

## **The Excellence section in Horizon 2020 collaborative project proposals**

The main part of Horizon 2020 proposals consists of 3 major sections: *Excellence*, *Impact and Implementation*. Each section has its unique requirements and calls for distinct content. As you work on your application, it is important to understand what is expected in these sections in order to write them successfully. As we already have dedicated [Impact section](#) and [Implementation section](#) articles, this article will focus on the ***Excellence section in Horizon 2020*** – the section through which you get the first (and possibly only) real opportunity to impress the reviewers with your project proposal. The saying that “*there is no second chance to make a first impression*” could not be more relevant here. Writing a perfect Excellence section that will leave an excellent first impression is an extremely important task for the authors of the project proposal. Doing this right will significantly increase your chances of success. So – continue reading for a thorough explanation of how to successfully address this section in your proposal.

## **What is the ‘Excellence section’ in Horizon 2020?**

The Excellence section in Horizon 2020 is where applicants are expected to present the motivation for the project, the project’s objectives & concept, and finally present the chosen approach and how it progresses beyond the State of the Art. In other words – this is the place to define WHAT it is that your project aims to achieve. Importantly, it should be conveyed to the reviewers in a clear and exciting fashion. Later on, it is the [Implementation section](#) that will address the question of HOW the project will be executed to achieve the project’s objectives.

Taking it a step further – a significant role of the Excellence section is presenting the novelty (and/or importance) of the project. The way to clearly manifest the novelty and motivation for the project is by establishing the knowledge gap in the field of interest

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(research). Doing so in a clear and sharp manner is of paramount importance. To achieve this, it is advised to properly scan, analyze and present the field of interest to clearly show the State of the Art and its current implications. Needless to say, you should avoid missing the most recent and updated published work related to your project. Be aware though – deep literature reviews tend to turn into long background texts with questionable added value to the grant evaluator. Unlike the world of scientific publications, the grants world motivation is to have a proposal text which is ‘lean and mean’. Therefore, while it is important to show you are fluent with recent updates and knowledge gaps in your field, avoid extra texts about the State of the Art and the knowledge gap that does not add real value to the evaluators.

## **The structure and content of the Excellence section in Horizon 2020**

While the Excellence section template instructions may seem straightforward, the highly competitive Horizon 2020 grant requires more than simply ‘ticking the boxes’ and following the general instructions in each sub-section. In order to present a highly competitive proposal – we must aim much higher than that. Let’s look at the breakdown of this section to better understand how to excel in writing one.

The Excellence section in Horizon 2020 consists of 4 sub-sections for RIA/IA type proposals and 3 sub-sections for CSA type proposals (learn about the different types in this official [Horizon 2020 factsheet](#)). While the essence of most of the Excellence section is very similar for both RIA/IA and CSA proposals, we will discuss the differences between them below. Additionally, note that EIC Pathfinder (FET-Open) proposals, though describing an RIA project, have a different structure and we will address the differences below as well.

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## Sub-section 1.1 – Objectives

The first subsection within the Excellence chapter refers to the objectives of the research project. In most cases, we recommend that this section will not exceed 2 pages in length.

To stay at recommended page length AND propose successful objectives sub-section, we recommend to adhere to the following guidelines:

1. When presenting the objectives, refer to the specific call's scope, focus and terminology. This is very important, as the call text is essentially the starting point of the reviewers, meaning it is likely that they will read the call text before reading your application.
2. Be clear and to the point. This means avoiding long background texts at the beginning of this section, being the opening text of the full application. The best practice is to immediately inform the reviewers exactly what the project is about and what are its objectives. Preferably, we recommend having this information at the very first 1-2 paragraphs of the first page. A clear message to the effect of: “The main objective(s) of this project is/are ...”, is a perfect way to start. The reviewers will highly appreciate this as it provides them with a clear answer to the first question that they have in mind: “What is this project all about?”
3. Include specific conceptual objectives. Aside from stating the overarching objective of the project, a set of specific *conceptual* objectives (unlike operational objectives which we refer to directly below) should be listed. These objectives should be **clear, measurable, realistic and achievable within the duration of the project**. If possible, we recommend adding means of verification or indicators of achieving the objectives. This can help in turning the objectives to

be more tangible, hence more attractive to the reviewers. Additionally, adding these will enable ‘measuring’ the overall performance of the project. This will not only be highly appreciated by the reviewers, but it will also assist you later on, during the [project’s execution phase](#), alongside the detailed work plan (in section 3). Keep in mind that the objectives are expected to be consistent with the expected exploitation and impact of the project (as described in Section 2 – Impact).

4. Clearly differentiate between conceptual objectives (in this subsection), and the operational & technical objectives that complement them in the work-packages (section 3.1). To better understand the difference between these two sets of objectives, consider the first one (in section 1.1) as the macro-level objectives of the project which provide a ‘bird’s eye view’ on the project, and the second set (listed within the work packages description (in section 3.1) to be the micro-level objectives of the project. It is the second set which serves as the project’s building blocks, going step-by-step through the operational tasks to achieve the project’s goal. If done correctly, the accumulation of achievements in the second set (operational & technical objectives), will eventually lead to the full achievement of the first set of objectives (the conceptual objectives).  
\*\*Read more about this second set of objectives in the dedicated article about the [implementation section](#).

## Sub-section 1.2 Relation to the Work program

This subsection has two roles. The first is merely technical – indicating the topic in the work program to which your proposal refers to. When doing so, make sure to use the call identifier next to the topic title.

The second role is to provide the reviewer with an overview of how and why your proposal addresses the specific challenge and scope of said topic. Providing such an overview is not a simple and straightforward task.

**For help, follow our guidelines:**

1. While this subsection is sequentially second in the proposal, our recommendation is to write it only after fully developing the entire proposal. Essentially, this is because waiting until the entire proposal is developed means having the full picture of the project when writing this subsection. This will help you to accurately provide this required “bird’s eye view” of the project. Writing this section earlier will simply not be as efficient or accurate.
2. Secondly, we recommend that the text in this subsection not be too long. One page can be enough!
3. Next, we strongly recommend avoiding repeating the same story, using the same words and terminology, as laid out in sub-section 1.1 and the project’s abstract. The reason for this is simple: the reviewers may read the proposal in a sequential manner (although not necessarily). If they do so, we do not want to bore them with repetitions of text, sentences and messages. Instead, we want to give them a new, fresh view and added value in this subsection, different from what they have already read in the opening of the proposal and in the project’s abstract.
4. Finally, if possible, let someone else who was not involved in the proposal development process to read and review the full proposal. Then, have them write a one-page summary for this unique sub-section. Doing so may result with a different ‘voice’ describing the same project, which will be a refreshing, and much appreciated, point of view for the reviewers as they read the entire proposal.

## **Sub-section 1.3 Concept and methodology**

The third subsection of the Excellence section in Horizon 2020 serves as the bridge to the more technical & operational Implementation section. This subsection is the place to convince the reviewers that the project brings a novel concept and is constructed on sound methods. Again, this is not a place for 'ticking the boxes'. This subsection calls for presenting a project concept that showcases a deep understanding and thinking about how to 'deliver the goods' and enable the novelty that was presented in the objectives subsection.

In RIA/IA type proposals, this subsection is divided into two segments. The first segment is used to describe the project's concept and novelty, while the second refers to the employed methodology in the project. Both segments are of utmost importance in making your proposal exciting, intriguing and competitive. Since these segments serve as the 'heart' of the excellence on one hand, and as the 'bridge' to the implementation, on the other hand, it is expected that subsection 1.3 will be highly detailed and account for 10-20 pages (depending on the nature of the project and required content).

## **The concept**

In the context of describing and explaining the overall concept underpinning the project – main ideas, models, assumptions, etc. should be listed and presented in detail. The novelty of your project should be reflected in this subsection. Therefore, do not hesitate to dive deep into the scientific reasoning of the suggested concept. Diagrams, graphs, mathematical formulas and expressions, description of algorithms, preliminary findings, etc., are all welcome and even required to fully justify the scientific novel claim. In case there are interdisciplinary aspects, or your project is hypothesis-driven – this is the place to address and stress that as well.

Other elements that should be addressed in this segment is the positioning, namely the maturity level, of the project in the spectrum ‘from idea to application’ or from ‘lab-to-market’. In this context, [refer to TRL levels relevant to your project](#) (i.e. what is the current TRL and where will it be by the end of the project). Here, pay close attention to any reference to TRL levels in the call text. Some calls may define the expected TRL levels at the beginning and/or the end of the project and therefore the presentation of your project’s concept must comply with that.

## **The methodology**

Once the concept is taken care of, we must next describe the methodology chosen for the project. Here, begin by referring to the overall work plan of your project and the reasoning behind this approach. In this section, only initial references will do, since a detailed description is expected only in section 3 – Implementation. Instead of diving into the “how”, use this subsection to elaborate on and explain the scientific and, if relevant, technological methods you are planning to employ in your project. You can also use this subsection to underscore the innovative aspects of your project. However, make sure these details do not overlap with sub-section 1.4.

In CSA type proposals, this subsection is named “Concept and methodology; quality of the measures”. Although in these projects the distinction between concept and methodology is not as clear as in RIA/IA type projects, our recommendation is to go ahead and separate the concept from the methodology, as done in the RIA/IA proposals. This makes for a much more logical and easier read. When doing so, make sure to first explain the overall concept underpinning your project, its main ideas, approach, models and assumptions composing it. Once in place, move on and explain

the chosen methodological approach for realizing this concept and achieving your objectives.

Needless to say, the discussion on TRL levels is not relevant to CSA proposals, and the discussion on interdisciplinarity is also typically less relevant.

In both RIA/IA and CSA proposals, this subsection is expected to describe national/international research and innovation activities which will be linked with the project, especially where the outputs from these will feed into the project. In this respect, you should pay close attention to the call text for specific requirements regarding particular organizations, networks, associations, initiatives, other related projects, or any other expected collaboration that should be addressed in the application.

Finally, one last aspect to refer to in this sub-section (for both RIA/IA and CSA proposals), as relevant to your proposal, is the sex and gender dimension. If applicable, be sure to explain exactly to what extent it is taken into account in the project's content. Assess whether concepts, methods and approaches need to be designed differently when thinking of sex and gender differences. Importantly, ***this is not the place to discuss the gender balance in the consortium*** (this is done later on in section 3.3), only refer to sex and gender aspects of the content of the project's activities.

## Sub-section 1.4 Ambition

This sub-section is relevant to RIA/IA type proposals only and requires applicants to refer to, and establish, the ***need/motivation*** for the suggested project. This is done by first clearly describing the state of the art, which in turn defines and establishes the knowledge gap, and then how the project plans to go beyond this state of the art. It is



this leap forward beyond the state of the art which will enable to portray an ambitious project proposal. When describing the state of the art, do so in the context of the problem you wish to solve. Begin by describing existing research activities and outcomes, and/or products and services already available on the market (including patent search if relevant). Based on that, discuss the shortcomings of these current findings, solutions or gaps of knowledge, and the ways these are currently limiting science and society. Stressing this will make the motivation for your project clearer.

Following and complementing the need and motivation – explain how your project and its innovation provides a solution to these needs. It is here that you are required to clearly explain the innovative potential of your project in terms of breakthroughs, new products, services or business, organizational models, or anything else in this context.

## **The Excellence section in EIC Pathfinder (FET-Open) proposals**

In the case of EIC Pathfinder (FET-Open), while many of the principles mentioned above are still valid, the structure of the Excellence section is completely different. In general, an excellent EIC Pathfinder (FET-open) proposal is one which clearly reflects its high-risk, high-gain and non-incremental nature in the following essential items:

### **Sub-section 1.1 Radical vision of a science-enabled technology**

As with other RIA projects, in this section it is required to supply clear, measurable, and realistic objectives that are achievable within the duration of the project (for more on this see the above-mentioned sub-section 1.1). The uniqueness of EIC Pathfinder

(FET-Open) is that here you are required to describe the radically-new science-enabled technology concept which challenges current paradigms.

Specifically, when it comes to presenting such a high-risk, high-gain, non-incremental project, as expected in this grant, it is our recommendation to learn, by analogy, from the ERC grant. In order to do so, we highlight the [hidden link between this EIC Pathfinder \(FET Open\) and the ERC grant](#). A deep understanding of these unique high-risk, high-gain and non-incremental research aspects is essential when presenting a highly competitive EIC Pathfinder (FET-Open) proposal. Although ERC is a grant for academia only, this recommendation is valid to any EIC Pathfinder (FET-Open) applicants, including those coming from non-academic sectors.

### **Sub-section 1.2 Science-to-technology breakthrough that addresses this vision**

In this subsection, describe the way(s) in which your offered project targets a novel and ambitious science-to-technology breakthrough that will contribute to achieving its long term, radical vision (if possible, in the form of the first proof of concept). In this respect, it is important to note that a 'blue-sky' exploratory basic research, which does not present a clear technological objective, will not be funded.

### **Sub-section 1.3 Interdisciplinarity and non-incrementality of the research proposed**

In this subsection, describe the research disciplines necessary for achieving the targeted breakthrough of the project along with the added value from this interdisciplinarity. In regards to non-incrementality of the research proposed, it is rather

simple. If your suggested project is a natural continuation of your previous work and/or other various efforts in the field of research, or if it includes integration of existing ideas or methods, the chances of being funded are relatively slim. To learn more about this, we'd recommend reading the article in our knowledge base about [Pathfinder's \(FET Open\) three "gatekeepers"](#).

## **Sub-section 1.4 High risk, plausibility and flexibility of the research approach**

Here, it is expected to explain the project's risks, the ways in which the research plan can support such risks, and the uncertainties characterizing your project. Be sure to touch on how the research approach relates to the project objectives, how it is suitable to deal with the considerable science-and-technology uncertainties, and finally how your project and consortium is set for choosing alternative directions and options should the needs arise. Note that listing specific risks and their mitigation measures belong in the Implementation section.

## **Conclusion – Excellence section in Horizon 2020**

On all counts listed above, the overall goal when presenting the Excellence section in a Horizon 2020 proposal is to aim as high as possible. Doing so successfully may require stepping out of your comfort zone, and dedicating significant time of key personnel from the project. If you have any questions or require additional assistance with the Excellence section in your Horizon 2020 proposal, or in general – please do not hesitate to contact us!