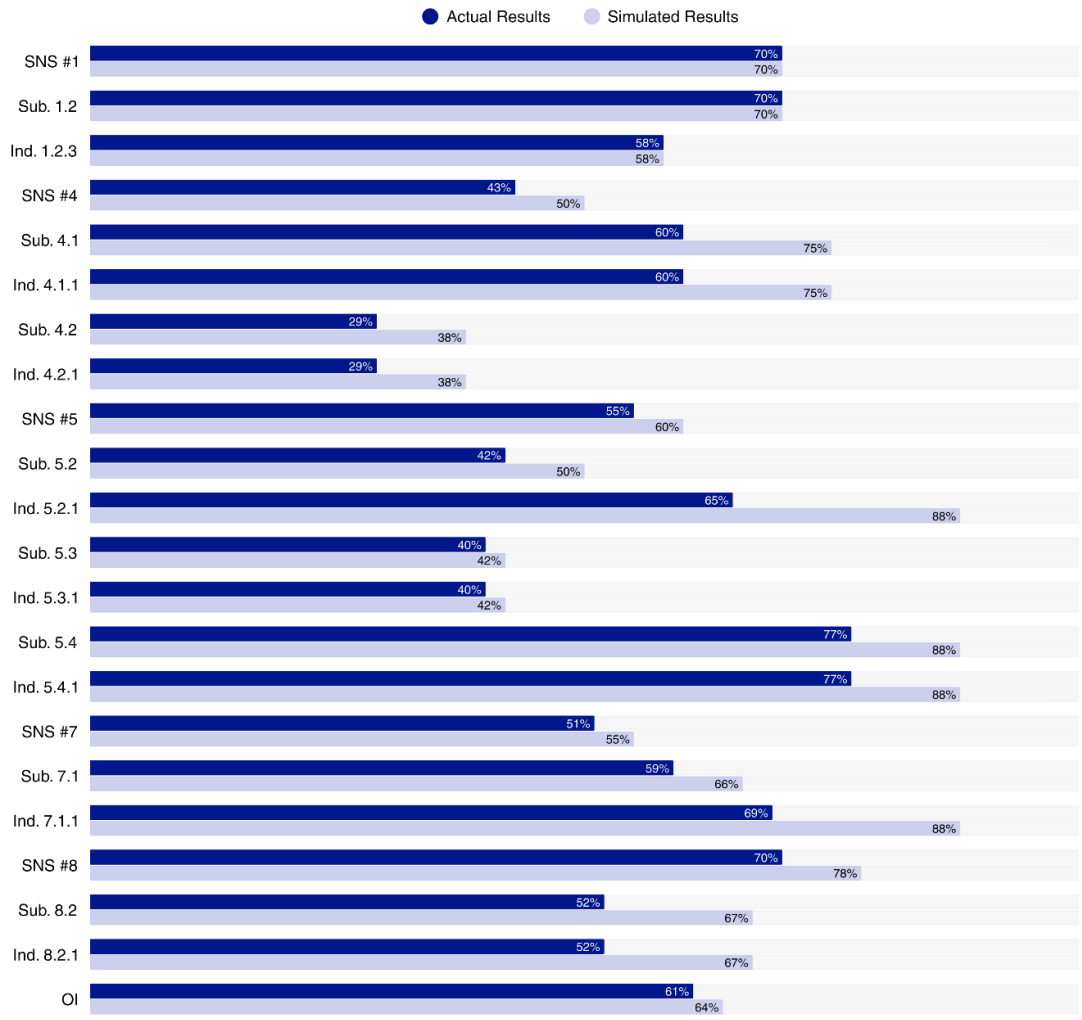

Figure 4 - (Sub)standards and indicators scores in 2024: actual vs. simulated considering 2023 scoring criteria

SOURCE: ESNA (2025)

2.4 Joint analysis

Finally, we computed how the changes in the composition of the country sample, the set of indicators used and the scoring criteria applied jointly influenced the final score. Table 1 displays the joint effect of these factors on the overall score.

Combining **two of the three elements**—countries in common with 2023 and the older indicator set—results in an index of 62%. When instead combining country consistency with the 2023 scoring method, the score increases to 64%. The highest simulated score, 65%, is obtained when applying the 2023 set of indicators together with the 2023 scoring method, but without restricting the country sample.

When **all three elements are considered simultaneously**—only countries present in both years, only indicators used in 2023, and scoring criteria from 2023— the index reaches 64%, 3 pp. above the actual 2024 result.

These simulations clearly show that each of **the methodological changes introduced in 2024 had a measurable, and generally downward, impact on the overall score**. While the overall index improved from 55% in 2023 to 61% in 2024, the results suggest that this increase would have been even more pronounced if the methodology had remained unchanged. This highlights the role of methodological adjustments in shaping the final scores and underscores the need to interpret year-on-year variations with caution.

Countries present in both editions	Only indicators used in 2023	Scoring Criteria applied in 2023	Simulated Overall index for 2024	Conclusion (comparing with 2024 overall score of 61%)
X	X		62%	Changing the number of countries and using the indicators from 2023, the overall index in 2024 would be 62%, which represents an impact of 1 p.p.
X		X	64%	Changing the number of countries and applying the scoring criteria from 2023, the overall index in 2024 would be 64%, which represents an impact of 3 p.p.
	X	X	65%	Using the indicators from 2023 and the same scoring criteria used in 2023, the overall index in 2024 would be 65%, which represents the highest impact throughout the simulations of 4 p.p.
X	X	X	64%	Using the full methodology of 2023 and only the countries within the scope of both editions, the overall index in 2024 would be 64%, which represents an impact of 3 p.p.

Table 1 - Overall index 2024 simulated results

SOURCE: ESNA (2025)

3. Conclusion

The 2024 edition of the SNS Report has proceeded with several methodological enhancements, namely the inclusion of new indicators, the increase in the number of countries covered and the revision of scoring criteria for certain indicators. To analyse how these refinements impacted the results, counterfactual simulations, assessing "what would have happened if certain changes had not taken place", were conducted for all standards.

The simulations results show that the 2024 revisions were not neutral, having a measurable, and generally downward, impact on the overall score. Neutralising the effect of country sample changes shows no significant change in SNS overall index, indicating that the inclusion of new countries and the exclusion of others had no significant impact on the average. The results suggest, however, that the introduction of new indicators in 2024 had a measurable but not transformative effect on the overall assessment of the startup policy ecosystem. A modest positive impact was found in most cases from considering the 2023 set of indicators. The effect of applying the 2023 scoring criteria was generally more pronounced. The following table summarises these findings.

Impact on Overall Index 2024	
Simulations	SNS
Using indicators set of 2023	▲
Applying scoring criteria of 2023	▲
Countries present in both versions	–
All changes together	▲

Table 2 - Summary of main simulations findings, for ESNA

SOURCE: ESNA(2025)