



## Deliverable 5.1

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Database of Startups/SMEs in BlueBioClusters region



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<b>Abstract</b>	The Startup/SME Database presents a list of mapped Startups and Small & Medium Enterprises (SMEs) working in the blue biotechnology sector with whom consortium partners have already been engaged and operating across BlueBioClusters regions.
<b>Keywords</b>	Blue biotechnology, Startups, Small & medium enterprises (SME)

HISTORY OF CHANGES		
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1.0	14.07.2023	Initial version

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## Acronyms

AKR	ASSOCIATION KLAIPEDA REGION
BBA	BLUEBIO ALLIANCE
BBC	BlueBioClusters
BioPark	TARTU BIOPARK
D	Deliverable
DBC	DE BLAUWE CLUSTER
EU	European Union
GDPR	General Data Protection Regulation
INNO	INNOVATUM
IOC	ICELAND OCEAN CLUSTER
KDMP	Knowledge and Data Management Plan
KU	KLAIPEDOS UNIVERSITETAS
LEGASEA	BLUE LEGASEA
PMBA	POLE MER BRETAGNE ATLANTIQUE
PU	Public
R&D	Research & Development
SAMS	THE SCOTTISH ASSOCIATION FOR MARINE SCIENCE
SEN	Sensitive
SME	Small & Medium Enterprises
SUBNet	SUBMARINER Network for Blue Growth EEIG
T	Task
TRL	Technology Readiness Level
UTartu	UNIVERSITY OF TARTU
WP	Work package

## Executive Summary

The D5.1 presents a detailed list of startups and SMEs operating in the blue biotechnology sector in BBC regions. The data collection to create this database was a joint task with contributions from all BBC partners, and it represents an early version of this ongoing database. Initially, BBC partners mapped all blue bioeconomy startups and SMEs they had already engaged with. Additionally, over the course of the project this list will be further developed, through active engagement with more startups/SMEs operating in each region.

D5.1 is an output of T5.1 of WP5 – ‘*Map Startups/SMEs and Support within BlueBioClusters regions*’ led by BioPark with all BBC partners as contributors.

The aim of D5.1 is to map in one database all blue biotechnology startups and SMEs by month 12; this is the baseline for further tasks in WP5 that are connected to the support of blue biotechnology startups and SMEs. This database will be accessible to all BBC partners. Although it is grounded in WP5’s tasks, it will provide other WPs with relevant foundational data and an overview of the blue biotechnology startups and SMEs in BBC regions, which could be appropriate for their objectives and analysis.

## Introduction

To properly perform BBC tasks and activities under WP5 in terms of (1) understanding startup/SME challenges in their regions, (2) creating a network to support them, (3) planning mentorship/matchmaking, and (4) creating capacity-building activities and co-creation workshops, there is a need to first map all startups and SMEs in each region into one database, which will provide an overview of the sector. This allows us to go more in-depth into the analysis of these companies in order to find out their main challenges, needs and value chains. All partners collected the information through their networks and regions, with the support of the 'Nomenclature Document' available for all partners in a shared folder and presented at the end of this document. This process allowed for the clarification and standardisation of all entries by each partner, providing a more accurate data analysis and more understandable results to form a common base and compare results across the partner regions. A disclaimer must be made in terms of the access to some of the provided detailed data, as some information cannot be accessed by public search nor by partners that do not have it in their internal database (in this case, it is expressed as '---').

## The structure of the database

The database was opened to partners to fill in at the end of January 2023. It was open for 4 months and was organised to give a clear overview of the profiles, types of companies in different regions, and the value chain in which they operate. A nomenclature document guided filling out the database, providing categorisation and definitions. The database is in an Excel file where each partner has 14 cells to fill in per startup/SME. Each partner has their tab, except for partners from the same country (who fill out the same tab). The categories are as follows:

1. Company name
2. Region (country)
3. Company type
4. Founding year
5. Nr. of employees
6. Technology type
7. Service/Product
8. Value Chain
9. Contact name
10. Contact email
11. Contact phone
12. Address
13. Website/LinkedIn
14. National contact (BBC partner)

## Nomenclature Document

This document was created to clarify the nomenclature and terminology used within the BlueBioClusters project and support a clear categorisation, standardised use of concepts, and a clear understanding of data. According to the 'EU Start-up Nations Standard of Excellence Ministerial Declaration' and 'Commission Recommendation of 6th May 2003 concerning the definition of micro, small and medium-sized enterprises', there is an effort to create a standard nomenclature for a clear EU-wide companies reference recognised by all EU Members that will facilitate benchmarking and contribute to a more accurate data analysis and thus understandable results. A common categorisation will also be very helpful in supporting decisions and policy-making, contributing to more effective implementation of strategies and plans, and supporting these economic agents in different EU countries. Considering this aim and orientations from the EU Commission, some countries have already started incorporating and making law transposition to define an economic ecosystem comparable between EU countries through a commonly held definition.

### Enterprise

An enterprise (or a company) is any entity engaged in economic activity, irrespective of its legal form, although some classification will be presented in order to clarify the main differences between Small and Medium Enterprises, Large Enterprises, Startups, and Scaleups. A common aspect of all these is that they must be registered in governmental administrative bodies, with all formalities accomplished.

The main division between these four categories is between SMEs and Large Enterprises. There is a clear quantitative framework to split companies into two big categories considering the following aspects: number of employees, annual turnover, and balance sheet.

Therefore, inside these two groups of companies, some can be called Startup or Scaleup, according to whether they:

- are new and independent (shareholders are not other companies)
- intend to tackle a problem with an innovative technology/business model
- are growth-oriented and looking for fundraising
- reveal high R&D expenses
- are older than 10 years, growth-oriented with an innovative technology

Additionally, depending on their number of employees, annual turnover, and balance sheet, these companies can be startups or scaleups. This categorisation involves a consideration of their size and stage of development. So, in conclusion, a company that is characterised by the above topics is a startup or a scaleup, considering the same criteria of SME classification.



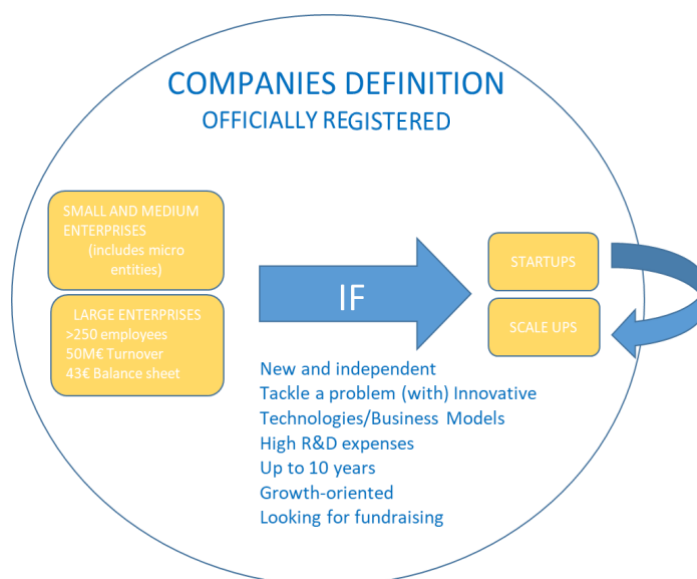


Figure 1 Companies definition; Author: BBC

## SME - Small and Medium Enterprises

A SME is a small or medium-sized enterprise that employs fewer than 250 persons and which has an annual turnover not exceeding EUR 50 million, and/or an annual balance sheet total not exceeding EUR 43 million. Specifically, this definition takes into account financial and economic indicators and number of employees. Inside this category, companies can be split into micro, small, and medium enterprises, considering the following:

1. Balance Sheet
2. Turnover
3. Number of Employees

EU firm-size definition:

Company category	Staff headcount	Turnover	or	Balance sheet total
Medium-sized	< 250	≤ € 50 m		≤ € 43 m
Small	< 50	≤ € 10 m		≤ € 10 m
Micro	< 10	≤ € 2 m		≤ € 2 m

Figure 2 EU firm-size definition; Source: European Commission

## Large Enterprise

A large enterprise is a company that employs 250 or more persons, and that has an annual turnover exceeding EUR 50 million and an annual balance sheet total exceeding EUR 43 million. In other words, considering figure 2 in the SME chapter, a large enterprise is a company that doesn't fit in the SME criteria.

## Startups

A startup is a new, independent firm, up to 10 years old, which is strongly growth-oriented and brings innovative technologies and/or new business models.

As seen before, startups are a specific group inside the SME group, and fulfil specific criteria regarding their business model and innovative products/services.

In detail, it considers a mix of qualitative and quantitative criteria as shown below:

1. new and independent; (and)
2. intend to tackle a problem with an Innovative technology/Business Model; (and)
3. reveals high R&D expenses; (and)
4. up to 10 years; (and)
5. growth-oriented and looking for fundraising.

There are some guidelines regarding some of the qualitative categories presented, for example the amount or percentage of expenses in R&D, or the annual growth rate of some financial and economic performance indicators. For this concept of startup, it is mandatory to keep in mind that a so-called innovative project or business idea is not necessarily a startup, for a startup needs a business official registration to be formally recognised in public administration bodies.

An additional note to complement this topic is the importance of a technological framework that shows the stage of development of an innovative project/startup/scaleup called Technology Readiness Level. This will be explored further in WP4.

## Scaleups

A scaleup is a new, independent firm, up to 10 years old, which is strongly growth-oriented and brings innovative technologies and/or new business models, that reaches EUR 1 million of venture capital funding and/or employs 250 or more persons, has an annual turnover that exceeds EUR 50 million and an annual balance sheet total exceeding EUR 43 million.

The definition of scaleup is a startup that grew in terms of dimension and funding, but maintains the remaining Startup criteria listed before. Scaleups can also be considered a specific group inside large enterprises, because, with the increase in some performance indicators, they can no longer be part of the SME category and thus have to move to large enterprise criteria. Therefore, to describe a scaleup, we need to use a mix of both criteria: startup and large enterprise.

In resume, for a scaleup definition, we should use:

1. new and independent; (and)
2. intend to tackle a problem with an Innovative technology/Business Model; (and)
3. reveals high R&D expenses; (and)
4. up to 10 years; (and)
5. growth-oriented and looking for fundraising; (and)
6. reach EUR 1 million capital funding; (and)
7. more than 250 employees; (and/or)
8. annual turnover equal or exceeds EUR 50 million; (and/or)
9. balance sheet equal or exceeds EUR 43 million.

As mentioned previously, TRL could also be important additional information to classify a Scaleup.

Note: There is another novel concept that is a particular case of startup/scaleup called a '*Unicorn*', which means that the company valuation exceeds EUR 1 billion. However, this concept is not relevant to the BlueBioClusters project.

### Ancillary Services

Ancillary services are supportive or necessary auxiliary services provided by companies that can be directly or indirectly operating in the blue biotech sector, and its intervention can be at any stage of the value chain.

To better understand the use of ancillary services we must define which value chain they are operating with, because somehow what is ancillary service in one specific value chain could not be in another. So, this is a concept that depends closely on the definition of value chain.

In the specific stage of this D5.1 of the BlueBioClusters project, and considering all subsectors of marine biotechnology, we will not go into further detail on this topic.

## Summary of the results

All BBC partners, in total 12, added information to the database: SUBNet, PMBA, BioPark, KU, UTartu, DBC, IOC, BBA, AKR, INNO, LEGASEA, and SAMS, contributing to a total of 570 entries distributed per region and per type according with images below and detailed in Annex I.

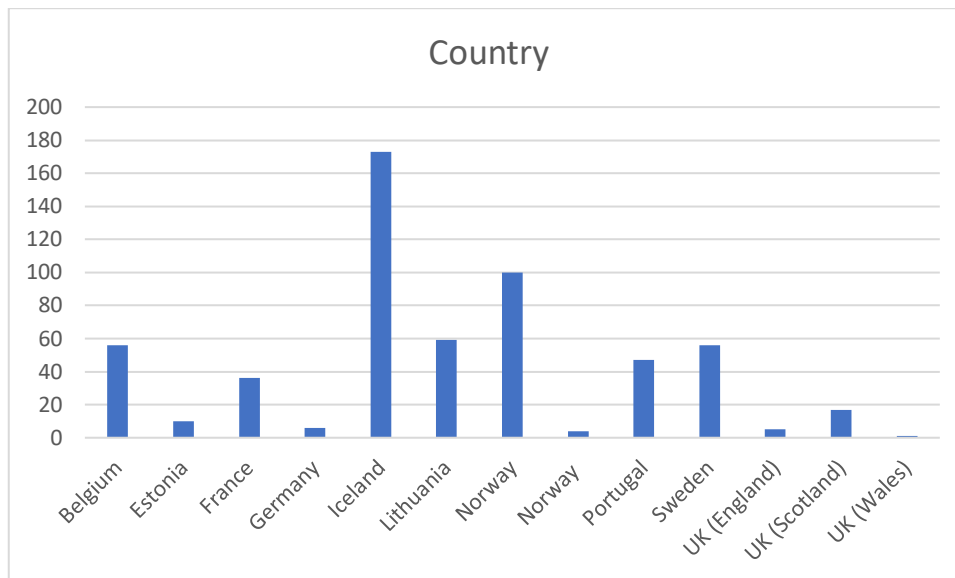


Figure 3 Database of Startup/SMEs in BBC region – geographic distribution; Author: BBC

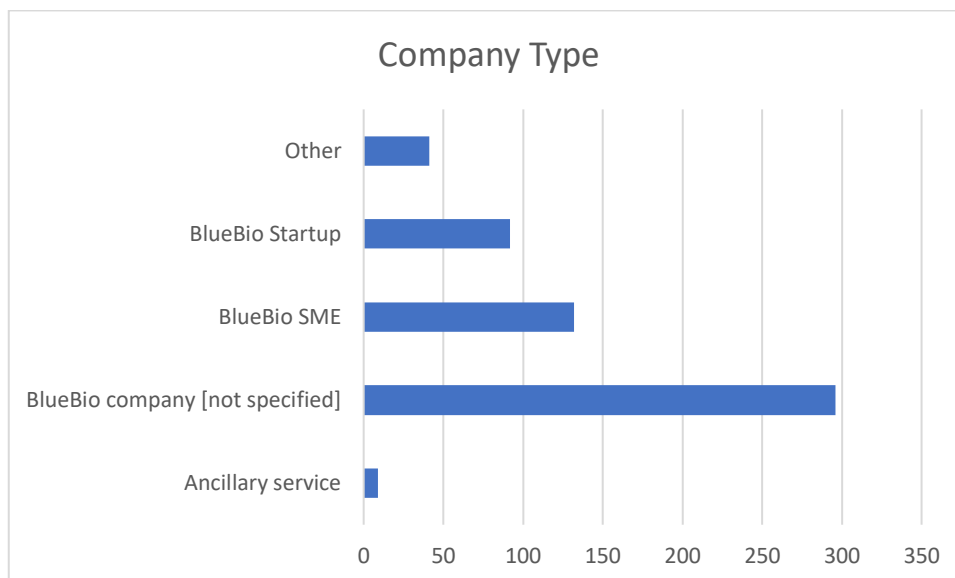


Figure 4 Database of Startup/SMEs in BBC region – company type; Author: BBC

## References

Autio, Erkkö (2016). 'Entrepreneurship Support in Europe: Trends and Challenges for EU Policy Report Prepared for EU DG Growth

Cook, Scarlett (2022) 'What is a Start-up?' <https://startups.co.uk/analysis/what-is-a-startup/>

Digital Day 2021 19<sup>th</sup> March (2021). 'The EU Startup Nations Standard of Excellence Ministerial Declaration' (2021) <https://www.portugal.gov.pt/download-ficheiros/ficheiro.aspx?v=%3D%3DBQAAAB%2BLCAAAAAAABAAzNDQxMwEAY9E%2BmQUAAAA%3D>

European Commission. 'Emerging industries and value chains' [https://single-market-economy.ec.europa.eu/industry/strategy/cluster-policy/emerging-industries-and-value-chains\\_en](https://single-market-economy.ec.europa.eu/industry/strategy/cluster-policy/emerging-industries-and-value-chains_en)

European Commission (2003). Recommendation European Commission (2003/361/EC) <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32003H0361>

European Commission. 'SME definition' [https://single-market-economy.ec.europa.eu/smes/sme-definition\\_en](https://single-market-economy.ec.europa.eu/smes/sme-definition_en)

Entrepreneurship Support in Europe: Trends and Challenges for EU Policy Report Prepared for EU DG Growth Erkkö Autio, Professor Imperial College Business School, London February 3, 2016

Herte, Anamaria Diana (2017). 'SMEs and Start-Ups. Importance and Support Policies in European Union and Romania' [https://mpr.aub.uni-muenchen.de/84174/1/MPRA\\_paper\\_84174.pdf](https://mpr.aub.uni-muenchen.de/84174/1/MPRA_paper_84174.pdf)

República Portuguesa (2003). Lei n.º 21/2023 – 'Establish the regime applicable to startups and scaleups and amend the Código do Imposto sobre o Rendimento das Pessoas Singulares (IRS), o Estatuto dos Benefícios Fiscais e o Código Fiscal do Investimento (EBF)'

## Annex I



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