Analysis report on
SME success factors and best practices
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This report was produced under the framework of Access4SMEs, the official network for Horizon 2020 National Contact Points (NCPs) for Small & Medium-sized Enterprises (SMEs) and Access to Risk Finance (ARF).

ACCESS4SMEs’ main objective is to provide support and specialised services to the network of SMEs and ARF NCPs.

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Table of Contents

Introduction ........................................................................................................................................ 4

Part 1 – Horizon 2020 SME funding details ...................................................................................... 5
  Can we observe a thematic focus of SMEs in Horizon 2020? ......................................................... 5
  Coordination vs. Partnership ........................................................................................................... 5
  Timeline - experienced H2020 SMEs or newcomer? ....................................................................... 6
  Project Duration ............................................................................................................................... 6
  Funding instruments of highest relevance for SMEs? ......................................................................... 6
  What are the geographic SME participation hot spots? .................................................................... 7

Part 2 – Horizon 2020 SME typology ............................................................................................... 8
  SME Team Size ................................................................................................................................ 8
  SME Age ........................................................................................................................................... 8
  SME Product/Service Portfolio Size .................................................................................................. 9
  SME Research intensity ................................................................................................................... 10

Part 3 Typology of SMEs in Horizon 2020 ....................................................................................... 11
  The average SME in Horizon 2020 .................................................................................................. 11
  SMEs according to funding schemes: ............................................................................................... 11

Supporting tool to assess an SME’s pre-requisites and suitability to H2020 projects .................... 12
  Introduction ...................................................................................................................................... 13
  Overview of methods and tools ....................................................................................................... 13
  SMEs’ first contact with Horizon 2020 ............................................................................................. 13
  Idea Check ...................................................................................................................................... 14
  Find relevant calls ............................................................................................................................ 18
  “One-page” Summary of EU R&I-project idea/proposal ................................................................ 21
  “Deep diving” in to a good proposal ............................................................................................... 24
  Product State of the Art (SoA) Review ............................................................................................. 24
  Guideline for Completing the Product SOA Review ....................................................................... 26
  Partner Grid ..................................................................................................................................... 26
  Guideline for completing the Partner Grid ..................................................................................... 27
  Buying Driver and USP Map ........................................................................................................... 27
  Guideline for completing the Buying Driver and USP Map ............................................................. 28
  Impact Plan ...................................................................................................................................... 29
  Guideline for Completing the Impact Plan ..................................................................................... 30
  Exploitation Grid ............................................................................................................................. 31
  Guideline for Completing the Exploitation Grid ............................................................................ 32
  Appendix I: SMEs in collaborative projects................................................................................... 33

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Introduction

For SMEs the participation in Horizon 2020 – the SME Instrument or further collaborative projects – should be based on a thorough economic consideration. Wasting time and effort on a proposal that will not be competitive due to missing basic requirements should be avoided. Adding to that the success rates in funding instruments like the SME Instrument show that only excellent proposals will have a chance of succeeding. However for NCPs and SMEs to decide whether the SME should go for a proposal is a difficult decision since it is not easy to assess whether the SMEs approach will be viable. As a decision basis this analysis of Access4SMEs identifies key characteristics and patterns of SMEs funded within H2020.

In two parts this document takes a closer look at the typology of SMEs in Horizon 2020. Who are the successful SMEs in the SME Instrument and further Collaborative Projects within H2020? Key characteristics and common patterns of funded SMEs are identified and presented. For example in terms of age, size, team set-up, R&I-focus/, scope of activities, area, target markets. This analysis is based on a desk research of data available provided by Commission (eCORDA Database) as well as online information of respective SMEs.

Furthermore this guideline has two target groups: SMEs and NCPs that consult SMEs. It will assist both NCPs and SMEs themselves in assessing their ability to succeed in H2020 projects. It is based on various methods that can be used to support SME’s when they want to apply for H2020 projects. At the same time it provides tools to help SMEs structure their initial project or innovation idea. Based on those tools SMEs and NCPs can identify suitable funding instruments. Further tools in this guide help NCPs and SMEs to get to the core of the project idea and fine-tune aspects like impact or value chain analysis.
Part 1 – Horizon 2020 SME funding details

The first part of this report gives an overview of SMEs characteristics in Horizon 2020 along different study questions and aspects. The data basis for part one is derived from the eCORDA Database.

eCORDA is the external version of CORDA – the COMon Research Datawarehouse. CORDA is collecting proposal, evaluation and grant management data of all the operational systems automating key business processes around the Framework Programmes, H2020 – FP5. eCORDA (e = external) is a subset of CORDA with reduced scope to H2020, FP7 and FP6.

This report is based on the release of eCORDA dated to 31.5.2017. It comprises information on more than 7,000 SMEs from member states and countries associated to Horizon 2020 that are or have been active in Horizon 2020 projects. eCORDA offers information like origin and address of the SME as well as details about the project the SME is involved in (what funding instrument, topic, contribution by European Commission etc.).

With this information available this report offers a first overview of SMEs characteristics in Horizon 2020 along the following study questions and aspects:

- Thematic focus of SMEs?
- Timeline: experienced H2020 SMEs or newcomer
- Coordination vs. Partnership
- Project duration
- What are the funding instruments of highest relevance for SMEs?
- Where are SME participation hotspots in Europe?

Can we observe a thematic focus of SMEs in Horizon 2020?

What did we look for?
Horizon 2020 offers funding for the full bandwidth of potential research and innovation topics. Starting from bottom-up basic research without a given topic to focussed calls in industrial technologies or societal challenges. The aim of this question was to find out if SMEs have favourite topics in Horizon 2020 or if SMEs are evenly distributed over the different topics.

What did we find out?
For this question we looked at a total of more than 11,000 SME participations in Horizon 2020. With more than 6,000 participations SMEs favourite pillar is “Societal Challenges”. Here SMEs also have the highest average EC contribution (330.000€). Second is “Industrial Leadership” with more than 4,000 participations and an average EC contribution of around 300.000€. All other areas account for 1,400 SME participation (295.000€ average EC contribution) with “Excellent Science” being the most frequent one. With 833 SME participations MSCA is the funding instrument in “Excellent Science” demanded by far the most.

Taking a look at topics: ICT leads the field. With 2,277 SME participations ICT is the most relevant topic for SMEs in Horizon 2020 – followed by Energy (1,326), Transport (1,276), Food (1,087) and Health (913).

What are the implications for SMEs?
SMEs are represented in all areas of Horizon 2020. Especially topics in “Industrial Leadership” and “Societal Challenges” and MSCA in “Excellent Science” are of high relevance for SMEs.

Coordination vs. Partnership

What did we look for?
Are most of the SMEs on board a consortium as a partner or are they taking over the extra work of coordinating a project?

What did we find out?
73% of the participations of SMEs in all areas of Horizon 2020 are as partners. This equals to around 8,600 participations. Still a significant percentage of SMEs (27%; around 3,200) participate as project coordinators. The total percentages differ if you disregard the SME Instrument. Here most projects are implemented by single SMEs which are therefore counted as coordinators. Without the SME Instrument taken into account 92,5% of the SMEs are participating and only 7,50% coordinating.

Thematic areas with highest percentages of coordination role are the “Industrial Leadership” topics “NMP” with 51% coordination (237) and “Biotech” with 45% (55) as well as “Societal Challenges” with 38% (347) in the topic “Health”. Thematic Areas with very low percentages of SME participations as coordinators...
are Advanced Materials (2%, 4) and Advanced Manufacturing (4%, 18). ICT, the thematic area with the highest number of SMEs participating shows a quite low coordination rate. Only 24% of ICT projects are coordinated by SMEs (547).

**What are the implications for SMEs?**

Most of the SMEs in Horizon 2020 take a participation role in projects. Especially for young and/or small SMEs, coordinating a project instead of “only” participating means additional effort. Unless it is not stated in the call-text or there are any other plausible reasons for the SME to participate as a coordinator there is no need for SMEs to take over the coordination role. An exception is obviously the SME Instrument which only SMEs are allowed to join.

**Timeline – experienced H2020 SMEs or newcomer?**

**What did we look for?**

Is the field of SMEs in Horizon 2020 projects dominated by usual suspects that keep applying for grant after grant? Or are the majority of SME newcomers to the programme?

**What did we find out?**

More than 77.21% are Horizon 2020 newcomers. That equals to 6.134 SMEs. 22.79% of SMEs (1811) are or have been active in several Horizon 2020 projects. Of those the majority (1060) are or have been active in two projects. 2.1% of the SMEs (172) are or have been active in more than five projects.

**Project Duration**

**What did we look for?**

Do SMEs tend to go for short or longer projects? Are there any differences to other actors in Horizon 2020?

**What did we find out?**

For this question we looked at a total of 5.863 projects with SME participation. The range of project duration is from 1 month to up to 84 months. The majority of project with SME participation runs for 48 (15.59%), 36 (20.37%), 24 (12.06%) or 6 (20.08%) months. Projects with a duration of more than 48 months are exceptional cases (3.38%). There are two cases of projects with a runtime of 7 years (84 months). 60% of all projects with SME participation run 24 months or longer. Aside the 6 months projects – the majority of those are SME Instrument Phase 1 projects – there is no obvious difference of SMEs and other H2020 actors.

**What are the implications for SMEs?**

When SMEs apply for a H2020 project it is in most cases going to be for projects lasting two to four years. Exception is the SME Instrument Phase 1 where projects are normally running for half a year. Longer projects tend to be Research and Innovation Actions with low technology readiness levels (TRL) at the beginning of the project and a longer time to market. Innovation Actions (especially FTI projects) and projects funded within the SME Instrument have a relatively short time to market at the beginning of the project (TRL of 6, meaning a demonstrator is already available at project start) and therefore have shorter project durations.

**Funding instruments of highest relevance for SMEs?**

**What did we look for?**

Are SMEs more active in Research and Innovation Actions (RIAs), Innovation Actions (IAs) or the SME Instrument? Or is there another funding instrument that is of high relevance for SMEs?

**What did we find out?**

For this question we took into account more than 11.800 SME participations in projects. The most common funding instrument for SMEs are Research and Innovation Actions (RIAs). 4318 SME participations were in RIAs. 3699 of these were in “normal” RIAs and 619 in RIAs of JTIs (Joint Technology Initiatives). 63 SME participations in RIAs were in Future and Emerging Technologies (FET) Open.

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**Figure 3: Top 11 share of coordinating SMEs in thematic areas (in %) / Number of SME coordinators and participants in thematic areas**

**Figure 4: Share of H2020 newcomers and SMEs with more than one H2020 project**

**Figure 5: Runtime of H2020 projects with SME participation**

**Figure 6: SME participation: Share of H2020 funding instruments**
Second were Innovation Actions (IAs) with 2608 SME participations. 2202 of these were in “normal” IAs and 406 in JTI IAs. 202 of SME participations in IAs were in the Fast-track to Innovation Pilot (FTI). Third most often chosen instrument was the SME Instrument Phase 1 with 2169 participations. The SME Instrument Phase 2 is the most lucrative instrument for SMEs with average EC contributions of 1,35 Mio. €. RIAs are on second place in that list however – with average contributions of 0,34 Mio. € for “normal” RIAs and 0,39 Mio. € for JTI-RIAs – way behind the SME Instrument Phase 2. SMEs in Innovation Actions can expect an average EC contribution of 0,34 Mio. € for “normal” IAs and 0,4 Mio. € for JTI-IAs.

What are the implications for SMEs?
More than 36% of all SME participants in Horizon 2020 are in Research and Innovation Actions, 23% in SME Instrument projects and 22% in Innovation Actions. All in all these three instruments account for over 80% of all SME participations in Horizon 2020 and are therefore the most relevant ones for SMEs. The SME Instrument Phase 2 is the most profitable instruments for SMEs. With an average contribution of 1,35 Mio. € it exceeds the average contribution of IAs (0,41 Mio. €) – placed second in terms of average contribution – by far.

What are the geographic SME participation hot spots?

What did we look for?
What is the share of SME participation in Horizon 2020 Member States? Which Member States have the highest EC contribution to SMEs in absolute numbers?

What did we find out?
The average SME share in regard to all participations (universities, large companies etc.) in Horizon 2020 is 30% for member states. The same counts for the average EC contribution share.

National SME share:
Member States with the highest SME participation share are Cyprus, Estonia (both 43%) and Hungary (40%). Member States with the highest absolute SME participation are Spain (1564), UK (1399), Italy (1358) and Germany (1356).

Absolute EC-Contribution to SMEs:
Spain, UK, Italy and Germany are also leading Member States in terms of total EC-Contributions to SMEs: SMEs in the UK in total so far receive 569 Mio. € in EC contributions followed by Germany (458 Mio. €), Spain (449 Mio. €) and Italy (380 Mio. €).
Part 2 – Horizon 2020 SME typology

eCORDA only offers limited information about the SMEs in Horizon 2020 projects. When analysing SMEs that receive funding, information on team size, age of the SME or product portfolio linked to respective funding instruments of these SMEs is very helpful. This information can put NCPs in the position to make a preselection of relevant funding instruments for SMEs in a given situation. Part 2 of the report takes a closer look at the typology of SMEs funded in Horizon 2020.

For this task the team of Access4SMEs has collected relevant information of SMEs in six different countries by means of online desk research and SME interviews between June and September 2017. The six countries are Germany, Israel, Italy, Norway, Poland and Spain. For a total of 282 SMEs information has been collected and analysed.

The following information regarding the SMEs has been focussed on:
- Number of Employees/ Team size
- Year funded
- Size of product / Service portfolio: Does the SME have a
  - small product/service portfolio with only one main product or service
  - a somewhat small product/service portfolio in a similar field (around 2-10)
  - a broad product/service offer in a similar field (more than 10)
  - a broad product/service offer in different application fields
- Research intensity - Does the SME conduct research?

From this information gather the following study questions were analysed – where possible taking into consideration different funding schemes:
- Are there more start-ups or rather experienced SMEs active in H2020 projects?
- What is the average team size of SMEs in in H2020 projects?
- Do SMEs in H2020 have big or small product or service portfolios?
- Does size have an influence on type of action SMEs are participating in? For example are rather big and experienced SMEs more active e.g. in cooperative research actions?
- Do young SMEs have good chances or do most grants go to older, more established ones?

SME Team Size

What did we look for?
What is the share of different SME sizes in a random sample of SMEs with a H2020 grant? Is there a correlation of company size and funding scheme? The report uses the classification of micro, small and medium enterprises (micro <10, small 10<50, medium 50<250).

What did we find out?
The range in the sample is from 1 to 240 employees. More than 50% of the SMEs have 16 or less staff members. In the sample 35% of SMEs were micro SMEs with less than 10 staff. With 47% the highest share were SMEs between 10 and below 50 staff. 18% of the SMEs had between 50 and below 250 employees. 82% are small SMEs with below 50 employees. In total numbers 232 of 282 SMEs in the sample are below 50 employees. Within the group of SMEs in H2020 the major share seem to be smaller sized SMEs. Taking a look at company size by funding scheme: The SME Instrument has the highest share of micro and small enterprises. In all Phase 2 SMEs of the sample the staff count is below 50. In Phase 1 8,6% of the SMEs are medium sized SMEs. In the remaining funding schemes the distribution of the share of SME size is similar. Between 71,4% and 80% are micro and small enterprises: 77,8% in RIA’s, 80% in MSC Actions, 80% in IAs and 75% in CSAs. The highest share of medium sized enterprises is in IAs (28,8%).

SME Age

What did we look for?
What is the share of the age of SMEs in a random sample of SMEs with a H2020 grant? Is there a correlation of company age and funding scheme? Also, how does age of an SME influence if it is partner or coordinator of a project – if at all. The report uses age groups 1-5 years, 6-10 years, 11-20 years and above 21 years.
What did we find out?
The range of company age in the sample is between 1 year and 101 years. More than 50% of SMEs in the sample are younger than 12 years, i.e. founded in 2006 or later. Within the selected age groups the number of SMEs is quite evenly distributed. 23% of SMEs can be attributed as Start-Ups with an age of up to 5 years. Another 23% are between 6 to 10 years. The largest group are SMEs aged 11 to 20 years (30%). 24% have been in the market for more than 21 years.

In regard to age groups in funding schemes, the share of start-ups (1-5 years) in the SME Instrument is 45.2% in Phase 1 and 38.9% in Phase 2. In comparison to the other funding schemes this is the highest share of start-ups. In Research and Innovation Actions 11-20 years is the age group most represented (42%). Here start-ups only play a minor role. Innovation Actions have the highest share of older SMEs with 21 plus years. In CSAs the age groups are evenly distributed, with no representation of start-ups.

The older an SME the more likely it is to coordinate a project. Among the start-ups only 6.3% of SMEs are coordinators. This percentage gradually increases over the age groups. With a share of 24.5% coordinating SMEs, older SMEs with more than 21 years on the market are almost four times as likely to coordinate a project than start-ups.

SME Product/Service Portfolio Size

What did we find out?
What is the usual product or portfolio size of SMEs participating in H2020 projects? Are there rather SMEs with many products on offer or single product companies? The report analyses the product/service portfolio of companies in the sample based on the following categorisation:

1. small product/service portfolio with only one main product or service
2. somewhat small product/service portfolio in a similar field (around 2-10)
3. broad product/service offer in a similar field (more than 10)
4. broad product/service offer in different application fields/markets

What did we look for?
In regard to funding schemes there seems to be no real correlation between scheme and size of product portfolio. The SME Instrument Phase 1 has the largest share of SMEs with a small product portfolio (18.3%). In Phase 2 of the SME Instrument there are no SMEs with a small product portfolio. In MSC Actions and CSAs there is a strong focus on SMEs with a somewhat small product/service portfolio in a similar field of around 2-10 products or services. 29% have a broad portfolio of more than 10 products or services. 27% have a broad product/service offer in many different application fields and markets.

The older an SME the more likely it is to coordinate a project. Among the start-ups only 6.3% of SMEs are coordinators. This percentage gradually increases over the age groups. With a share of 24.5% coordinating SMEs, older SMEs with more than 21 years on the market are almost four times as likely to coordinate a project than start-ups.
SME Research intensity

**What did we look for?**
Not all SMEs active in Horizon2020 have a research focus. Some are development and innovation oriented and either license technologies or develop products and services that are innovative but don’t require intense research activities. Others take over support, management tasks or consulting activities and therefore are also not necessarily research intensive. What is the share of research intensive SMEs in contrast to SMEs with no or low research intensity? How are SMEs distributed along the different funding schemes?

**What did we find out?**
Within the sample of SMEs 67% are research intensive whereas 33% are not or only to a small extend research intensive.

In regard to funding schemes the distribution of research intensive SMEs in the different funding scheme looks as follows. In RIAs with 78,8% the majority of SMEs are research intensive. This is also the scheme with most research intensive SMEs represented, followed by MSCA (73,3%). Interestingly the SME Instrument Phase 2 (72,2%) and Phase 1 (65,6%) have a much higher share of research intensive SMEs than IAs in which still the majority of SMEs are research intensive (52,4%).
Part 3 Typology of SMEs in Horizon 2020

Based on the eCORDA data from Part 1 “Horizon 2020 SME funding details” of this report and the desk research of Part 2 “Horizon 2020 SME typology” in Part 3 a general typology of the “average” SME in Horizon 2020 is derived – for Horizon 2020 in general and for different funding schemes.

The average SME in Horizon 2020

- Is new to Horizon 2020 with a chance of 77%.
- Is located in Spain, UK, Italy, Germany or France with a 60% probability.
- Is research intensive with a chance of 67%.
- Has a broad product portfolio with a chance of 56%.
- Has between one and 49 employees with a chance of 65%.
- Is relatively young. It has been the market between 1-20 years with a 76% chance.
- Is participating in either thematic areas ICT, ENERGY, Transport, FOOD or HEALTH with an almost 70% probability.
- Is most certainly active either in Research and Innovations Actions, Innovation Actions or the SME Instrument (with over 80% probability).
- Is participating in a project instead of coordinating it with a 69% chance.
- Is committed to a project runtime of 24 months or more with a 60% chance.

SMEs according to funding schemes:

The typical SME in Research and Innovation actions:
- Receives an average contribution of 0,36 Mio. €
- Is a partner in the project (86,4%)
- Is a small SME with between 10 and 49 employees (58% chance)
- Is most certainly between 6-20 years old (69,2% chance)
- Is not a one product/service SME (96,3% chance)
- Is research intensive (78,8% chance)

The typical SME in Innovation actions:
- Receives an average contribution of 0,41 Mio. €
- Is a partner in the project (82,5%)
- Is a micro or small SME with up to 49 employees (71,4% chance)
- Is 11 years or older (66,7%)
- Is not a one product/service SME (93,7% chance)
- Is not necessarily research intensive (52,4%)

The typical SME in Coordination and Support Actions:
- Receives an average contribution of 0,16 Mio. €
- Is either coordinating or partner in the project (50%)
- Is a micro or small SME with up to 49 employees (75% chance)
- Is 6 years or older
- Has a mid-size product/service portfolio (75%)
- Is not necessarily research intensive (58,3%)

The typical SME in MSC Actions:
- Receives an average contribution of 0,18 Mio. €
- Is a partner in the project (86,7%)
- Is a micro or small SME with up to 49 employees (80% chance)
- Is between 1-20 years old (86,7%)
- Has a somewhat small product/service portfolio (60%)
- Is research intensive (73,3% chance)

The typical SME in SME Instrument Phase 1:
- Receives a contribution of 0,05 Mio. €
- Is coordinating the project/ is active in a project as single entity (98,9%)
- Is a micro or small SME with up to 49 employees (91,4% chance)
- Is relatively young (66,7%, with chances of being start-up of 45,2%)
- Doesn’t necessarily only have a small or a somewhat small product/service portfolio (52,7%)
- Is not necessarily research intensive (65,6%)

The typical SME in SME Instrument Phase 2:
- Receives an average contribution of 1,35 Mio. €
- Is coordinating the project/ is active in a project as single entity (83,3%)
- Is a micro SME with up to 10 employees (66,7% chance)
- Is up to 20 years old (77,8%, with chances of being start-up of up to 5 years of 38,9%)
- Has a mid-sized product/service portfolio (77,8%)
- Is research intensive (72,2% chance)

The findings of this Access 4 SMEs Deliverable D3.1 “Analysis report on SME success factors and best practices - Typology of SMEs funded in Horizon 2020” have been incorporated in the Access 4 SMEs Deliverable D3.2 “SME NCP H2020 guidelines and tools”.
Supporting tool to assess an SME's pre-requisites and suitability to H2020 projects
Introduction

For Small-medium Sized Enterprises (SMEs) the participation in Horizon 2020 – the SME Instrument or further collaborative projects – should be based on a thorough economic consideration. Wasting time and effort on a proposal that will not be competitive due to missing basic requirements should be avoided. Additionally the success rates in funding instruments like the SME Instrument show that only excellent proposal will have a chance of succeeding. However for National Contact Points (NCPs) and SMEs to decide whether the SME should go for a proposal is a hard decision since it is not easy to assess whether the SMEs approach will be viable.

This guideline has two target groups: SMEs and NCPs that consult SMEs. It will assist both NCPs and SMEs themselves in assessing their ability to succeed in H2020 projects. It is based on various methods that can be used to support SME’s when they want to apply for H2020 projects. At the same time it provides tools to help SMEs structure their initial project or innovation idea. Based on those tools SMEs and NCPs can identify suitable funding instruments. Further tools in this guide help NCPs and SMEs to get to the core of the project idea and fine-tune aspects like impact or value chain analysis.

Overview of methods and tools

This section gives a short overview of methods and tools presented in this guideline:

- **Idea Check**: Tool that provides a questionnaire-like structure to assess which funding instruments are relevant for the specific situation of a SME. It comprises 18 questions regarding different areas of the SME and the project idea – from the type of SME to details about potential markets.
- **Call finding guide**: A guide to find relevant calls that gives a short step by step introduction to the Participant Portal of the European Commission and a to-do list for applicants – starting with the first contact with an NCP to the “SME self-assessment”.
- **Project One-Pager**: Based on the idea check with the project one-pager the initial idea will be structured and translated into «H2020 terminology». It helps to start fitting the idea to the proposal template and for partner search.
- **Product State of the Art (SOA) Review**: A tool to identify potential competition. It will help to identify any potential competition to SMEs’ solution and will also help to create a robust argument to demonstrate how their innovation is superior.
- **Partner Grid**: A tool, designed to make sure that each partner selected has a role to play and will receive a direct benefit out of the project.
- **Buying Driver and USP Map**: A tool which helps to ensure that the features and functionalities of the technology match with the needs of the target market.
- **Impact Plan**: A tool to give a top-level view of the commercial viability of the innovation/project.
- **Exploitation Grid**: A tool that helps to build a robust exploitation plan.

SMEs’ first contact with Horizon 2020

When a SME contacts a SME NCP for the first time to ask for funding opportunities it is important to keep an open mind. First of all it needs to be assessed whether Horizon 2020 funding in general is the right way to go for the SME. An SME NCP will have at least an overall knowledge on regional and national funding opportunities, start-up support facilities and programmes as well as financing schemes. Consider these possibilities together with H2020 possibilities and explore what will fit best.

In general every SME is open to participate in H2020. But sometimes regional or national opportunities could be the better choice. It depends on the SME: Is it a relatively new start-up or a long established company? Is it a very small SME with two persons in the team or a big one close to the EU SME definition threshold? Does the SME seek funding for a research oriented project or for activities rather close to commercialisation? And finally at a first glance: does the idea fit in any of the H2020 thematic areas? If you assess all these questions and come to the conclusion: Yes, H2020 could work for that specific SME, the tool «Idea Check» will be helpful to get to the core of the idea and provides a structured approach to find out, which H2020 funding instruments the SME should concentrate on. An overview of different funding schemes in H2020 is given below.
Idea Check

A first assessment of the SME and its idea shows that H2020 will in general fit to the SME. Now the task is to see which funding instrument could be suitable. There are various funding instruments and hundreds of calls available in Horizon 2020. Many of those are potentially relevant for participation of SMEs. The approach of the “idea check one-pager” is for the SME to present its innovation idea and answer questions regarding technology readiness level, objectives and activities it intends to implement. This will help to structure the SMEs considerations. It will get the SME to do some thinking around, why, what, when and where, before the meeting with the NCP. In that way, the meeting gets more productive. On the basis of the “idea check”, in the first meeting with the SME, NCPs can assess which funding instruments are relevant for the specific situation of the SME. The idea check is supposed to be a guideline for NCPs and for SMEs to structure their idea. To identify relevant funding instruments an experienced NCP who has knowledge about the different funding instruments is required.
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<td><strong>1. Contact</strong></td>
<td>Contact person &lt;br&gt;within your organisation (name + email)</td>
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<tr>
<td><strong>2. Are you a profit-oriented SME?</strong></td>
<td>□ Yes &lt;br&gt;□ No  &lt;br&gt;Note: In most of the instruments also non-profit SMEs are eligible for application. In the SME Instrument, SMEs have to be &quot;for profit&quot;. In Fast Track to Innovation (FTI) only for profit SMEs count as &quot;industry participants&quot;. &lt;br&gt;□ If &quot;no&quot;: SME Instrument is ruled out.</td>
</tr>
<tr>
<td><strong>3. How old is the SME?</strong></td>
<td>□ Start-Up (up to five years)  &lt;br&gt;□ 5-10 years  &lt;br&gt;□ 10-20 years  &lt;br&gt;□ Older than 20 years</td>
</tr>
<tr>
<td><strong>4. How big is the SME's team/workforce?</strong></td>
<td>□ 1  &lt;br&gt;□ 2-5  &lt;br&gt;□ 6-20  &lt;br&gt;□ 21-50  &lt;br&gt;□ 50+</td>
</tr>
<tr>
<td><strong>5. Do you have experience in European projects?</strong></td>
<td>□ Yes  &lt;br&gt;□ No  &lt;br&gt;Note (regarding 3, 4, 5): Participating in European Projects for SMEs as a partner means to cope with administrative tasks such as financial reporting, filling timesheets, budget calculation, providing deliverables etc. As a project coordinator it is even more demanding since the coordinator takes care of the whole communication between the project consortium and with the European Commission. Also the coordinator administrates the project budget. Smaller companies with a relatively short track record and no previous experience in European projects should rather start as a project partner with a smaller budget or as a single applicant in the SME Instrument. An alternative option could be to look for other low-threshold funding opportunities on a regional or national level</td>
</tr>
<tr>
<td><strong>6. My innovation (idea) is a</strong></td>
<td>□ Product  &lt;br&gt;□ Technology  &lt;br&gt;□ Business model  &lt;br&gt;□ Services  &lt;br&gt;□ Process  &lt;br&gt;□ Other</td>
</tr>
<tr>
<td><strong>7. Basic idea:</strong> Try to give a generic presentation. Consider that a non-expert should understand what your idea is about in 3 lines of description (This should answer the question: &quot;Tell me in 10 seconds what your project/innovation is about&quot;).</td>
<td></td>
</tr>
<tr>
<td><strong>8. Current development level of your innovation</strong></td>
<td>far from market  &lt;br&gt;close to market  &lt;br&gt;Note: &lt;br&gt;- See figure «H2020 Funding Schemes for SMEs»:  &lt;br&gt;- Innovation at a low Technology Readiness Level (TRLs) (i.e. far from market): Research and Innovation Actions (RIAs) or FET might be the right funding choices.  &lt;br&gt;- Innovation at mid Technology Readiness Level (4-6): RIAs, Innovation Actions (IAs), Eurostars.  &lt;br&gt;- Innovation at higher Technology Readiness Levels (6+): IAs, Fast track to Innovation (FTI), SMEI.  &lt;br&gt;- Innovation at Technology Readiness Levels very close to market (8+): FTI, SMEI and InnovFin</td>
</tr>
</tbody>
</table>
9. **Innovative edge:** Shortly describe (potential) advantages of your innovation compared to other existing solutions / solutions in development of competitors. How do you address user needs better than others?

Note: this shall give a first outline of the competitive landscape. To dig deeper refer to the tool “Product State of the Art (SOA) Review” in this guideline.

10. **Innovation oriented objectives:**

What will your product/technology/service/process look like after the project? (refer to TRLs)

What else do you intend to achieve with the project?

11. **Commercial objectives:**

Will your innovation be at commercialization stage after the project? If not, how long will it take to commercialization (in case you plan commercialization at all)?

Note (regarding 10, 11): The foreseen objectives may help you to identify suitable topics in relevant calls. Impact plays a big role in H2020 projects. The closer a project/innovation gets to the commercialization phase (TRL 8, 9) the more relevant are commercial objectives. Whereas in RIA's they normally don't play such a big role.

12. **Business Plan:** Do you have a business plan for your idea?

- [ ] Yes
- [ ] Yes but some questions are still open
- [ ] No

13. **Market:**

What markets/market segments do you target? Consider also a geographic segmentation.

What customers/users do you target?

The market perspectives (in terms of market share and turnover) are:

Not that huge, it is rather a niche market but society needs it

Huge, once it is on the market it will skyrocket

Note (regarding 12, 13): Applications for some funding instruments in H2020, such as FTI or the SME Instrument, are structured like a business plan. Therefore SMEs that already have a business plan available can use the information and thus take less time to prepare the application. The higher the TRL of innovation activities within H2020 projects the more likely it is that at least some market related figures need to be provided. Please refer to the tool “Impact Plan” if you want to elaborate on that matter with your client.
### 14. Activities:

What is the nature of the activities to be implemented in the scope of your project?

- ___% research
- ___% innovation and development
- ___% preparation of commercialization

Shortly describe the main activities you intend to implement.

Note: Until now you should already have a first idea what funding instruments and H2020 areas could be of relevance. With the activities mix you can verify your assumption. Normally the percentage of research activities decreases the closer you get to commercialization stage. For example in the SMEI (starting at TRL6) there are no research activities foreseen.

### 15. Challenges:

What are possible, relevant risks and challenges related to the project and later on the market introduction (technical, commercial, market barriers, IP issues, implementation risks, e.g. related to project partners)?

Note: This is to find out if there are any issues that could rule out eligibility of the SME for a funding instrument or diminish its chances to succeed in a way that investing time in the application is not worthwhile. Also in preparation of a project proposal it is important to think about challenges since they need to be accounted for in the proposal.

### 16. Partners:

Do you want or need to work with partners?

- Yes, project partners (i.e. having same rights and obligations),
  - Research institutions or universities
  - Industry partners: large enterprises
  - Industry partners: SMEs
- Yes, with support in form of subcontractors (i.e. providing clearly defined support at market prices)
- No

If yes, why is it important to perform the project as a co-operation at a European level (e.g. European added value)?

Note:
- Cooperation projects (like RIAs or IAs) require at least three partners from three different member states or countries associated to H2020. Normally such projects have many more partners than just three (on average 6-20). In FTI (which is a special form of IAs) only up to 5 partners are allowed and there needs to be a focus on industry partners.
- Eurostars allows for participation of two partners of two participating countries.
- The SME Instrument is the only instrument in H2020 relevant for SMEs that can (and usually is) applied for by single entities.
- Subcontracting is normally possible in all funding instruments.

This initial assessment if and what kind of partners are needed can be supported with the tool “Partner Grid” in these guidelines.

### 17. Budget:

Please specify the extent of investment/project budget needed

_________________________ €

In certain instruments you need to contribute around 30% of the project budget. Can you comply with that?

- Yes
- No

### 18. Duration: How long do you think your project will take?

______ months
Find relevant calls

The idea check is completed by the SME. NCP and/or SME have an idea what funding instruments could be suitable for the idea of the SME. Some funding instruments – like the FTI or the SME Instrument are open for all kinds of innovations and topics. It is bottom up and there are no specific requirements regarding the topic. However the innovation/solution needs to have a clear European dimension and this is the reason why companies should know the most relevant requirements both with respect to commercialization and competition. More in general other calls in H2020 are focused and have clear requirements which areas of research are to be covered and what kind of activities should be implemented. Therefore in a next step SMEs – possibly with support of the NCP – need to search for relevant topics within open calls on the participant portal of H2020 where all calls are available. Information regarding relevant calls for SMEs respectively for the SME support ecosystem and Access to Finance are also available on the Access4SME website:

http://www.access4smes.eu/innovation-in-smes/
and
http://www.access4smes.eu/access-to-risk-finance/

To get an overview over all calls and topics that are relevant for SME, the official participant portal of the European Commission offers all the information under “How to participate”: 
Choose “SME Participation”:

![RESEARCH & INNOVATION Participant Portal](image)

This guides you to a page with relevant topics for SME’s:

Here you can find calls to the SME instrument by pushing the "apply" button. That will open a new window with all relevant calls. You can also find relevant collaborative project calls, like RIA and IA by clicking "apply" under "Collaborative Projects". This opens a page where you can search for calls based on keywords related to your idea. As well as information to "Risk Finance".

And finally this site also contains links for FAQ’s, advisors and other helpers, so this is a "must visit" page for all SME’s.
Alternatively you can also find relevant calls by: Choosing “funding opportunities” in the top menu and clicking “H2020”:

That brings up a window containing all calls in H2020. You can then choose different topics which might be relevant for you:
Once the right instrument and call is identified there are some steps SMEs should start with in GOOD TIME before they plan to send in the proposal:

**To-do list for SMEs:**
1. Contact your National NCP for SME’s or other relevant advisors in your country:
2. To be able to hand in a H2020 proposal you need to register in the Participant portal.
   [https://webgate.ec.europa.eu/cas/eim/external/register.cgi](https://webgate.ec.europa.eu/cas/eim/external/register.cgi)
3. Complete the financial viability check to see if you are in a position to actually run a H2020 project (especially relevant if you plan to be the coordinator of a project and the project budget is above 500.000€).
4. Take a SME self-assessment test to verify your SME status. Be aware that owner structures have to be considered. For the SME Instrument the self-check is obligatory. The SME self-assessment is available in the registration process. More information about the registration process:
   [http://ec.europa.eu/research/participants/docs/h2020-funding-guide/grants/applying-for-funding/register-an-organisation/registration-of-organisation_en.htm](http://ec.europa.eu/research/participants/docs/h2020-funding-guide/grants/applying-for-funding/register-an-organisation/registration-of-organisation_en.htm). If you would like to see how the self-assessment looks like, you can test it here:

**“One-page” Summary of EU R&I-project idea/proposal**

This document is intended as a summary of a project idea/proposal. It shall help to translate the initial idea – i.e. taken from the “idea check” into «Horizon 2020 terminology». Above that, it is useful to approach potential partners during the partner search. Notes on completion are provided at the end of the template.

<table>
<thead>
<tr>
<th>Contact:</th>
<th>Contact person within your organisation (name + email)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basic Idea:</strong></td>
<td>Concise description (no more than 3 lines!) summarising the basic idea of the project. (This should answer the question: “Tell me in 10 seconds what your project/innovation is about”).</td>
</tr>
<tr>
<td><strong>Project Title:</strong></td>
<td>Provide a full title and a one-word title/acronym. See note (1).</td>
</tr>
<tr>
<td><strong>Work Programme Area(s):</strong></td>
<td>List the number (eg. 3.1.1.2) of the one area in the work programme that is most relevant to your idea. It can be useful to be even more specific, and quote the individual bullet points/sub-sections of the area in the work programme that you address. If your idea is relevant to several work programme areas, list the others in brackets. See note (2).</td>
</tr>
<tr>
<td><strong>Project Type:</strong></td>
<td>The choice is between Collaborative Project, CSA. See note (3).</td>
</tr>
<tr>
<td><strong>Objectives:</strong></td>
<td>Describe briefly what you are trying to achieve in the project. See notes (4), (5).</td>
</tr>
<tr>
<td><strong>Key Results:</strong></td>
<td>Key Results: What concrete results will be produced within the project itself? See notes (4), (5).</td>
</tr>
<tr>
<td><strong>Impact:</strong></td>
<td>Describe what will be made possible when the project has delivered its results and achieved its objectives and these can be taken into use. See notes (5), (6), (7).</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Partners:</strong></td>
<td>Provide three separate lists: HAVE (names of definite partners), MIGHT HAVE (names of likely partners) and NEED (profile of the types of organisations the project needs). Summarise the role of each partner in the project (write it in brackets after the partners name).</td>
</tr>
<tr>
<td><strong>European Dimension:</strong></td>
<td>Why is it important to perform the project as a co-operation at a European level?</td>
</tr>
<tr>
<td><strong>Initiator:</strong></td>
<td>Write either the name of your company (if it is your own idea) or the name of the other organisation who has proposed the project and invited you to join.</td>
</tr>
<tr>
<td><strong>Co-ordinator:</strong></td>
<td>There are 3 possibilities: (1) Your organisation co-ordinates proposal writing and the project itself; (2) Your organisation co-ordinates proposal writing, but someone else should co-ordinate the project itself; (3) Someone else co-ordinates proposal writing and the project itself.</td>
</tr>
<tr>
<td><strong>Duration/phases:</strong></td>
<td>Identify the main activities of the project (workpackages).</td>
</tr>
<tr>
<td><strong>Work breakdown:</strong></td>
<td>Identify the main activities of the project (workpackages).</td>
</tr>
<tr>
<td><strong>Estimated budget/ EU financing:</strong></td>
<td>“Budget” refers to total costs, “financing” refers to how much the EU will fund.</td>
</tr>
</tbody>
</table>
About the “one-page” summary

Its purpose is to provide:

- A concise summary of key information about an EU project idea or concrete initiative to develop a proposal.
- Simple basis for further technical discussion, either within your organization or with potential partners when building a consortium.
- Support for internal decision making: Is the proposal idea good enough to deserve the investment of time & effort needed to develop it further?
- Basis for some parts of the proposal text itself.

Don’t think of the summary as a bureaucratic “form” that is a task in itself; it is supposed to help you crystallize and communicate your ideas about your project. So:

- Keep it short. If you find yourself writing lots of text for any of the sections, you have missed the point about what it’s supposed to be for.
- If you have nothing to say for some of the sections, leave them blank. (But if you have little or nothing to say for many of the sections, maybe it’s a sign that your ideas need to be matured drastically.).
- When the proposal text itself is well underway, most of the information here will be in the proposal anyway – so you will no longer need this summary.

But parts of it should be useful in writing the 2000-character “Project Abstract” required by the Commission.

Guidance Notes

1) The one word title is very often an acronym – but doesn’t need to be. So you can just choose a simple name that you think suits the project. Don’t waste time trying to find a perfect acronym, especially during the early stages of developing a proposal where all you really need is a “label” for the project. Also, project goals will evolve as the proposal develops, so what might have been a perfect acronym at the start may end up being misleading when the project is submitted.

2) It is not essential that the proposal should be relevant to any parts of the Work Programme other than the specific objective to which it is addressed. However: it strengthens the proposal if the relevance is wider than just to a single objective, so try to identify and briefly describe any relevance to other objectives, or to more general, high-level objectives of the Work Programme (as described in its introductory chapters).

3) You need to read the text in the Work Programme carefully to find out which project types are allowed for which parts of the Work Programme. This is sometimes specified very precisely – down to the level of individual bullets/sub-sections within a given objective. If you don’t know the difference between the different project types, you ought to find it out urgently – it makes a big difference to what you can do in the project.

4) It is sometimes difficult to distinguish between “objectives” and “results”. For instance, if you have an objective like “To develop a new compiler for C++”, it is a bit redundant to then include “New Compiler for C++” as one of the results. If you find such cases arise, take it as a signal that you need to rethink what the objective really should be. Think about why you want to produce the result. For instance: perhaps the objective is “To make it possible to compile C++ programs twice as fast” and the result is the “New C++ compiler”.

5) A common source of confusion for evaluators is that proposers fail to make it clear what will be done within the project itself and what will be made possible after the project. This is a classic case of something that is so obvious to the writer that it does not get explicitly stated in the document. Proposers write sentences like the following: ”The project will allow typical car journeys to be made with 20% less fuel consumption than is typical today”. Does this mean that one of the project deliverables will be a car with a more fuel efficient engine? Or does it mean that the project will deliver the design documents for a new type of engine - but leave it up to others to actually manufacture them? Or does it mean that the project will deliver a report surveying the latest research in the area, and leave it up to others to produce engine designs and to others still to manufacture the car? All are possible interpretations of the sentence. It is vital that the evaluator immediately understands the right points. And it’s not good enough that clarification can be found only by studying many different parts of the proposal: evaluators don’t read every word, and if they stumble on a sentence that is vague when read in isolation they very soon develop a negative impression. So: make a very clear distinction between: * Concrete results that will be BROUGHT into the project, from the partners. * Concrete results that will be DEVELOPED within the project, using EU money (“Objectives”/”Deliverables”). * Things that will become possible as a result of the project having achieved its objectives (“Impact”). This may sound rather obvious - but muddle and confusion on this is often a major contributing factor to proposals being considered “unclear”.

6) Whereas the “Objectives” and “Results” descriptions describe the work to be done by the consortium within the project itself, the “Impact” section should summarize what will be possible for others outside the project, using the project results. Should answer the questions ”Why are you doing this project”? , “So what?”, “Who cares?”, “Why now?”. When the project has been completed, how will it make the world a better place - for society, for business, for standards, ... ?

7) The “Impact” section should aim to “educate the evaluator” e.g. by providing facts and figures from policy documents, or by providing other information that makes it clear why the project is useful.
"Deep diving" in to a good proposal

Besides the “Idea check” and the "One pager" there is a set of different tools we can use, to further dive in to the different aspects of a good proposal. The following tools are not only relevant for the very market oriented instrument like the SME instrument or FTI but for H2020 instruments in general – including RIAs, and IAs.

Product State of the Art (SoA) Review

**Existing Solutions**

<table>
<thead>
<tr>
<th>What can I currently buy that attempts to address my needs?</th>
<th>Why does this not meet my needs?</th>
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<tbody>
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</table>
### Technology Transfer

<table>
<thead>
<tr>
<th>What alternative proven technologies is there that could address my needs?</th>
<th>Why does this not meet my needs?</th>
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### Technology Transfer

<table>
<thead>
<tr>
<th>What emerging technologies are there that could address my needs?</th>
<th>Why does this not meet my needs?</th>
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<tbody>
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</table>
Guideline for Completing the Product SOA Review

**Purpose of the Tool:**
This tool will help you identify any potential competition to your solution and will also help you create a robust argument to demonstrate how your innovation is superior.

**Existing Solutions**
This section should be used to highlight the existing products that can currently be purchased on the market. Concentrate on the top 4 or 5 products that are most competitive with your solution. Describe the technology briefly and give additional information such as cost, websites, market share, etc. Do not cut and paste from your competitors websites!
For each solution that you highlight, explain why it is not capable of addressing the need.

**Technology Transfer**
It may be that a technical solution in a different industry sector could be applied to address the Fundable Need. This might be at whole system level or component level. This section should describe any such technology transfer opportunities. Describe the technology briefly.
For each technology that you highlight, explain why it is not capable of addressing the need.

**Emerging Research**
Every industrial need has someone who is trying to meet it. This section should describe any patents, university-level research or existing research projects that attempt to meet the same need as you. Describe the technology briefly.
For each technology that you highlight, explain why it is not capable of addressing the need.

**Partner Grid**

<table>
<thead>
<tr>
<th>Role in Project</th>
<th>Nature of Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activity</strong></td>
<td><strong>Towards which Aims?</strong></td>
</tr>
</tbody>
</table>

|  |  |  |  |
Guideline for completing the Partner Grid

**Purpose of the tool:**
One of the most important decisions when creating your consortium is to think about the value chain for the project. You will have as few partners as possible, which makes it easier to manage the project; however, you will need to have the critical partners that make up the total value chain for the project so the project will be successful.

There is a danger in creating a consortium on an ad-hoc basis, as you may end up filling positions that are not essential or missing out essential partners.

This tool is designed to make sure that each partner selected has a role to play and will receive a direct benefit. Without this, the evaluator may question the need for that partner.

**Role in Project:**
Activity – The specific actions that partner will perform during the project. These could be related to scientific work, technical work, integration, testing, dissemination, management, etc.

Towards which aims? – Specify the technical and/or scientific aims that the stated activity will help achieve. For example, a partner conducting a cost sensitivity analysis may be contributing to your specific aim to develop a low-cost device.

**Nature of Benefit:**
Type – The type of benefit to be received by the partner. Examples include:

- Manufacturing rights
- Supply rights
- Installation/maintenance contracts
- IPR licensing revenue
- End use of the technology
- Indirect benefits from use (e.g. patients' groups in healthcare projects)

Description – A brief description of the impact that the described benefit will have. For example, the right to install a new product may open up new revenue streams in new markets or help to fight competition in existing markets. Be specific and as detailed as possible.

---

### Buying Driver and USP Map

<table>
<thead>
<tr>
<th>Buying Decision Maker</th>
<th>Buying Driver</th>
<th>Unique Selling Point</th>
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</table>
Guideline for completing the Buying Driver and USP Map

**Purpose of the Tool:**
This tool will help you to ensure that the features and functionalities of your technology match up with the needs of your target market.

**Buying Decision Maker** – The company/person in your supply chain (although not necessarily a consortium member) who has a say in which product/process/service is purchased. Typical examples include end users, lobbying groups, politicians, installers, maintenance/service companies, manufacturers, distributors and retailers. There may also be buying decision makers in different market sectors.

**Buying Driver** – The particular feature of the product/process/service that would make it attractive to the Buying Decision Maker. This may be a technical feature, a price point, a product lifetime or other similar aspect. List all the buying drivers relevant to each Decision Maker and be specific (don’t just say ‘cost’, explain what price point the Decision Maker will tolerate).

**Unique Selling Point** – The unique feature of your technology that makes it attractive to the particular Buying Decision Maker (i.e. it satisfies their buying driver). This should be something above and beyond what anyone else can offer (hence unique). Note that you will not always be able to satisfy all the Buying Drivers of all the Decision Makers but you should ensure that you address most of those for the most important Decision Maker.
## Impact Plan

### Market Opportunity

- Market size in Europe p.a.
- Market Growth Rate

### Top 5 Market Leaders:

- Market share
- Nationalities

### Financials

- Approximate Selling Price (€)
- Selling Prices of Main Rivals (€)
- Approximate Manufacturing Cost (€)

### Predicted Sales Figures

<table>
<thead>
<tr>
<th>Year</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Volume</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales Value (€)</td>
<td></td>
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</table>

### Sanity Check!

- Cost of supplying cheapest item supplied by a partner
- 5 year turnover of that partner based on sales volume above

### Benefits

- End user savings per unit p.a.
- End user payback period
- Environmental reductions per unit p.a.
  - Emissions:
  - Pollution:
  - Raw materials use:

### Societal challenges

- Environmental impact
- Assisted living
- Other societal benefits
Guideline for Completing the Impact Plan

**Purpose of the Tool:**
This tool is designed to give a top-level view of the commercial viability of the project. This should highlight if you have sufficient market size, if you are able to penetrate that market, if you are able to make money and if Europe as a whole will benefit. It is of particular relevance for close to market projects, i.e. for Innovation Actions (IA), Fast track to Innovation (FTI) and the SME Instrument Phase 2.

**Market size in Europe p.a.** – The number of units that are sold each year in Europe. Note that this is not the same as the total market size, which is the value of all the products currently in use. If you have a completely new product, you may have to estimate this.

**Market Growth Rate** – The rate at which the demand for products/processes/services is increasing. The EC will not fund falling markets so this should always be positive and expressed as a percentage.

**Top 5 Market Leaders** – List the amount of market controlled by the 5 largest companies in the primary market sector and the nationalities of those companies (headquarters).

**Approximate Selling Price** – A rough price guide given your knowledge of your solution and of your market rivals.

**Selling Prices of Main Rivals** – A rough indication of the price ranges of the 3 or 4 main competitors to your solution.

**Approximate Manufacturing Cost** – From your selling price, show how much of this will be spent on gross manufacturing costs.

**Sanity Check!** – Take a look at the project that will supply the lowest per-unit cost component into the supply chain. This might be someone providing casings, connecting components, a piece of control software or some low-cost circuit boards, for example. Using your calculated sales figures, work out how much turnover and profit that partner will achieve 5 years after the project. Check that this is a reasonable return on investment (ROI) for them (or Net Present Value - NPV).

**End user savings per unit p.a.** – Give a quantified benefit for the end users of the technology, on a per annum basis. End user payback period - Look at your selling price and ensure that the end user savings give the end users a reasonable ROI or NPV.

**Environmental impact p.a.** – Briefly indicate any environmental benefits from reduced emissions (including waste), pollution and raw materials use. Quantify these reductions.

**Societal challenges** – Briefly indicate any wider societal benefits arising from reduced death/injury, improved health, child protection or social inclusion. Quantify wherever possible.
## Exploitation Grid

<table>
<thead>
<tr>
<th>Special Circumstances</th>
<th>Outside Support Needed</th>
<th>Partner</th>
<th>When?</th>
<th>Location</th>
<th>Markets</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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Guideline for Completing the Exploitation Grid

**Purpose of the Tool:**
This tool helps you to build a robust exploitation plan by getting you to consider all possible markets and territories for each of your project results. This tool will also help you identify all of the support planning you will have to do to be able to penetrate these markets.

**Result** – In theory, if it is exploitable, it will be a result. Your integrated result will be the main exploitation focus but other components may still be exploited in ‘spillover’ applications.

**Markets** – These are the areas in which the particular result can be exploited. You will usually have 1 or 2 core markets with a number of ‘spillover’ opportunities. In the example above, 3 particular application areas for the complete system have been identified.

**Location** – You will almost always have a small number of initial exploitation countries to target (software is a notable exception). These will usually be where your main manufacturing partners are based. Do not claim that you will simultaneously sell to the whole world or the whole of Europe – build up slowly. In some cases, the countries you sell to will be dictated to by lifestyle or environmental factors. For example, gas heating products will not sell in Sweden, which predominantly uses electric heating. Highlight this to the evaluator to show you have done your research.

**When?** – You will need to demonstrate to the evaluator an exploitation timeline that is realistic and manageable. Make sure that this includes your time to market projections and that you explain clearly what you will do during that period in terms of technological and market preparation. Following this, explain your roll-out plans across your major markets. Remember that it will take several years to get your product established before you can roll out further, especially in highly competitive markets. Do not try and penetrate outside of Europe until you have at least 5 years of sales, unless you have a specific need/opportunity.

Note: ICT projects are generally exceptions to the rule. Due to the speed of technology change, new products might only have a lifespan of a few years and so exploitation will take the form of rapid, worldwide distribution with continuous investment in product improvements, before obsolescence and replacement with the next generation technology.

**Partner** – Be specific about which partners are conducting the exploitation. For example, we may have shown that Partner 1 will cover manufacturing for Western Europe and that our other markets will be fed by manufacturing under licence. It is important to explain these arrangements in detail so that the evaluator can feel confident that no one partner is overloaded.

**Outside Support Needed** – In most cases, the SME partners will not be in a position to go instantaneously to market. If you are fortunate enough to have a complete supply chain in one market, you will certainly not in another. Explain who you will have to liaise with in order to get your product into the market. The most common examples of this are installers and maintenance networks. This will in turn affect the number of countries you can enter at any one time.

**Special Circumstances** – This is a chance to explain the exact mechanism of exploitation and provide any missing details. In particular, it is an opportunity to describe the chain of companies that will have to be created. For example, you may need to talk to companies about branding or selling through certain stores, explain specific details about your licensee requirements promote your product through third parties or gain approvals in different countries or for major buyers.
Appendix I: SMEs in collaborative projects

Following contents have been produced for the Access4SMEs webinar "SMEs in collaborative projects" addresses both SME and ARF NCPs. It shows the possibilities for SMEs to participate in collaborative projects and other types of action within Horizon 2020. In particular the attention focuses on:

- Why do SMEs play an important part in the consortium
- Which roles are most common for SMEs
- What are the pros and cons, pitfalls etc.
- How to find a consortium/partner

This webinar took place on November 30th 2017. The webinar was organized and executed by FFG, the Austrian Research Promotion Agency on behalf of the Access4SMEs project.

The material is available on:
http://www.access4smes.eu/events-single/?id=16
What kind of collaborative projects are out there?

- Research and Innovation Action – RIA (100% funding)
- Innovation Action – IA (70% funding)
- Fast Track to Innovation – FTI
- SME Instrument (optional)

SMEs are a cross cutting issue in Horizon 2020
20% target for funding to SMEs in pillar 2 and 3

Collaborative Projects

It is in the nature of collaborative projects that different partners with varying mindsets and interests come to sit at one table.

Policy

SMEs are the driving force of economic growth
Innovation capacity of industry depends crucially on ambitious entrepreneurs and small enterprises aiming for radical innovations and fast growth.

Why do SMEs participate in collaborative projects?

Goal: research and publish
- Using results for future research and teaching activities
- Insufficient exploitation strategy

Goal: commercialization of results
- Application-oriented approach
- Keeping control over own research results
- Bringing existing know-how and link to market
Why do SMEs participate in collaborative projects?

**Why not?**

- **Because** some calls address SME participation
- **Because** the funding rates are really attractive (70-100%)
- **Because** SMEs are more flexible than large organisations
- **Because** SMEs can take on roles that no other partner can manage
- **Because it** provides huge internationalisation potential
- **Because they** are champions in their specific field
- **Because it** helps to establish long-lasting partnerships
- **Because SMEs** get access to results that may guarantee the further growth
- **Because SMEs** are the link to the market
- **Because**...  

Roles for SMEs in collaborative projects

- Special technical expertise
- Administrative or co-ordination related expertise
- PR expertise
- IPR expertise
- Pilot user
- Gateway to the first customers
- Ensure the real customers’ needs are fulfilled
- ...

→ Make sure the SME finds the appropriate role

Ideal SME Profile for collaborative projects

- Are disruptive and innovative
- Have a close-to-market product, process or service
- Have global ambitions
- Are willing to collaborate with R&D institutions – easier said than done...
- Are already in the market – in a relevant field
- Have a long-term development strategy
- Show high-growth potential
- Will communicate project aims and outcomes
- Will share non-sensitive data
- Are open to independent assessment

Learnings and Pitfalls for SMEs

- Be part of a project that is doing what you want to do...
- Define what to exploit with/from the project
- Finding the correct niche is key
- SME must add value to the consortium
- The SMEs role must relate to its area of expertise
- Join a strong consortium
- Cash Flow is slow and may be hard for the SME
Learnings and Pitfalls for SMEs

- Better networking options and contacts
- Overhead and bureaucracy as a burden for SMEs
- A lot of the R&D results are not usable as each partner has a different agenda (papers for academia, products for industry)
- Be specific - choose small focused topics to work on
- Start early - six months in advance
- It is possible to have bad partners you need to cover for
- IPR is an issue - every time...

Administration and Reporting

- SME are not used to the EC bureaucracy
- It takes time and effort to do it properly
- Be prepared ahead of the project
  - read and understand the GA and the CA
  - timesheets and other procedures
  - controlling and reporting
    (who collects the data, who is responsible)
  - read the financial guidelines in the annotated GA
  - cash flow
  - secure IPR

> the NCP organisation can help cover these aspects in advance, advise your customers!

...but most importantly:

> Make sure the project fits the STRATEGY of the company

What kind of support do SMEs need from NCPs?

- Identification of appropriate topic
- Project Management
- IPR Management
- Financial Management
- Partner Search
- Insights into EC processes
- Audit Compliance
- Communication

IPR issues

- IPR - tricky to get, especially in a consortium with big companies
- Try and solve this at the beginning of the project
- Get a lawyer on board if necessary
- Read and understand the Consortium Agreement (CA)
- Make changes to CA if possible in your benefit
- Understand that each company wants to protect their own IP
- Be flexible
- Remember that you own whatever you develop
- Open source - may add problems with fast or slow adoption

> TIP: Support by IPR Helpdesk
https://www.iprhelpdesk.eu

Support networks and projects

- Access4SMEs - what else?
  - Thematic NCP Networks
  - Enterprise Europe Network
  - Partner Search Tools
    - List of all NCP network PS tools
      http://eureasupport.europa.eu/other/partner-search-tools
    - Enterprise Europe Network
      http://eureasupport.europa.eu/content/international-partnerships-

> Use the NCP networks, there is more to be found than you would ever expect!