

Experiences Supporting the Evaluation of Horizon Europe Cluster 5 Proposals

1. Criterion 1 – Excellence

1.1 Clarity and pertinence of the objectives, and extent to which the proposed work is ambitious, and goes beyond the state-of-the-art:

1.1.1 Insert a statement on the clarity of the objectives i.e. are the objectives understandable. (The objectives [are] / [are not] clear + justification if not.)

Assessment by Independent Experts (IEs).

1.1.2 Insert a statement on the pertinence of the objectives i.e. “The pertinence of the objectives is [excellent; very good; good; fair; poor]” + justification:

- o The justification should include comments, with evidence from the proposal, on whether the proposal aims to focus on [... insert key sentence from scope of call ...].

Assessment by IEs.

1.2 Insert a statement on the extent to which the proposed work goes beyond the state of the art. Include comments on:

1.2.1 how ambitious the advance is

Assessment by IEs.

1.2.2 the credibility of the ambition related to the proposed innovative tools

Assessment by IEs.

1.2.3 the extent to which the proposed activities are expected to achieve TRL 6-8 by the end of the project

Assessment by IEs.



TURKEYⁱⁿ
HORIZON 2020
COOPERATION, INNOVATION, COMPETITIVENESS

National Advisory Group Meeting on Horizon Europe:
Solar Energy Call topics (Hybrid Event)
Hybrid Event & Radisson Blu Şişli, İstanbul,
18 November 2022

Derek K. BAKER



ODTÜ
METU

Dept. of Mech. Engr.
Middle East Tech. U.

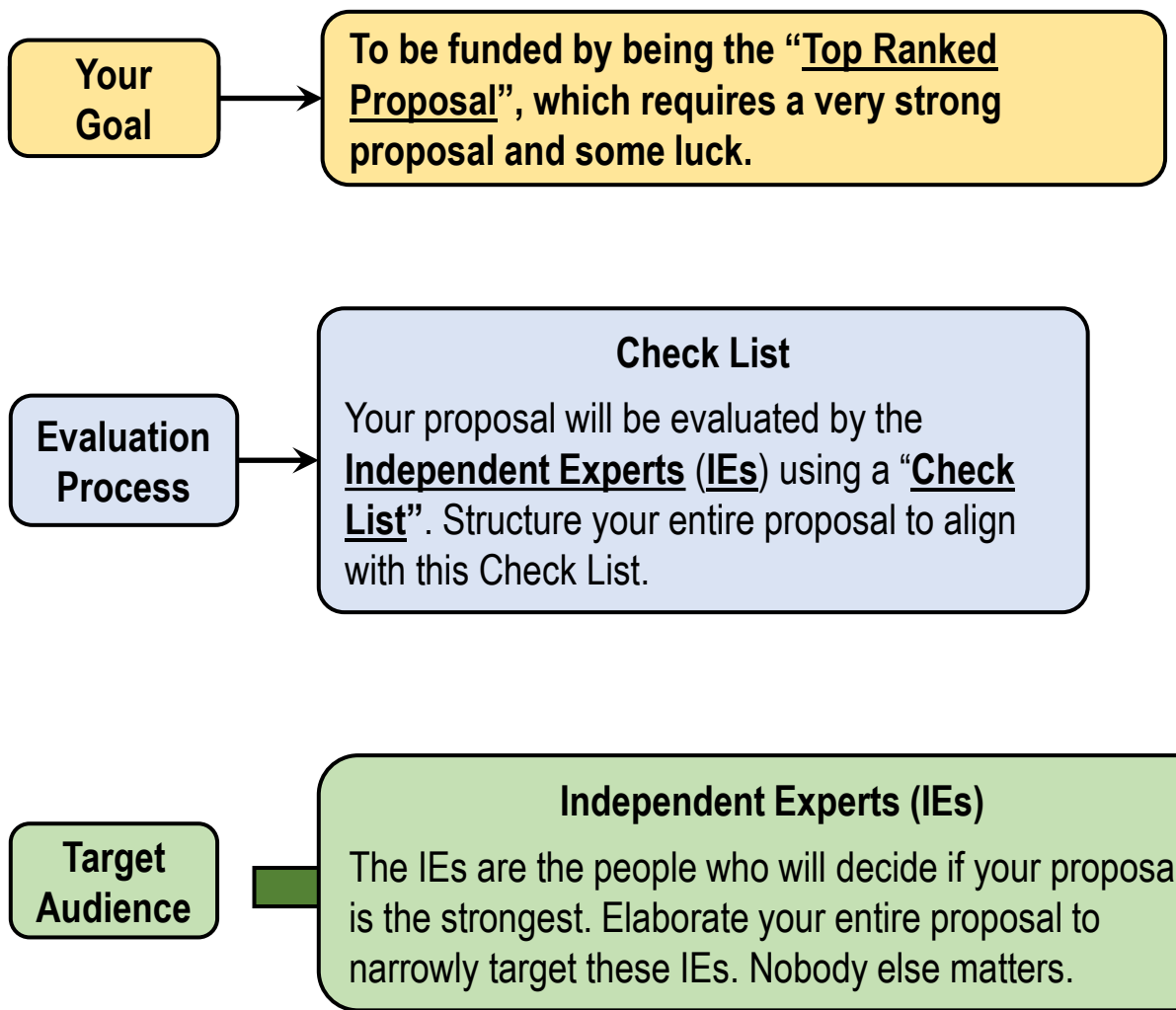


ODAK: Concentrating
Solar Thermal


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Evaluation Overview



Evaluation Team and Roles

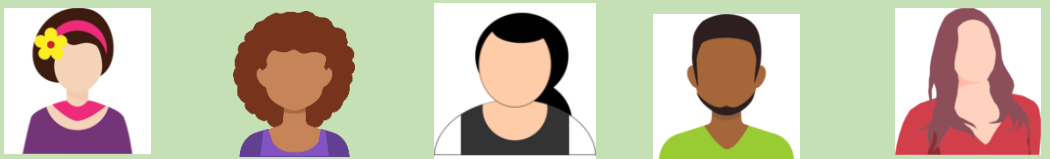



Call Coordinator: An employee of the European Commission (EC) who is in charge of translating the call text into the Check List and managing the Moderators and overall evaluation process.




Moderator: An employee of the European Commission (EC) who is responsible for managing the IEs to assess each proposal according to the Check List.

Independent Experts (IEs): 4-5 IEs are responsible for evaluating the proposals.





Rapporteur: Responsible for writing reports to facilitate the evaluation process and document outcomes.



Quality Control: Responsible for language and coherence across panels.

The “Check List”

Your proposal will be assessed using a “Check List” by 5 (sometimes 4) Independent Experts (IEs).

- For any given Check List item, your proposal will be assessed poorly if the IEs cannot easily find credible content;
- Any content that is not easily linked to a Check List item may not be evaluated.

All items on the Check List come from 1 of 3 sources

1. Proposal “Part B” Template
2. Programme General Annexes “D-Award Criteria”
3. Call Text

Hints:

1. Predict the Check List
2. Write your proposal so it is aligned with your predicted Check List
3. Any checklist item you don’t understand can be a gap in your proposal!

1. Criterion 1 – Excellence

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Assessment by Independent Experts (IEs).

1.1.2 Insert a statement on the pertinence of the objectives i.e. “The pertinence of the objectives is [excellent; very good; good; fair; poor]” + justification:

- o The justification should include comments, with evidence from the proposal, on whether the proposal aims to focus on [... insert key sentence from scope of call ...].

Assessment by IEs.

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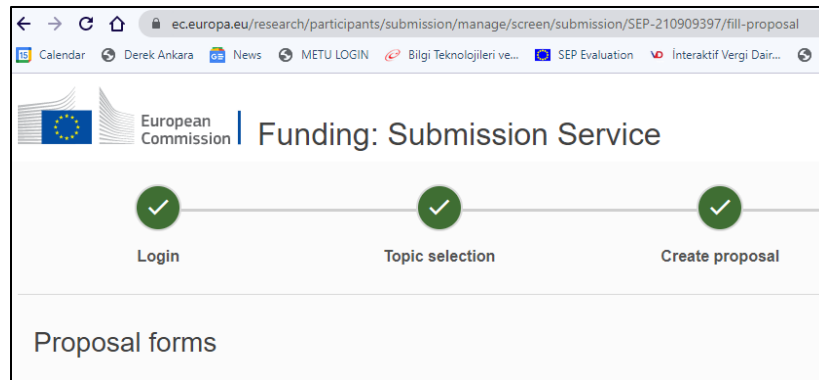
1.2.2 the credibility of the ambition related to the proposed innovative tools

Assessment by IEs.

1.2.3 the extent to which the proposed activities are expected to achieve TRL 6-8 by the end of the project


Assessment by IEs.

Check List Input 1: Proposal Part B Template



Call data


Call: **HORIZON-CL5-2022-D3-03**
 Topic: **HORIZON-CL5-2022-D3-03-05**
 Type of action: **HORIZON-RIA**
 Type of MGA: **HORIZON-AG**

 Topic and type of action can only be changed by creating a new proposal.

Proposal data

Acronym: **Dummy**
 Draft ID: **SEP-210909397**


Download Part B templates

 [Download part B templates](#)

1. Excellence


Excellence – aspects to be taken into account.

- Clarity and pertinence of the project's objectives, and the extent to which the proposed work is ambitious, and goes beyond the state of the art.
- Soundness of the proposed methodology, including the underlying concepts, models, assumptions, interdisciplinary approaches, appropriate consideration of the gender dimension in research and innovation content, and the quality of open science practices, including sharing and management of research outputs and engagement of citizens, civil society and end users where appropriate.

 *The following aspects will be taken into account only to the extent that the proposed work is within the scope of the work programme topic.*

1.1 Objectives and ambition

- Briefly describe the objectives of your proposed work. Why are they pertinent to the work programme topic? Are they measurable and verifiable? Are they realistically achievable?
- Describe how your project goes beyond the state-of-the-art, and the extent the proposed work is ambitious. Indicate any exceptional ground-breaking R&I, novel concepts and approaches, new products, services or business and organisational models. Where relevant, illustrate the advance by referring to products and services already available on the market. Refer to any patent or publication search carried out.
- Describe where the proposed work is positioned in terms of R&I maturity (i.e. where it is situated in the spectrum from 'idea to application', or from 'lab to market'). Where applicable, provide an indication of the Technology Readiness Level, if possible distinguishing the start and by the end of the project.

 *Please bear in mind that advances beyond the state of the art must be interpreted in the light of the positioning of the project. Expectations will not be the same for RIAs at lower TRL, compared with Innovation Actions at high TRLs.*

1.2 Methodology

- Describe and explain the overall methodology, including the concepts, models and assumptions that underpin your work. Explain how this will enable you to deliver your project's objectives. Refer to any important challenges you may have identified in the chosen methodology and how you intend to overcome them.

Check List Input 2: Programme General Annexes “D-Award Criteria”

The screenshot shows the SEDIA portal for the topic "Novel Thin Film (TF) technologies targeting high efficiencies". The call is titled "Sustainable, secure and competitive energy supply (HORIZON-CL5-2022-D3-03)". The "General information" section indicates it is a "Grant" under the "Horizon Europe Framework Programme (HORIZON)". The "Topic conditions and documents" section lists "General conditions" with "1. Admissibility conditions: described in Annex A and Annex E of the Horizon Europe Work Programme General Annexes" and "The page limit of the application is 70 pages."

- 5. Evaluation and award:**
- Award criteria, scoring and thresholds are described in Annex D of the Work Programme General Annexes
 - Submission and evaluation processes are described in Annex F of the Work Programme General Annexes and the Online Manual

D — Award criteria

Award criteria

If admissible and eligible, the proposals will be evaluated and ranked against the following award criteria, depending on the type of action:

	Excellence <small>(The following aspects will be taken into account, to the extent that the proposed work corresponds to the description in the work programme)</small>	Impact	Quality and efficiency of the implementation
Research and innovation actions (RIA) Innovation actions (IA)	Clarity and pertinence of the project's objectives, and the extent to which the proposed work is ambitious and goes beyond the state of the art. Soundness of the proposed [for the first stage: overall] methodology, including the underlying concepts	- Credibility of the pathways to achieve the expected outcomes and impacts specified in the work programme, and the likely scale and significance of the contributions from the project. - Suitability and quality of the measures to maximise expected	- Quality and effectiveness of the work plan, assessment of risks, and appropriateness of the effort assigned to work packages, and the resources overall - Capacity and role of each participant, and the extent to which the consortium as a whole brings together the necessary expertise
Coordination and support	Clarity and pertinence of the	Credibility of the pathways to achieve	Quality and effectiveness of the

Check List Input 2: Programme General Annexes “D-Award Criteria”

D — Award criteria

Award criteria

If admissible and eligible, the proposals will be evaluated and ranked against the following award criteria, depending on the type of action:

	Excellence <small>(The following aspects will be taken into account, to the extent that the proposed work corresponds to the description in the work programme)</small>	Impact	Quality and efficiency of the implementation
Research and innovation actions (RIA) Innovation actions (IA)	<ul style="list-style-type: none"> Clarity and pertinence of the project’s objectives, and the extent to which the proposed work is ambitious and goes beyond the state of the art. Soundness of the proposed [for the first stage: overall] methodology, including the underlying concepts, models, assumptions, inter-disciplinary approaches, appropriate 	<ul style="list-style-type: none"> Credibility of the pathways to achieve the expected outcomes and impacts specified in the work programme, and the likely scale and significance of the contributions from the project. Suitability and quality of the measures to maximise expected outcomes and impacts, as set out in the dissemination and exploitation plan 	<ul style="list-style-type: none"> Quality and effectiveness of the work plan, assessment of risks, and appropriateness of the effort assigned to work packages, and the resources overall. Capacity and role of each participant, and the extent to which the consortium as a whole brings together the necessary expertise.

The Appendix D-Award Criteria are also given in the Proposal Part B Template.

1. Excellence

Excellence – aspects to be taken into account.

- Clarity and pertinence of the project’s objectives, and the extent to which the proposed work is ambitious, and goes beyond the state of the art.
- Soundness of the proposed methodology, including the underlying concepts, models, assumptions, interdisciplinary approaches, appropriate consideration of the gender dimension in research and innovation content, and the quality of open science practices, including sharing and management of research outputs and engagement of citizens, civil society and end users where appropriate.

The following aspects will be taken into account only to the extent that the proposed work is within the scope of the work programme topic.

1.1 Objectives and ambition

- Briefly describe the objectives of your proposed work. Why are they pertinent to the work programme topic? Are they measurable and verifiable? Are they realistically achievable?
- Describe how your project goes beyond the state-of-the-art, and the extent the proposed work is ambitious. Indicate any exceptional ground-breaking R&I, novel concepts and approaches, new products,

Check List Input 3: Call Text

HORIZON-CL5-2022-D3-03-05: Novel Thin Film (TF) technologies targeting high efficiencies

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 5.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 20.00 million.
<i>Type of Action</i>	Research and Innovation Actions
<i>Eligibility conditions</i>	The conditions are described in General Annex B. The following exceptions apply: The Joint Research Centre (JRC) may participate as member of the consortium selected for funding.
<i>Technology Readiness Level</i>	Activities are expected to achieve TRL 5 by the end of the project – see General Annex B.

Expected Outcome: Photovoltaic power generation is pivotal in the transition towards a clean energy system and the achievement of the zero-emissions target. To that end, it is important to enhance affordability, security of supply and sustainability of PV technologies along with further efficiency improvements. Consequently, project results are expected to contribute to all of the following outcomes:

- Increase the potential of thin-film technologies for mass production, low cost and/or specialised applications.
- Reinforce the European PV value chain, support local companies to develop and sell

*Horizon Europe - Work Programme 2021-2022
Climate, Energy and Mobility*

film PV is the lower direct semiconductor materials cost. Realising lower costs in production requires high input material utilisation and low raw materials conversion costs. Large-scale thin-film module production can be more cost efficient when utilising rapid processing technologies. With further advances in scientific understanding, 25% efficiency devices are within reach as are even higher efficiencies in tandem architectures. Translating those device and process advances to manufacturing technology will dramatically reduce LCOE once sufficiently scaled in both module size and production volume. This will require adapting deposition processes for higher rates and to larger-scale equipment while developing suitable robust techniques for inline process and quality control.

The proposal should address all of the following:

- Develop novel environmentally benign thin-film technology concepts that optimise PV cell and module architecture, increase durability, decrease losses (minimising also the cell-to-module efficiency gap) and target very high efficiencies (>25%) with flexibility for specific applications.
- Employ simple, scalable and low cost/low energy consumption and higher rate deposition processes.
- Ensure compliance with all relevant standards, including those related to the specific applications targeted.
- Perform device/module real-life (under actual outdoor operating conditions) characterisation for reliability and energy yield assessment.
- Perform a life cycle analysis to bring evidence of the lower environmental impact, better resource efficiency than current commercial PV technologies, and circularity potential.

Assessment & Funding

3 Proposal Sections = 3 Evaluation Criteria	Score	Threshold to be eligible for funding
1. Excellence	0-5	3
2. Impacts	0-5	3
3. Implementation	0-5	3
Total	0-15	10

Scoring Method:

- Evaluate each section sequentially and independently; e.g., Section 1 is evaluated and scored without considering Section 2 content and vice-versa.
- Each section starts with a score 5 / 5.
- Score reduced based on number and severity of “Problems”
 - Minor Shortcoming:** A small problem that is ignored when making funding decisions → no reduction in points.
 - Shortcoming:** A problem that is sufficiently large to impact funding decisions but not so large as to make the proposed project unviable → ~0.5 pt reduction.
 - Significant Weakness:** Problem so large the proposed project is not viable → Maximum score 2.5 / 5.0 → Not eligible for funding.

Funding:

- All proposals ranked from highest to lowest score;
- Starting from the highest ranked proposal, proposals are funded until the call budget is consumed.

Sample Check List

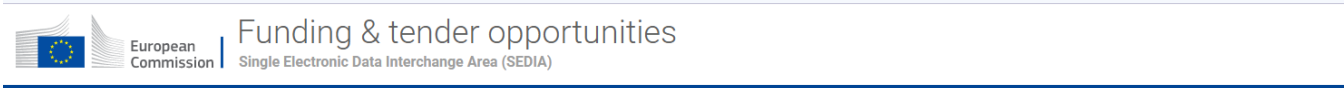
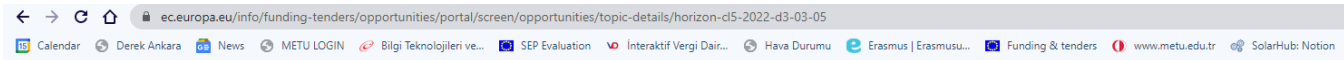
I will step through all check-list items for a recent evaluation. If you / your proposal writers don't have a sophisticated understanding of any checklist item, your proposal may at the least have a problem in terms of presentation and perhaps even terms of content here, so you'll want to **get help** (e.g., ask a question to me)!

Check List has 3 orthogonal (i.e., independent) Criteria

1. Excellence
2. Impact
3. Implementation

Each criterion has multiple sub-criteria.

Example: Research and Innovation Action (RIA) and not Innovation Action (IA)



Novel Thin Film (TF) technologies targeting high efficiencies
TOPIC ID: HORIZON-CL5-2022-D3-03-05

Grant
General information
Topic description
Destination
Conditions and documents
Partner search announcements
Submission service
Topic related FAQ
Get support

General information
Topic description
Destination
Conditions and documents
Partner search announcements
Submission service
Topic related FAQ
Get support

Type of action
HORIZON-RIA HORIZON Research and Innovation Actions

Innovative components and/or sub-systems for CSP plants and/or concentrating solar thermal installations
TOPIC ID: HORIZON-CL5-2022-D3-03-01

Grant
General information
Topic description
Destination
Conditions and documents
Partner search announcements
Submission service
Topic related FAQ
Get support

General information
Topic description
Destination
Conditions and documents
Partner search announcements
Submission service
Topic related FAQ
Get support

Type of action
HORIZON-IA HORIZON Innovation Actions

Type of MGA
HORIZON Action Grant Budget-Based [HORIZON-AG]

1. Excellence

1. Excellence

Excellence – aspects to be taken into account.

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- Soundness of the proposed methodology, including the underlying concepts, models, assumptions, interdisciplinary approaches, appropriate consideration of the gender dimension in research and innovation content, and the quality of open science practices, including sharing and management of research outputs and engagement of citizens, civil society and end users where appropriate.

⚠ The following aspects will be taken into account only to the extent that the proposed work is within the scope of the work programme topic.

1.1 Objectives and ambition

- Briefly describe the objectives of your proposed work. Why are they pertinent to the work programme topic? Are they measurable and verifiable? Are they realistically achievable?
- Describe how your project goes beyond the state-of-the-art, and the extent the proposed work is ambitious. Indicate any exceptional ground-breaking R&I, novel concepts and approaches, new products, services or business and organisational models. Where relevant, illustrate the advance by referring to products and services already available on the market. Refer to any patent or publication search carried out.
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⚠ Please bear in mind that advances beyond the state of the art must be interpreted in the light of the positioning of the project. Expectations will not be the same for RIAs at lower TRL, compared with Innovation Actions at high TRLs.

1.2 Methodology

- Describe and explain the overall methodology, including the concepts, models and assumptions that underpin your work. Explain how this will enable you to deliver your project’s objectives. Refer to any important challenges you may have identified in the chosen methodology and how you intend to overcome them.
- Describe any national or international research and innovation activities whose results will feed into the project, and how that link will be established;
- Explain how expertise and methods from different disciplines will be brought together and integrated in pursuit of your objectives. If you consider that an inter-disciplinary approach is unnecessary in the context of the proposed work, please provide a justification.
- For topics where the work programme indicates the need for the integration of social sciences and humanities, show the role of these disciplines in the project or provide a justification if you consider that these disciplines are not relevant to your proposed project.
- Describe how the gender dimension (i.e. sex and/or gender analysis) is taken into account in the project’s research and innovation content. If you do not consider such a gender dimension to be relevant in your project, please provide a justification.

- Describe how appropriate open science practices are implemented as an integral part of the proposed methodology. Show how the choice of practices and their implementation are adapted to the nature of your work, in a way that will increase the chances of the project delivering on its objectives. If you believe that none of these practices are appropriate for your project, please provide a justification here.
- **Research data management and management of other research outputs:** Applicants generating/collecting data and/or other research outputs (except for publications) during the project must provide maximum 1 page on how the data/ research outputs will be managed in line with the FAIR principles (Findable, Accessible, Interoperable, Reusable), addressing the following (the description should be specific to your project):

Types of data/research outputs

Findability of data/research outputs:

Accessibility of data/research outputs:

Interoperability of data/research outputs:

Reusability of data/research outputs:

Curation and storage/preservation costs;

“FAIR”

Check List Item 1.1

Check-List

1. Criterion 1 – Excellence

1.1 Clarity and pertinence of the objectives, and extent to which the proposed work is ambitious, and goes beyond the state-of-the-art:

1.1.1 Insert a statement on the clarity of the objectives i.e. are the objectives understandable. (The objectives [are] / [are not] clear + justification if not.)

Assessment by Independent Experts (IEs).

1.1.2 Insert a statement on the pertinence of the objectives i.e. “The pertinence of the objectives is [excellent; very good; good; fair; poor]” + justification:

- o The justification should include comments, with evidence from the proposal, on whether the proposal aims to focus on [... insert key sentence from scope of call ...].

Assessment by IEs.

Input 2: Annex D

Excellence – aspects to be taken into account.

- Clarity and pertinence of the project’s objectives, and the extent to which the proposed work is ambitious, and goes beyond the state of the art.

Input 3: Call Text

For a recent call, this was taken from 1 key sentence early in the Scope: ~ “... requires technologies A, B, C and D to be developed.”

My draft statement ~“The proposal appropriately aims to develop A and B for C and D.” I would ask IEs if any items A - D need to be deleted.

Check List Item 1.2

Input 2: Annex D

Excellence – aspects to be taken into account.

- Clarity and pertinence of the project’s objectives, and the extent to which the proposed work is ambitious, and goes beyond the state of the art.

Check-List

1.2 Insert a statement on the extent to which the proposed work goes beyond the state of the art. Include comments on:

1.2.1 how ambitious the advance is

Assessment by IEs.

1.2.2 the credibility of the ambition

Assessment by IEs.

1.2.3 the extent to which the proposed activities are expected to achieve TRL x by the end of the project

Assessment by IEs.

Input 3: Call Text
 “Activities are expected to achieve TRL x by the end of the project – see General Annex B.”

Check List Item 1.3.1

Input 2: Annex D

Soundness of the proposed methodology, including the underlying concepts, models, assumptions, interdisciplinary approaches, appropriate consideration of the gender dimension in research and innovation content,



1.3.1 The soundness of the methodology - “The proposed methodology is sound / **not sound**”

Assessment by IEs.

The justification should include comments, with evidence from the proposal, on the extent to which the proposed methodology appropriately considers:

1.3.1a Then explain your judgement including comments on the underlying concept, models and assumptions,

Assessment by IEs.

1.3.1b Inter-disciplinary approaches¹,

Assessment by IEs.

1.3.1c Appropriate consideration of the gender dimension in research and innovation content.

Assessment by IEs.

“The proposed methodology is **not sound**” is a **Significant Weakness** and the proposed project is no longer eligible for funding.

Refers to collaboration between different disciplines and not just have different disciplines working independently.

Does not refer to gender diversity within the researcher team, but differences at the interface between a technology and a person due to gender.

Check List Item 1.3.2

1.3.2 The justification should include comments, with evidence from the proposal, on the extent to which the proposed methodology appropriately considers:
General Comments
I put IE comments here that do not fit well in the sub-items 1.3.2a, 1.3.2b, etc., and these typically are not included in the Consensus Report (CR), and therefore do not impact scores.
1.3.2a First bulleted item in Scope
Assessment by IEs.
1.3.2b Second bulleted item in Scope
Assessment by IEs.
.....
Assessment by IEs.
1.3.2z Last bulleted item in Scope.
Assessment by IEs.

Call Text: “Proposals are expected to cover [some / most / all] aspects below:”

- Item 1
- Item 2
-

If “**some / most**”, only those items specifically addressed in the proposal are evaluated.

If “**all**”, missing any item is typically at least a Shortcoming (-0.5 / 5.0).

Check List Item 1.4

Input 2: Annex D

..... and the quality of open science practices, including sharing and management of research outputs and engagement of citizens, civil society and end users where appropriate.

1.4 The quality of open science practices.
<i>Assessment by IEs.</i>
1.4.1 Sharing and management of research outputs;
<i>Assessment by IEs.</i>
1.4.2 Where appropriate, comment on engagement of citizens, civil society and end users
<i>Assessment by IEs.</i>

Be careful that your Section 3.1 Work Plan is coherent with your methodology (e.g., gender, OA, Data management, etc)!

Open Science: Key Ideas

- Horizon Europe compliant Open Access (OA) publishing
- Date Management based on FAIR principles.

“National or international research and innovation activities whose results will feed into the project, and how that link will be established”

For this call, IEs were asked to assess this during their pre-consensus meeting Independent Evaluation, but this item was not included in my Check List (i.e., funding decisions were not made based on this content). But in other calls this has been included in my checklist, and therefore this content impacted funding decisions.

Section 1: Draft Consensus Report & Score

1. Criterion 1 – Excellence

Criterion 1 Scoring	
Minor Shortcomings	
Shortcomings	
Significant Weaknesses	
Serious Inherent Weaknesses	
Score	

1. Excellence

Overall [the proposal successfully addresses all relevant aspects of the criterion (5) / the proposal addresses the criterion very well (4) / the project addresses the criterion well (3) / broadly addresses the criterion (2) / the proposal addresses the criterion inadequately (1)]. In particular:

1. Positive bullet point 1
2. ...

Nevertheless, [a small number of shortcomings are present (4) / a number of shortcomings are present (3) / significant weaknesses are present (2) / there are serious inherent weaknesses (1)].

Namely:

1. Negative bullet point 1
2. ...

The last call I supported had ~18 check list items in Section 1.

Evaluating Section 1 may take 2 hours for the 1st proposal, and 1 hour after the 3rd proposal.

Thus you may think on average ~3-5 minutes is spent discussing each check list item.

2. Impact

2. Impact

Impact – aspects to be taken into account.

- Credibility of the pathways to achieve the expected outcomes and impacts specified in the work programme, and the likely scale and significance of the contributions due to the project.
- Suitability and quality of the measures to maximise expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities.

The results of your project should make a contribution to the expected outcomes set out for the work programme topic over the medium term, and to the wider expected impacts set out in the 'destination' over the longer term.

In this section you should show how your project could contribute to the outcomes and impacts described in the work programme, the likely scale and significance of this contribution, and the measures to maximise these impacts.

2.1 Project's pathways towards impact

- Provide a **narrative** explaining how the project's results are expected to make a difference in terms of impact, beyond the immediate scope and duration of the project. The narrative should include the components below, tailored to your project.
 - (a) Describe the unique contribution your project results would make towards (1) the **outcomes** specified in this topic, and (2) the **wider impacts**, in the longer term, specified in the respective destinations in the work programme.
 - (b) Give an indication of the scale and significance of the project's contribution to the expected outcomes and impacts, should the project be successful. Provide quantified estimates where possible and meaningful.
 - (c) Describe any requirements and potential barriers - arising from factors beyond the scope and duration of the project - that may determine whether the desired outcomes and impacts are achieved. These may include, for example, other R&I work within and beyond Horizon Europe; regulatory environment; targeted markets; user behaviour. Indicate if these factors might evolve over time. Describe any mitigating measures you propose, within or beyond your project, that could be needed should your assumptions prove to be wrong, or to address identified barriers.

2.2 Measures to maximise impact - Dissemination, exploitation and communication

- Describe the planned measures to maximise the impact of your project by providing a first version of your 'plan for the dissemination and exploitation including communication activities'. Describe the dissemination, exploitation and communication measures that are planned, and the target group(s) addressed (e.g. scientific community, end users, financial actors, public at large).
 - ⚠ *Communication¹ measures should promote the project throughout the full lifespan of the project. The aim is to inform and reach out to society and show the activities performed, and the use and the benefits the project will have for citizens. Activities must be strategically planned, with clear objectives, start at the outset and continue through the lifetime of the project. The description of the communication activities needs to state the main messages as well as the tools and channels that will be used to reach out to each of the chosen target groups.*
 - ⚠ *All measures should be proportionate to the scale of the project, and should contain concrete actions to be implemented both during and after the end of the project, e.g. standardisation activities. Your plan should give due consideration to the possible follow-up of your project, once it is finished. In the justification, explain why each measure chosen is best suited to reach the target group addressed. Where relevant, and for innovation actions, in particular, describe the measures for a plausible path to commercialise the innovations.*
 - ⚠ *If exploitation is expected primarily in non-associated third countries, justify by explaining how that exploitation is still in the Union's interest.*
 - ⚠ *Describe possible feedback to policy measures generated by the project that will contribute to designing, monitoring, reviewing and rectifying (if necessary) existing policy and programmatic measures or shaping and supporting the implementation of new policy initiatives and decisions.*
- Outline your strategy for the management of intellectual property, foreseen protection measures, such as patents, design rights, copyright, trade secrets, etc., and how these would be used to support exploitation.
 - ⚠ *If your project is selected, you will need an appropriate consortium agreement to manage (amongst other things) the ownership and access to key knowledge (IPR, research data etc.). Where relevant, these will allow you, collectively and individually, to pursue market opportunities arising from the project.*
 - ⚠ *If your project is selected, you must indicate the owner(s) of the results (results ownership list) in the final periodic report.*

Check List Item 2.1.1

Input 2: Annex D

2. Impact

Impact – aspects to be taken into account.

- Credibility of the pathways to achieve the **expected outcomes** and impacts specified in the work programme, and the likely scale and significance of the contributions due to the project.



2. Criterion 2 - Impact
2.1 Expected Impacts:
General Comments on Expected Impacts
2.1.1a First bulleted item in Expected Outcomes
<i>Assessment by IEs.</i>
2.1.1b Second bulleted item in Expected Outcomes
<i>Assessment by IEs.</i>
.....
<i>Assessment by IEs.</i>
2.1.1k Last bulleted item in Expected Outcomes
<i>Assessment by IEs.</i>

Call Text: “Expected Outcomes: Project results are expected to contribute to [**some / most / all**] of the following expected outcomes:

- Outcome 1
- Outcome 2
-”

If “**some / most**”, only those items specifically addressed in the proposal are evaluated.

If “**all**”, missing any item is typically at least a Shortcoming (-0.5 / 5.0).

Check List Item 2.1.2

Input 2: Annex D

2. Impact

Impact – aspects to be taken into account.

- Credibility of the pathways to achieve the **expected** outcomes and **impacts** specified in the work programme, and the likely scale and significance of the contributions due to the project.



2.1.2 impacts in Destination 2 of the work programme (See Annex I of this checklist for full list of expected impact of the Destination 2), including in particular:

General Comments

2.1.2a First bulleted item in Expected Impacts

Assessment by IEs.

2.1.2b Second bulleted item in Expected Impacts

Assessment by IEs.

.....

Assessment by IEs.

2.1.2k Last bulleted item in Expected Impacts

Assessment by IEs.

In the last evaluation I supported *

Call Text:

... Destination

- Key Strategic Objectives: Not Assessed
- Impact Areas: Not Assessed
- **Expected Impacts: Assessed.**

** The evaluation method varies with the team and evolves with time, and history is not always a good predictor for the future.*

Check List Item 2.2

Input 2: Annex D

Suitability and quality of the measures to maximise expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities.



Dissemination: Open sharing of project results so others can gain competitive advantage; e.g., **make money** by creating new products / services, etc.)

Exploitation: How the consortium uses project results to gain competitive advantage; e.g., **make money** by creating new products / services, etc. Include

- IPR Management
- Exploitation plans for individual consortium members
- Pathways to commercialization (e.g., business plan)

2.2 Suitability and quality of the measures to maximise expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities.
[2.2.1 Dissemination]
Assessment by IEs.
[2.2.2 Exploitation]
Assessment by IEs.
[2.2.3 Communication]
Assessment by IEs.

3. Implementation

3. Quality and efficiency of the implementation

Quality and efficiency of the implementation – aspects to be taken into account

- Quality and effectiveness of the work plan, assessment of risks, and appropriateness of the effort assigned to work packages, and the resources overall
- Capacity and role of each participant, and extent to which the consortium as a whole brings together the necessary expertise.

3.1 Work plan and resources

Please provide the following:

- brief presentation of the overall structure of the work plan;
- timing of the different work packages and their components (Gantt chart or similar);
- graphical presentation of the components showing how they inter-relate (Pert chart or similar).
- detailed work description, i.e.:
 - a list of work packages (table 3.1a);
 - a description of each work package (table 3.1b);
 - a list of deliverables (table 3.1c);
- a list of milestones (table 3.1d);
- a list of critical risks, relating to project implementation, that the stated project's objectives may not be achieved. Detail any risk mitigation measures. You will be able to update the list of critical risks and mitigation measures as the project progresses (table 3.1e);
- a table showing number of person months required (table 3.1f);
- a table showing description and justification of subcontracting costs for each participant (table 3.1g);
- a table showing justifications for 'purchase costs' (table 3.1h) for participants where those costs exceed 15% of the personnel costs (according to the budget table in proposal part A);
- if applicable, a table showing justifications for 'other costs categories' (table 3.1i);
- if applicable, a table showing in-kind contributions from third parties (table 3.1j)

3.2 Capacity of participants and consortium as a whole

⚠ *The individual participants of the consortium are described in a separate section under Part A. There is no need to repeat that information here.*

- Describe the consortium. How does it match the project's objectives, and bring together the necessary disciplinary and inter-disciplinary knowledge. Show how this includes expertise in social sciences and humanities, open science practices, and gender aspects of R&I, as appropriate. Include in the description affiliated entities and associated partners, if any.
- Show how the partners will have access to critical infrastructure needed to carry out the project activities.
- Describe how the members complement one another (and cover the value chain, where appropriate)
- In what way does each of them contribute to the project? Show that each has a valid role, and adequate resources in the project to fulfil that role.
- If applicable, describe the industrial/commercial involvement in the project to ensure exploitation of the results and explain why this is consistent with and will help to achieve the specific measures which are proposed for exploitation of the results of the project (see section 2.2).
- **Other countries and international organisations:** If one or more of the participants requesting EU funding is based in a country or is an international organisation that is not automatically eligible for such funding (entities from Member States of the EU, from Associated Countries and from one of the countries in the exhaustive list included in the Work Programme General Annexes B are automatically eligible for EU funding), explain why the participation of the entity in question is essential to successfully carry out the project.

Check List Item 3.1

Input 2: Annex D

3. Quality and efficiency of the implementation

Quality and efficiency of the implementation – aspects to be taken into account

- Quality and effectiveness of the work plan, assessment of risks, and appropriateness of the effort assigned to work packages, and the resources overall

Work Packages, Tasks, Gantt Chart, Pert Chart, etc. Are these coherent with the Section 1 Methodology?

Milestones and Deliverables need to be distributed throughout the project to enable effective external project monitoring.

Milestones should be confused with Project Finish Line (i.e., no Milestones in last month of project).

Deliverables need to be defined to enable robust project reporting without generating excessive project reporting loads. Don't have too many Deliverables due in last month of the project.

3. Criterion 3 - Implementation	
3.1 Quality and efficiency of the work plan	
<i>Assessment by IEs.</i>	
3.1.1 appropriate milestones and deliverables	
<i>Assessment by IEs.</i>	
3.1.2 assessment of risk in the project (e.g. are potential risks well identified, suitable mitigation measures proposed?)	
<i>Assessment by IEs.</i>	
3.1.3 appropriateness of the effort assigned to the work packages and the resources overall	
<i>Assessment by IEs.</i>	

Effort = Person Months (PMs): In general PMs but not PM Rates (€/PM) or Direct Personnel Budget (€) assessed.

Resources: Other Direct Costs (travel, equipment, etc) and sub-contracting

Lesson (Re-)Learned: The playing field is not always level

Context: Effort and Budget

Effort	The time devoted to the project measured in Person-Months (PMs)
1 PM	One person working full time for 1 month. Conceptually 1 PM = 8 hours/day x 5 days/week x 4 weeks = 160 hr.
PM Rate	The cost of 1 PM to the EC, e.g., (€/PM). The PM rate reflects actual institutional pay rates, which means institutions in Northern European have a high PM rate while METU has a low PM rate.
Direct Personnel	Total personnel costs (€) charged to the EC = Effort (PMs) x PM Rate (€/PM)

Experiences: Evaluators tend to focus more on PMs than Direct Personnel Budget

It is “appropriate” for institutions in Northern Europe to have PM Rates that are ~4x higher than METU’s

It is “expected” that the scientific outcomes from 1 PM are the same for all institutions and independent of the PM Rate.

Emerging Strategy: ~”The human resource model seeks to maximize scientific returns on EC Direct Personnel investments rather than Effort (PMs). For example, rather than executing the work plan using independent researchers with an aim to minimize effort, a researcher-trainer model is used where senior researchers manage lower cost graduate students to execute the core work. This model has proven effective at producing the same quality of outcomes with lower Direct Personnel costs (albeit with higher effort), and also contributing to European goals to train future researchers.

Check List Item 3.2

Input 2: Annex D

Capacity and role of each participant, and extent to which the consortium as a whole brings together the necessary expertise.



Important when constructing a consortium:

- Each partner needs to have a well-defined role
- Removing any partner results in a gap that the other partners could not fulfill.

3.2 Capacity and role of each participant, and the extent to which the consortium as a whole brings together the necessary expertise.
3.2.1 Comment on the operational capacity and role of each participant
3.2.2 Comment on the extent to which the consortium as a whole brings together the necessary expertise (i.e. is anything missing, unnecessarily duplicated, only there as sub-contracting)

Outcomes from last evaluation

3 proposals funded

14.5/15.0	Proposal A	
14.5/15.0	Proposal B	
12.5/15.0	Proposal C	<i>Funding Cut-Off</i>
12.5/15.0	Proposal D	
12.0/15.0	Proposal E	
12.0/15.0	Proposal F	
11.5/15.0	Proposal G	
....		

2 proposals “Failed” due to improper formatting* / exceeding page limits

(*e.g., font size in figures too small to read).

Sample Success Rates:

Horizon 2020: < 10%

Horizon Europe: 20-30%

Best Practices

Key Idea: Even the best IEs will not read, much less understand, your entire proposal. Therefore, the IEs will never have as sophisticated an understanding of your proposal as you do, and can miss relevant details that are not properly presented (e.g., wrong location).

Do	Do Not

Closing Thoughts

Official EU Goal: Identify and fund the top proposals.


Reality: The EU is content to fund some subset of the top proposals using a legally defensible but still somewhat arbitrary method (i.e., especially near the funding threshold, the funding outcomes are often somewhat arbitrary and not fully repeatable).

If you don't submit because the evaluation may not be fully credible, you won't be funded.

Of the ~ 60 Independent Experts (IEs) I have worked with

20	Scientifically brilliant and dedicated
20	Scientifically very strong and dedicated
18	Scientifically strong and dedicated
1	Smart, opinionated, and disruptive
1	Quota Guy

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