Intelligence in Writing a grant application in Cluster 6

APRE

I want to be…


Coordinator
Define your idea
Find a funding opportunity
Write a proposal
Cross the fingers!


Partner
Identify you skill
Promote yourself
Join a consortium
Define your activity

THE COORDINATOR'S ROAD

Suggestion: Is your idea innovative?

Consult:

- Patent database
- IPR helpdesk
- Proviously FP’s and Horizon 2020 funded project (e.g. CORDIS, etc)
- Bibliography
- Google

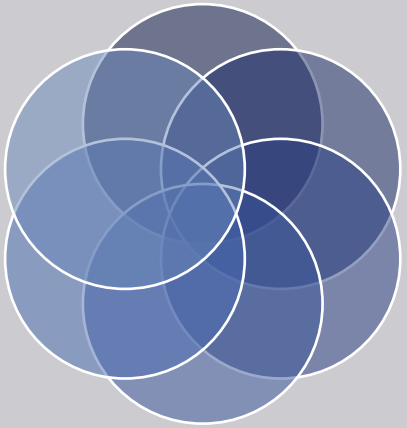
Suggestion: Tips and tricks

Partner Search:

Personal Contacts

Google

Cordis

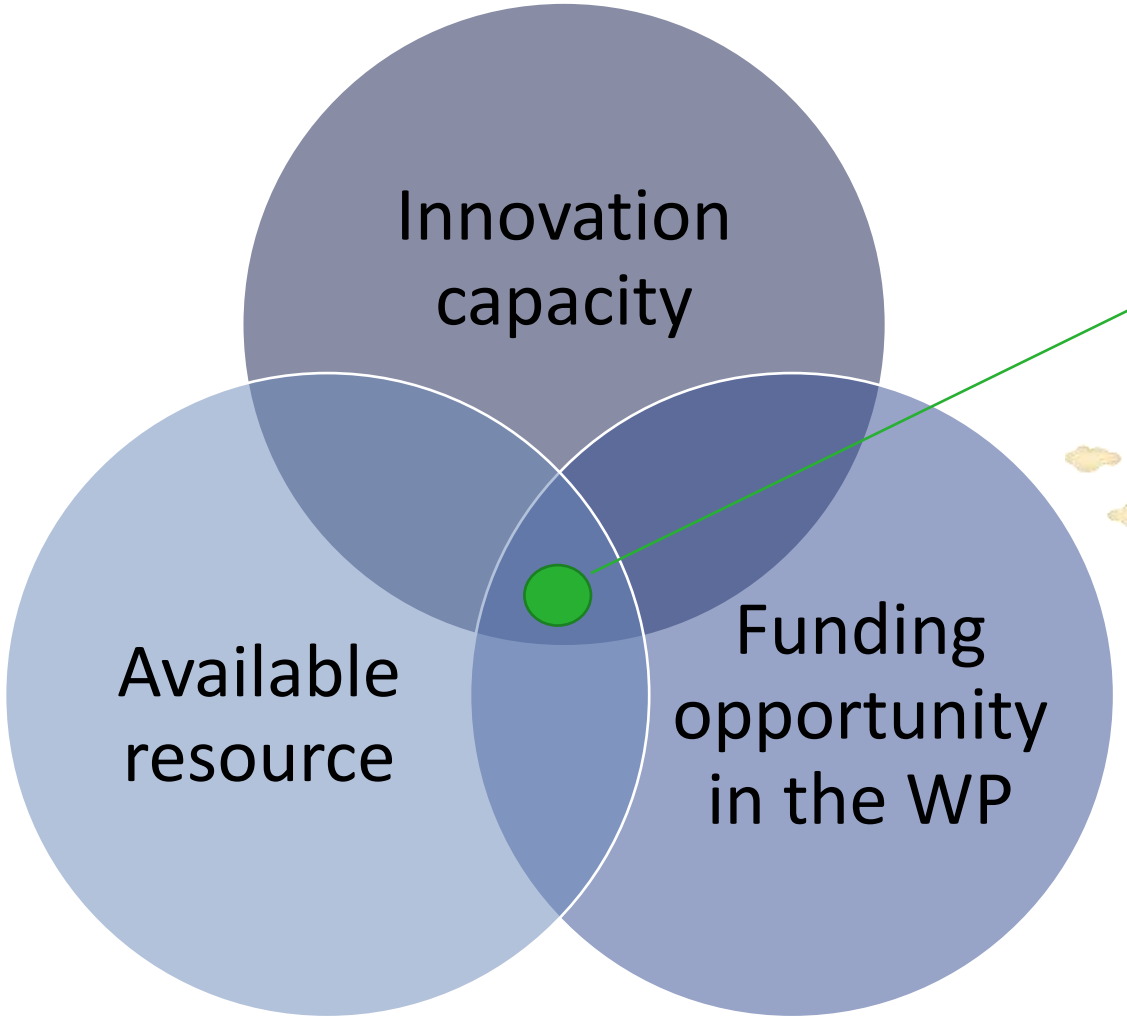


NCPs Networks

Events

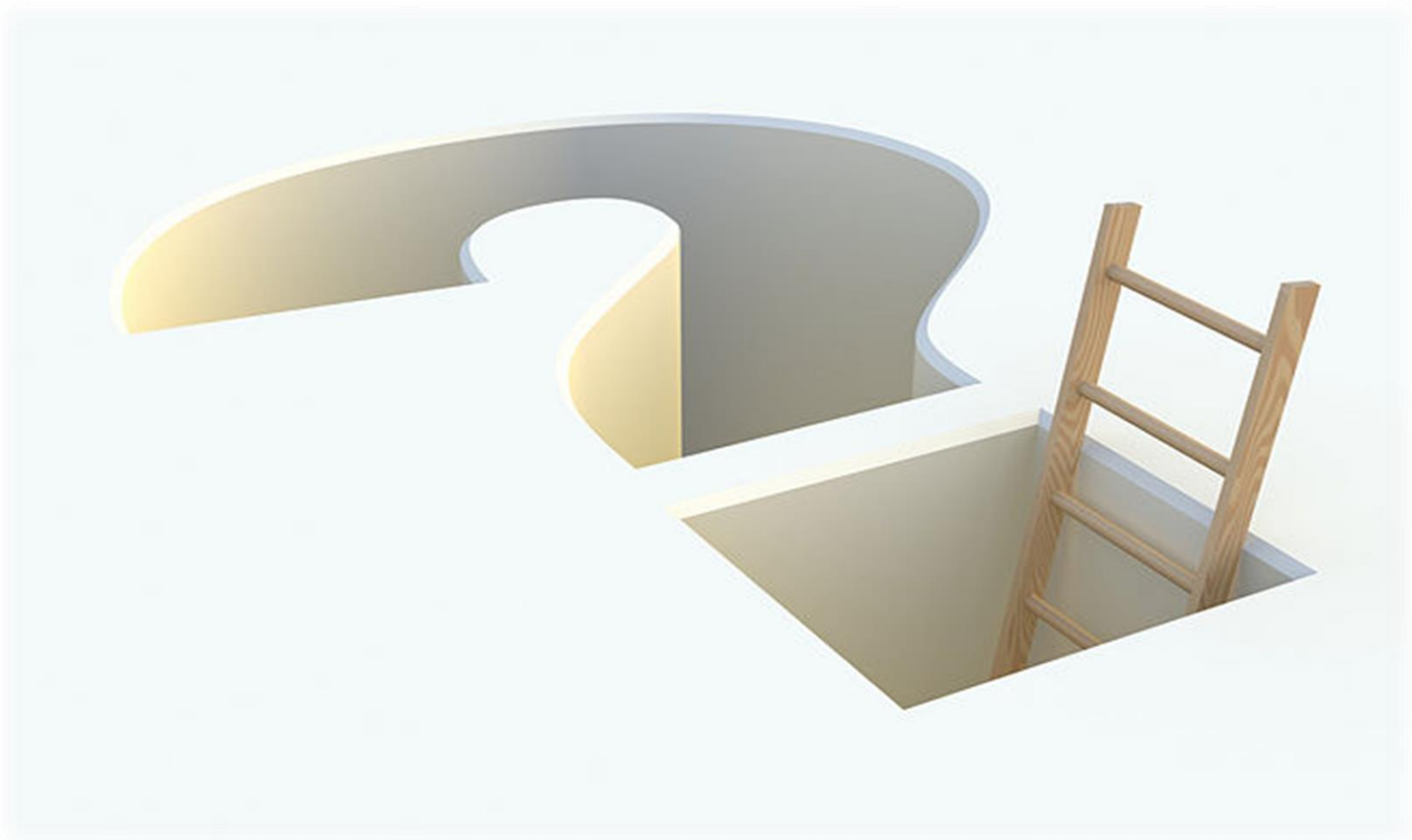
Specific websites

Identify the project idea



Your Idea

Define your idea



Define your idea: **ABSTRACT** one page proposal

Topic	
Title/ACRONYM	
Objective	The aim of the proposal is to… The key research question/challenge is to…
Background/short description	• Why bother? What problem are you trying to solve? • Is it a European priority? Could it be solved at National level? • Is the solution already available? • Why now? What would happen if we did not do this now? • Why you? Are you the best people to do this work?
Results/impact	• Expected results - what will come out of the project? Who will use the results? • Why do they want to use the results? • How are you planning the transfer of results? • What will be changed? Post project situation
Activities/phases (science part)	
Project consortium	
Duration/cost	

ORGANIZE YOUR TIME

FROM THE OPEN CALL TO THE DEADLINE

1st stage **Consortium meeting**	*Aim of the project, research question, distribution of work* (Science, Management and Editors!!)	**5-6 months before deadline**
2nd stage **Homework**	*Proposal writing* (inputs from partners – WP leaders and coordinator!)	**4-5 months before deadline**
3rd stage **Preparation of first draft of Proposal**	*First proposal draft* (summarized by lead scientist and support service: science, impact, implementation)	**3 months before deadline**
4th stage **Core group meeting**	*IN or OUT* *Final agreement* (aim and research question, WP, timeline, outputs/deliverables, budget, etc.)	**3 months before deadline**
5th stage **Full proposal completion**	*Proposal writing* (including editing, proof reading and external review) (Lead scientist, Support service, External experts)	**Last two months**

Timeline

1. Average time spent by coordinator: 350-450 hours = 45-60 working days (full time)

2. Average time spent by Work package leader: 70-100 hours = 9-14 working days (full time)

3. Approx. 50% Emailing (!!!)

Timeline: From idea to project

Project idea

Proposal writing

3 to 6 months

Proposal submission

Timeline: From idea to project

Proposal Submission

5 months

First indication from EC

Timeline: From idea to project

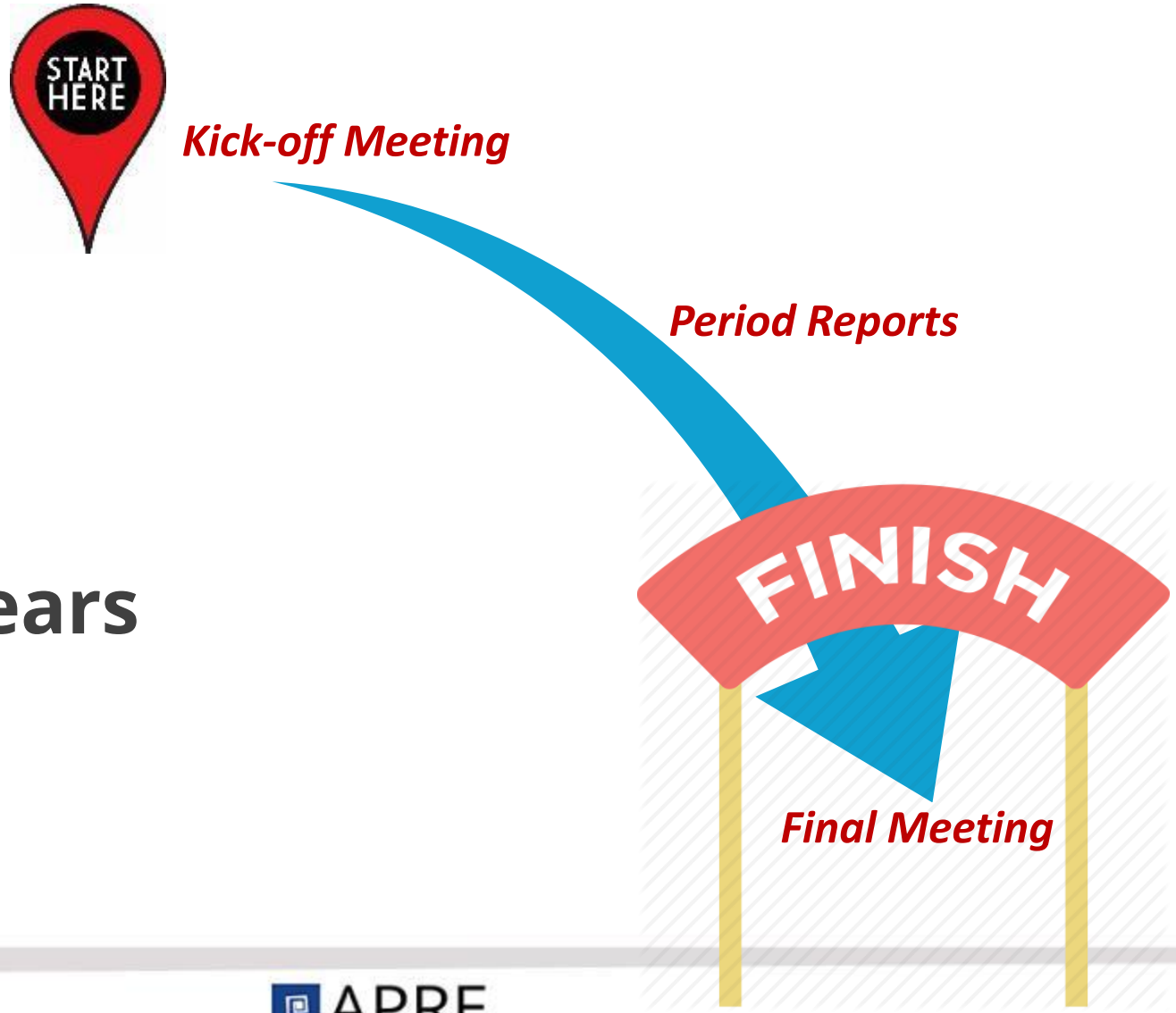
First indication from EC

Grant Preparation

3 months

Grant Agreement

Timeline: From idea to project



~ 3 to 5 years

Evaluation Criteria (RIA/IA)

Excellence

- ✓ 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, inter-disciplinary approaches, appropriate consideration of the **gender dimension** in research and innovation content, quality of **open science practices** including sharing and management of research outputs and engagement of citizens, civil society and end users where appropriate

Impact

- ✓ 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 maximize expected outcomes and impacts**, as set out in the dissemination and exploitation plan, including communication activities.

NB: New approach to impact: Key Impacts Pathways (KIPs)

Quality and efficiency of the implementation

- ✓ 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

NB: The quality of applicants is assessed under 'implementation', rather than as a separate binary assessment of operational capacity. Assessment of management structures has been removed.

Evaluation Criteria (CSA)

Excellence

- ✓ Clarity and pertinence of the project's objectives.
- ✓ Quality of the proposed coordination and/or support measures including soundness of methodology.

Impact

- ✓ 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 maximize expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities.

NB: New approach to impact: Key Impacts Pathways (KIPs)

Quality and efficiency of the implementation

- ✓ 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

NB: The quality of applicants is assessed under 'implementation', rather than as a separate binary assessment of operational capacity. Assessment of management structures has been removed.

Ranking Criteria for ex aequo proposals

By order of priority

1. Aspects of the call that have not otherwise been covered by more highly ranked proposals
2. Scores on ‘Excellence’ then on ‘Impact’ (for IAs, scores on ‘Impact’ then ‘Excellence’)
3. **Gender balance among personnel named in the proposal who will be primarily responsible for carrying out the research and/or innovation activities, and who are included in the researchers table in the proposal**
4. Geographical diversity
5. …

Application form (proposal template)

The proposal contains two parts:

Part A (web-based forms) is generated by the IT system.
It is based on the information entered by the participants through the submission system in the Funding & Tenders Portal

Part B is the narrative part that includes three sections that each correspond to an evaluation criterion. Part B needs to be uploaded as a PDF document following the templates downloaded by the applicants in the submission system for the specific call or topic


Instructions, please remove
Horizon Europe Programme
Standard Application Form (HE RIA and IA)
Project proposal – Technical description (Part B)
Version 3.2
15 November 2022

What is expected from the applicants?

- **Check the call description**
- **Read carefully the topic description** in the Work Programme:
  - **Title and Specific conditions (**ToA, indicative budget, TRL...**)**
  - **Type of Action** (RIA, IA, CSA, PCP)
  - **Expected outcome**
  - **Scope**

How is the proposal structured?

PART A

- **Abstract, administrative data of consortium, budget table**

In addition

- Researchers table – needed to follow up researchers careers (HE indicator)
- Role of participating organisations
- *Self-declaration on gender equality plan*
- Ethics self-assessment
- Security questionnaire (NEW! in all HE proposals)
- Information on participants' previous activities related to the call

PAGE LIMIT! 45 pages (RIA) / 50 pages for topics using lump sum funding
(including title page and list of participants)


Instructions, please remove
Horizon Europe Programme
Standard Application Form (HE RIA and IA)
Project proposal – Technical description (Part B)
Version 3.2
15 November 2022

How is the proposal structured?

PART B

- **Excellence**
- **Impact**
- **Quality and efficiency of the Implementation**

In addition:

- Glossary of terms to ensure consistency
- Extensive explanations on what exactly should be included in each section
- Annexes: Security Template and eligibility table + Lump Sum table (when relevant)


Instructions, please remove
Horizon Europe Programme
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Project proposal – Technical description (Part B)
Version 3.2
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Excellence

B1. Excellence

1. Excellence

1.1 Objectives and ambition (4 p.)

1.2 Methodology (15 pages)

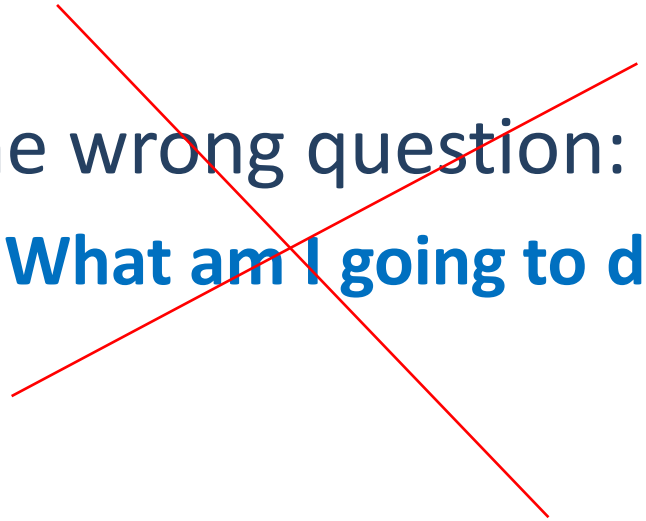
B1.1 Objectives & Ambition

- **Overall aim =>Short introductory paragraph answering 5 KEY QUESTIONS**
  - Which problem are you trying to solve?
  - Is it a European priority or could it be solved at national level?
  - Is the solution already available?
  - Why now?
  - Why you? Are you the best consortium to do this work?
- **2-3 OVERALL OBJECTIVES**
- **Specific objectives (not more than 5)**

Objectives ≠ activities!

- The right question:
  - **What do I plan to achieve?**

- The wrong question:
  - **What am I going to do?**



S M A R T OBJECTIVES

S specific, concrete

- What **exactly** are you going to achieve?
- Is the objective written in a clear and **comprehensible** way?

M measurable

- How can you tell if the objective is reached?
- Are there clear **indicators** or **parameters** to measure the objective?

A acceptable

- Acceptance of project results by stakeholders?
- Do the objectives provide an **acceptable solution** to the problem?

R realistic

- Is the objective **achievable**, given the time and resources committed?

T timely

- **When** will the objectives be achieved?

Suggestions:

- There is usually **one main**, overarching goal ("***overall objective***“) and **several subordinate** , more specific goals ("***specific objectives***“). You should list both.
- To a certain extend, the **project objectives are usually already included in the topic text** (see: *scope, expected outcome*.), sometimes explicitely listed, sometimes more implicit.
- The objectives are a result of the selected topic and the *concept and approach* the consortium has chosen for its project.

B1.1 Objectives and Ambition (4 pages)

- Objectives should be consistent with the expected/identified exploitation and impact of the project

- Describe the specific objectives for the project, which should be **clear, measurable, realistic and achievable** within the duration of the project.

- 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.

- 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.

- Describe the ground-breaking nature of the objectives, concept , trans-disciplinarily considered. innovation potential…

Suggestions– AMBITION: *Beyond the state-of-the-art*

- **Present situation vs future situation** (also post-project!)
- **Innovation potential of the project results**
- **Comparative tables** (present vs future)
- **Abbreviations, acronysms** (need to be explained)

Methodology…

- The right question:
  - **How will the objectives be reached?**
- The wrong question:
  - **What exactly and when will it be done?**

1.2 Methodology (15 pages)

- 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**; =***EXPLOITABLE RESULTS***

- 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.

1.2 Methodology (15 pages)

- 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.

1.2 Methodology (15 pages)

- **Research data management and management of other research outputs**
- **Types of data/research outputs** (e.g. experimental, observational, images, text, numerical) and their estimated size
- **Findability of data/research outputs:** Types of persistent and unique identifiers (e.g. digital object identifiers) and trusted repositories that will be used.
- **Accessibility of data/research outputs:** IPR considerations and timeline for open access (if open access not provided, explain why); provisions for access to restricted data for verification purposes.
- **Interoperability of data/research outputs:** Standards, formats and vocabularies for data and metadata.
- **Reusability of data/research outputs:** Licenses for data sharing and re-use (e.g. Creative Commons, Open Data Commons); availability of tools/software/models for data generation and validation/interpretation /re-use.
- **Curation and storage/preservation costs; person/team responsible for data management and quality assurance.**

Excellence: Practical Example

SO2: Establish multi-actor regional platforms adopting structured and continuous co-creation approaches, aiming at remove barriers to the adoption and implementation of research results and small-scale bio-based solutions.

How? In each region addressed in the project, a collaborative, multi-actor and permanent "platform" [redacted] will be established involving farmers and foresters, clusters, policymakers, companies, business support organisations, NGOs, and any other key player in the regional bioeconomy system. Each [redacted] *Regional Facilitator* (involved in the consortium as "knowledge holder") together with its local *Hub Contact Point,* (defined in this stage, members of the Advisory Board - AB) and other stakeholders of the Regional Hub will co-create, co-decide and co-design the 2 value chains on which defining the Action Plan (T3.2) to be implemented (and monitored, T3.3) and the strategy to make the Hub sustainable after the end of the project (T5.4). The regional stakeholders will co-design recommendations and new actionable knowledge (T5.2); exchange and learn about best practices from other Regional Hubs and with other external regions [redacted] *Followers*, T3.4); measure impacts of the project (T5.1). Finally, the whole [redacted] approach, methodology and results will be packaged to be easily adapted and replicated in other regions.

ExRes: *a.l. 270* stakeholders involved in *9* Regional Hubs, meeting *a.l. 3* times (D3.3); *3* European Mobilisation and Mutual Learning (MML) Workshops, *a.l. 150* participants in total (D3.4); *9* strategies to ensure self-sustainability to the Regional (D5.5); *1* publication with recommendations and actionable knowledge (D5.3); *1* [redacted] Replication Manual (D5.5).

Pertinence: "Establish regional platforms […] (including non-governmental organisations, etc.)"; "However, there are barriers to the adoption and implementation […] to develop their bio-based economies […]".

SO3: Empowering regions to provide a tailored and independent support to innovators to accelerate the adoption and market penetration of bio-based solutions, also easing the participation of the regional platforms in European networks relevant for the sector and the creation of new partnerships.

How [redacted] will empower each Regional Hub on how to provide support to innovators, in order to transfer knowledge to the local key actors and enabling them to keep offering services also after the end of the project. Assisted by its own Regional Facilitator and other member of the consortium, each hub will be: ***mentored*** in the definition, daily implementation and monitoring of its Action Plan (T3.2-3.3), as well as in the design and realization of activities aimed to ease the adoption of the small-scale bio-based solutions in the regions (networking events & study visits, T4.3-4.4); ***coached*** on bioeconomy, highlighting its potential and impacts, and on how to implement social innovation approaches; ***trained*** on different topics (some of them addressing all Hubs, other selected according to regional needs), e.g. stakeholder engagement, better nutrient recycling in the circular economy, funding opportunities, trends in bioeconomy, etc (T3.1-4.2); ***supported*** to access and benefit of full potential of European networks (ECBF, CCRI, BBI JU-CBE, BIC, EuBioNet, EEN, ENRD, ERRIN, etc.) and to establish new collaborations with other regions (e.g. [redacted] and other initiatives (e.g. other funded projects, EIP-AGRI Operational Groups, etc.). Empowerment services will rely on [redacted] partners' expertise and resources (training course, toolkits, materials, methodologies) developed in previous projects, that will exploited, enriched with new themes/topics and packed to be deployed in different settings/regions/countries thus spreading them.

ExRes: *a.l. 100* topics for training chosen, *>4.000* people trained and *a.l. 1.000* assistance activities (emails exchange, meetings, support, etc.) in total (D4.2); *a.l. 20* Networking Events (*>2.000* participants in total) & *a.l. 18* study visits in total (D4.3-4.4); *a.l. 40* collaborations with other initiatives in 3 years (D6.4) and participation of *a.l.3*[redacted] Followers from a.l. *15* other countries not covered by the consortium (D3.4-4.4).

Pertinence: "Regional platforms for innovation […] regionally available biomass"; "Help transfer training […]in

Ambition: practical example

1.1.3. Ambition and progress beyond the state of the art

The [redacted] project brings advances beyond the State of the Art (SoA) as described in the following:

Table 1 – How C4B goes beyond the State of the Art (SoA)

Challenge 1 – To advance the existing network of stakeholders in the EU biorefinery domain, to include actors from all stages of the chains and to use their knowledge to develop novel business models
SoA: The implementation of innovative business models that balance the share of power and profits in the bioeconomy is a niche reality applied by frontrunners. Primary producers remain a relatively marginalized group in the bioeconomy, with often limited chances to cooperate with the other actors along the bio-based value chains. Moreover, not all types of actors are equally involved in innovation activities related to agriculture, forestry and rural development[4], at the expenses of the primary sector.
[redacted]**beyond the SoA:** The implementation of fair business models in the bioeconomy sector will target a broad audience of business actors (with emphasis of primary producers), policy makers, and other relevant stakeholders through *i)* **mobilization of diverse participants in [redacted] Stakeholder Panel**, *ii)* organisation of co-creation and multistakeholder events, *iii)* **facilitation of implementing sustainable business measures** thanks [redacted] **systematic D&C actions**. Using the MAA, [redacted] will create a cooperative environment [redacted] that will boost the collaboration and the peer-to-peer knowledge exchange among actors, enhancing impact in agricultural and forestry innovation in the longer term.

Suggestions – Description of the overall methodology

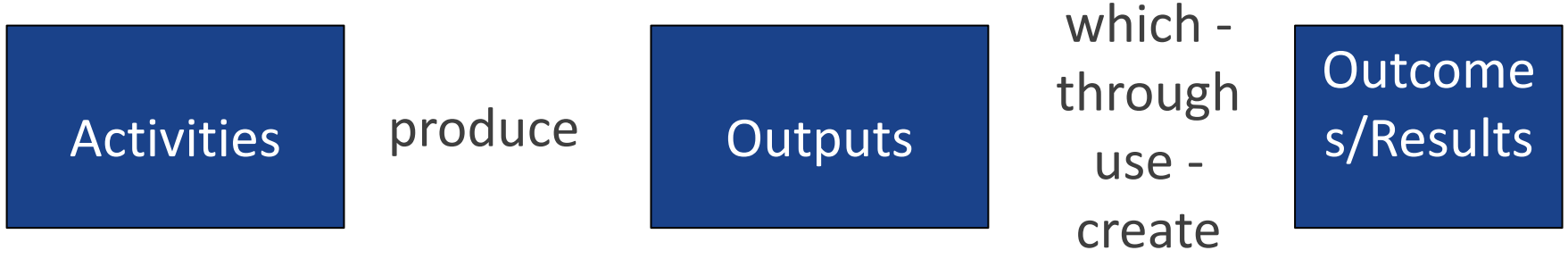
- How will be **solved the problems and needs described?**
- Detailed but **concise** **description of the solution**
- Rational **why the project is composed this way**, in the different stages identified (research, demonstration, etc.)
- **Flow chart** visualizing the phases of the project and their interconnections
- Verify **coherence among objectives, activities, results**

Before going further… ask yourself!:

- Does chapter 1 **create curiosity and stimulates** to carry-on reading?
- Does the **layout** encourage reading (with pleasure)?
- Check **consistency** across chapter 1, and across entire proposal
- Are **abbreviations** explained (when first occuring)?
- Are **figures** self-explanatory (applicants tend to have too many figures in chapter 1, and also the wrong figures!)
- Take an Helicopter view on the proposed project: **do you get all required information? What is missing? What is overdone?**

Impact

From project activities to impact



OUTCOME/RESULT =what happens, if our **target group uses** our outputs!

- they become more knowledgeable (enlightenment!) or
- produce better products or
- reduce the ecological footprint

IMPACT = what happens **by use or non-use** of others than our primary target group (i.e. a 'secondary' or even 'not-intended audience')

What are the project results?

Results

Any tangible or intangible output of the action, such as data, knowledge and information whatever their form or nature, whether they can be protected.*

- Key exploitable results are the **outputs generated during the project which can be used and create impact**, either by the project partners or by other stakeholders

- Project results can be reusable and exploitable (e.g. inventions, prototypes, services) as such, or elements (knowledge, technology, processes, networks) that have potential to contribute for further work on research or innovation

Different kind of impacts

- **Results-oriented impacts**: usually quantitative measurable results (e.g. creation of jobs, new publications, patents, reduction etc.)

- **Behavioural impacts**: changes in the (social, economic, …) behaviour (e.g. changes concerning innovative behaviour, change of environmental behaviour, change of images & awareness etc.)

- **Scientific/Academic/Research:** This avenue generally focuses on the possible publications, conferences, or any other opportunities that can arise as a result of this project to promote the research field.

- **Socio-economic:** Here, researchers often touch on the new possibilities for job creation, important policy outputs, and overall social benefits of their project.

- **Environmental:** Such applications mostly refer to policy papers or guidance documents produced as a result of the research project.

- **Public engagement:** In this selected avenue, researchers describe varying ways to publicly engage through communication strategies, education, media or social media outlets, and user groups.

What evaluators of Horizon Europe proposals are looking for:

The evaluators pay particular attention to:

- Expected impacts described for the topic of the project
- Key performance indicators (KPIs) including target values
- Enhancing innovation capacity and integration of new knowledge
- Strengthening competitiveness and growth of industrial partners by developing and delivering innovations meeting market needs
- Other environmental or social impacts…

They evaluate effectiveness of the proposed measures to exploit and disseminate the project results (including management of IPR), to communicate the project...

2.1 Project's pathways towards impact [e.g., 4 pages]

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.

- 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.

2.1 Project's pathways towards impact [e.g., 4 pages]

- 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.
- 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, etc. 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 [e.g. 5 pages]

- 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).

Please remember that this plan is an admissibility condition, unless the work programme topic explicitly states otherwise. In case your proposal is selected for funding, a more detailed 'plan for dissemination and exploitation including communication activities' will need to be provided as a mandatory project deliverable within 6 months after signature date. This plan shall be periodically updated in alignment with the project's progress.

Communication 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.

Measures to maximise impact

Dissemination, exploitation and communication

To include a draft plan in the proposal is an admissibility condition, unless the work programme topic explicitly states otherwise.

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

Elements of the D&E&C plan

- **Planned measures** to maximise the impact of projects
- **Target groups** (e.g. scientific community, end users, financial actors, public at large) and **proposed channels** to interact
- **Communication measures** for promoting the project and its findings throughout the full lifespan of the project
- **Policy feedback** measures to contribute to policy shaping and supporting the implementation of new policy initiatives and decisions
- Follow-up plan to foster **exploitation/uptake** of the results
  - Comprehensive and feasible strategy for the **management of the intellectual property** (the provision of a results ownership list is mandatory at the end of the project)
  - If exploitation is expected primarily in non-associated third countries, give a convincing justification that this is still in the Union's interest.

Source: EC

Which is the difference between Communication and Dissemination?

Newsletter

Press release

Project factsheet, brochure

Social media (blogs, Twitter, Facebook, LinkedIn)

About the project results

Multiple audience

Inform and **reach out to society**, show the benefits of research

Grant Agreement art. 38.1

Communication

About results only

Audiences that may use the results in their own work

Enable use and **uptake** of **results**

Grant Agreement art. 29

Dissemination

Scientific publications

Policy brief/roadmap

Training/demonstration

Sharing results on online repository (research data, software, reports)

Informing about the project → Informing about the results → Making results available for re-use

Exploitation

- **Utilisation of results**, for scientific, societal or economic purposes
- Groups and entities that are making **concrete use of results**
- **All results generated during** project (exploitation by the project or another entity)
- Grant Agreement art. **28**

Spin-off/Start-up
Product
Patent
PhD thesis/post
Standard
Service
Societal activity
Open/copyleft licenses
Further research
Policy change

2.3 Summary

KEY ELEMENT OF THE IMPACT SECTION

SPECIFIC NEEDS	EXPECTED RESULTS	D & E & C MEASURES
What are the specific needs that triggered this project? Example 1 Most airports use process flow-oriented models based on static mathematical values limiting the optimal management of passenger flow and hampering the accurate use of the available resources to the actual demand of passengers. Example 2 Electronic components need to get smaller and lighter to match the expectations of the end-users. At the same time there is a problem of sourcing of raw materials that has an environmental impact.	What do you expect to generate by the end of the project? Example 1 **Successful large-scale demonstrator:** **Successful large-scale demonstrator:** Trial with 3 airports of an advanced forecasting system for proactive airport passenger flow management. **Algorithmic model:** Novel algorithmic model for proactive airport passenger flow management. Example 2 Publication of a **scientific discovery on transparent electronics.** **New product:** More sustainable electronic circuits. **Three PhD students trained.**	What dissemination, exploitation and communication measures will you apply to the results? Example 1 **Exploitation:** Patenting the algorithmic model. **Dissemination towards the scientific community and airports:** Scientific publication with the results of the large-scale demonstration. **Communication towards citizens:** An event in a shopping mall to show how the outcomes of the action are relevant to our everyday lives. Example 2 **Exploitation of the new product:** Patenting the new product; Licencing to major electronic companies. **Dissemination towards the scientific community and industry:** Participating at conferences; Developing a platform of material compositions for industry; Participation at EC project portfolios to disseminate the results as part of a group and maximise the visibility vis-à-vis companies.

TARGET GROUPS	OUTCOMES	IMPACTS
Who will use or further up-take the results of the project? Who will benefit from the results of the project? Example 1 **9 European airports**: Schiphol, Brussels airport, etc. **The European Union aviation safety agency.** **Air passengers (indirect).** Example 2 **End-users**: consumers of electronic devices. **Major electronic companies**: Samsung, Apple, etc. **Scientific community** (field of transparent electronics).	*What change do you expect to see after successful dissemination and exploitation of project results to the target group(s)?* Example 1 **Up-take by airports:** 9 European airports adopt the advanced forecasting system demonstrated during the project. Example 2 **High use of the scientific discovery published** (measured with the relative rate of citation index of project publications). A **major electronic company** (Samsung or Apple) **exploits/uses the new product** in their manufacturing.	*What are the expected wider scientific, economic and societal effects of the project contributing to the expected impacts outlined in the respective destination in the work programme?* Example 1 **Scientific:** New breakthrough scientific discovery on passenger forecast modelling. **Economic:** Increased airport efficiency Size: 15% increase of maximum passenger capacity in European airports, leading to a 28% reduction in infrastructure expansion costs. Example 2 **Scientific:** New breakthrough scientific discovery on transparent electronics. **Economic/Technological:** A new market for touch enabled electronic devices. **Societal:** Lower climate impact of electronics manufacturing (including through material sourcing and waste management).

Suggestions – Impact, Communication

Ways for communication:

- When to disseminate what (flexibility in the beginning!) -> **attract attention in the beginning, sell results at the end of the project!.**
- Don‘t forget about **collaboration with other (related) projects.**
- Language might be **adapted depending on target group**.
    - **Where to promote the project?** (fairs, conferences, workshops, summer schools,…).
    - **How to promote via internet?** (website, newsletter, webinars, blogs, new social media,…).
    - **Material** to be generated: flyers, articles,…

Use the results from the project…

- Plan to include a clear view on **what is to be published** and **what could be patented** and **who is responsible** for each publication or IPR.

Example

Projects can be **exploited in different ways** according to their characteristics. Some examples:

- *Promote and further excellence in research.*
- *Create spin-offs or start-ups (business plan).*
- *Develop products or processes, services.*
- *Added value of the technology (business case).*
- *Contribute to standardization activities, create networks.*

Impact: Practical Example

Outputs (direct project results)	WP	Outcomes
Improved understanding about which measures should be taken, by EU, Member States, and others to strengthen the innovation ecosystem within and across food systems and bio-based sectors, based on a detailed mapping exercise and on a comprehensive view on issues related to deployment		
Assessment of the relevant information needs of the stakeholders und collecting and integrating their knowledge on the issues identified (min. 1000 stakeholders mapped in database, 16 mapping and analysis workshops, 140 stakeholders involved.) **Results of the mapping of structures, initiatives and instruments** covering key innovation and deployment issues such as financing, collaboration, technology transfer across all EU-regions (number of mapped structures identified per topic: 50 entities from minimum 15 EU countries, 2 reports published, database, dashboard). Integrated knowledge about key **deployment issues** of the bioeconomy (4 scientific publication in peer-reviewed journals related to the key topics).	WP1 WP2 (WP4)	**Improved and comprehensive knowledge base** and **understanding** on key challenges and gaps in the bio-based sectors and food systems and its dissemination **Specific recommendations** and guidelines for policy makers on EU-level (key elements for future Horizon programs, EU Bioeconomy strategy actions, financing instruments etc.), member states, regional or local level to exploit the potentials of the bioeconomy as well as for other stakeholder groups, such as investors (1 report and 7-8 of the events targeting recommendations) **Strengthened innovation ecosystems** for food and bioeconomy thro[illegible] levels an[illegible] accelerat[illegible] **Improve**[illegible] to achiev[illegible] sented E[illegible] events) **Uptake o**[illegible] e.g. introd[illegible] ings with
Improved impact and efficiency of bioeconomy innovation a[illegible]		
ShapingBio will provide **a detailed mapping and analysis on gaps and issues** for the 4 key topics (4 specific topic reports) ShapingBio will enable a better **synergies** between the bio-based and food industries, and the end-consumers, by developing strategies, tools and activities to work together and create synergies (4	WP3 WP4 WP5	Improved[illegible] **tion** of bi[illegible] ties, inno[illegible] vestors. ([illegible] rate of re[illegible] Network [illegible] by Shapi[illegible] (event pa[illegible] nities:70%

Outputs (direct project results)	Outcomes	Impacts
Innovative governance models enabling sustainability and resilience notably to achieve better informed decision-making processes, societal engagement and innovation.		
[redacted] contributes to new innovative governance by integrating and directly bringing together stakeholders from different types, sectors, countries in order to elaborate new solutions. By mapping and communicating structures and initiatives those advances and structures are actively communicated to interested actors (6 different tools / channels for dissemination, see table 5) [redacted] will provide suggestions of key elements for the future Horizon programmes as well as the EU Bioeconomy Strategy such	[redacted] will improve transparency as basis of better decision making processes by making the mapped knowledge more available and accessible (see individual targets for channels /tools in table 5) Through the dedicated mapping of strengths and weaknesses, actors in macro-regions can deduce new strategies and establish collaborations (5 number of new strategies	The innovative governance will contribute to improve resilience of European food and bioeconomy systems in the face of external shocks and disruptions, as the network and communication channels between the actors are strengthened The project will create linkages across different levels of governance, so actions taken

Quality and efficiency of the implementation

3.1 Work plan and resources [e.g.,14 pages – including tables]

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);

Give full details. Base your account on the logical structure of the project and the stages in which it is to be carried out. The number of work packages should be proportionate to the scale and complexity of the project.

You should give enough detail in each work package to justify the proposed resources to be allocated and also quantified information so that progress can be monitored, including by the Commission

Resources assigned to work packages should be in line with their objectives and deliverables. You are advised to include a distinct work package on 'project management', and to give due visibility in the work plan to 'data management' 'dissemination and exploitation' and 'communication activities', either with distinct tasks or distinct work packages.

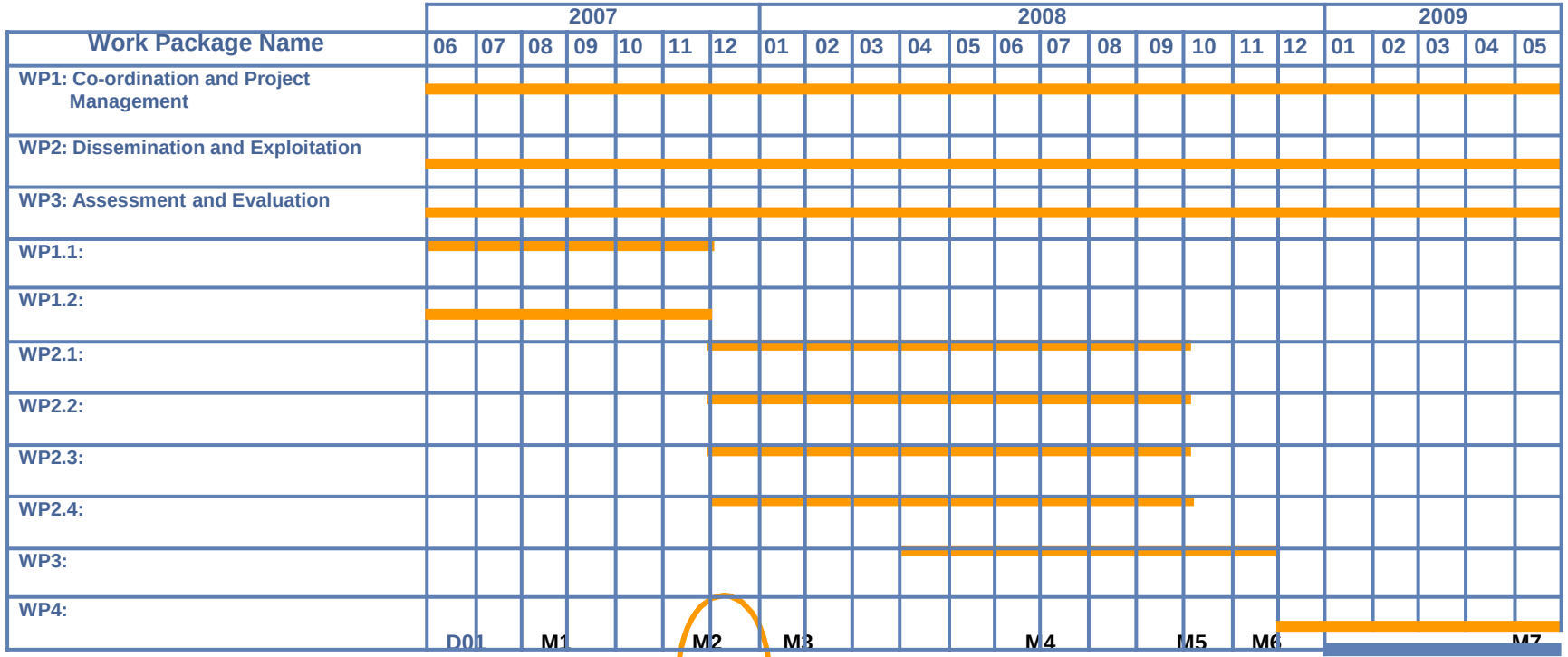
You will be required to update the 'plan for the dissemination and exploitation of results including communication activities', and a 'data management plan', (this does not apply to topics where a plan was not required.) This should include a record of activities related to dissemination and exploitation that have been undertaken and those still planned.

Please make sure the information in this section matches the costs as stated in the budget table in section 3 of the application forms, and the number of person months, shown in the detailed work package descriptions.

Work plan – Timing => Gantt Chart

from simple/Excelsheet……

Example



APRE

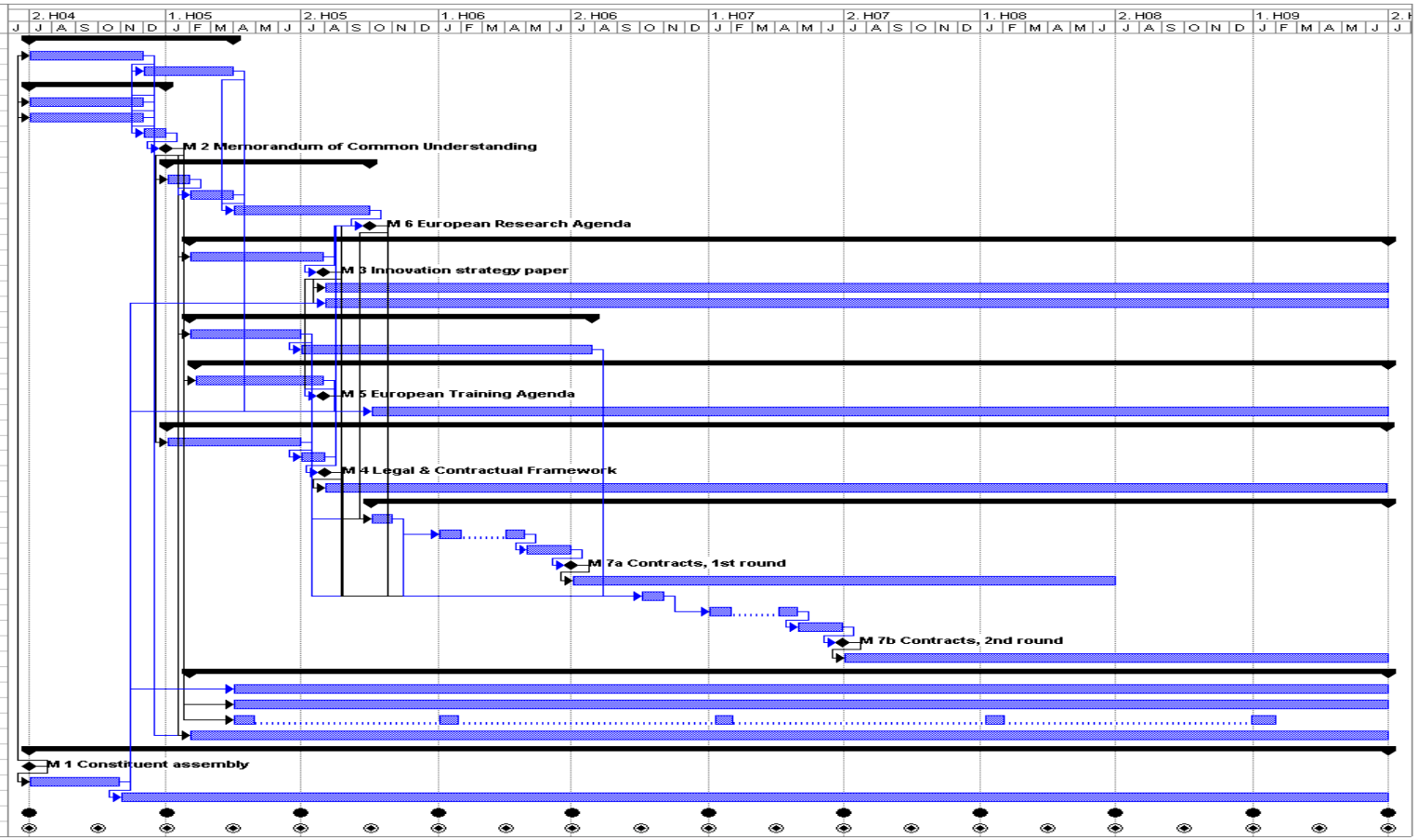
European Commission

Work plan – Timing => Gantt Chart

….to complex management tools….

Example

Nr.	Task
1	**WP 1 Status-quo of partner programmes**
2	T 1.1 Survey on the national programmes
3	T 1.2 Interactive Information System
4	**WP 2 Knowledge base for RTD strategies**
5	T 2.1 Programmes in / Cooperation with third countries
6	T 2.2 Foresight studies on future challenges
7	T 2.3 Policy-maker workshop
8	M 2 Memorandum of Common Understanding
9	**WP 3 Strategic and analytic activities**
10	T 3.1 "Kick-off" strategy meeting
11	T 3.2 Indepth discussions with high-level experts
12	T 3.3 Feedback from Scientific Community
13	M 6 European Research Agenda
14	**WP 4 Economic exploitation and job creation**
15	T 4.1 SMEs/industry working group
16	M 3 Innovation strategy paper
17	T 4.2 Supporting network of innovation partners
18	T 4.3 Web-market place for innovations
19	**WP 5 Support for transnational consortium building**
20	T 5.1 Partnering Workshop
21	T 5.2 Satellite workshop to 2nd FEMS conference
22	**WP 6 Human resources development and mobility**
23	T 6.1 Working Group on training issues
24	M 5 European Training Agenda
25	T 6.2 Student & scientist exchange and career forum
26	**WP 7 Management concept and tools**
27	T 7.1 Transnational working groups
28	T 7.2 Workshop for common understanding
29	M 4 Legal & Contractual Framework
30	T 7.3 Transnational task force of programme managers
31	**WP 8 Implementing transnational activities**
32	T 8.1 1st joint call for proposals
33	T 8.2 1st transnational evaluation
34	T 8.3 1st project selection
35	M 7a Contracts, 1st round
36	T 8.4 Project execution, 1st round
37	T 8.1 2nd joint call for proposals
38	T 8.2 2nd transnational evaluation
39	T 8.3 2nd project selection
40	M 7b Contracts, 2nd round
41	T 8.4 Project execution, 2nd round
42	**WP 9 Science and society issues**
43	T 9.1 Communication/information platform for the public
44	T 9.2 Printed information materials
45	T 9.3 On-spot-presentations
46	T 9.4 Strategic supervision with regard to FP 6
47	**WP 10 Consortium management**
48	M 1 Constituent assembly
49	T 10.1 Set up of working infrastructure
50	T 10.2 Overall coordination
51	**NSC Meetings**
63	**EB Meetings**



APRE

Work plan – Pert Diagram

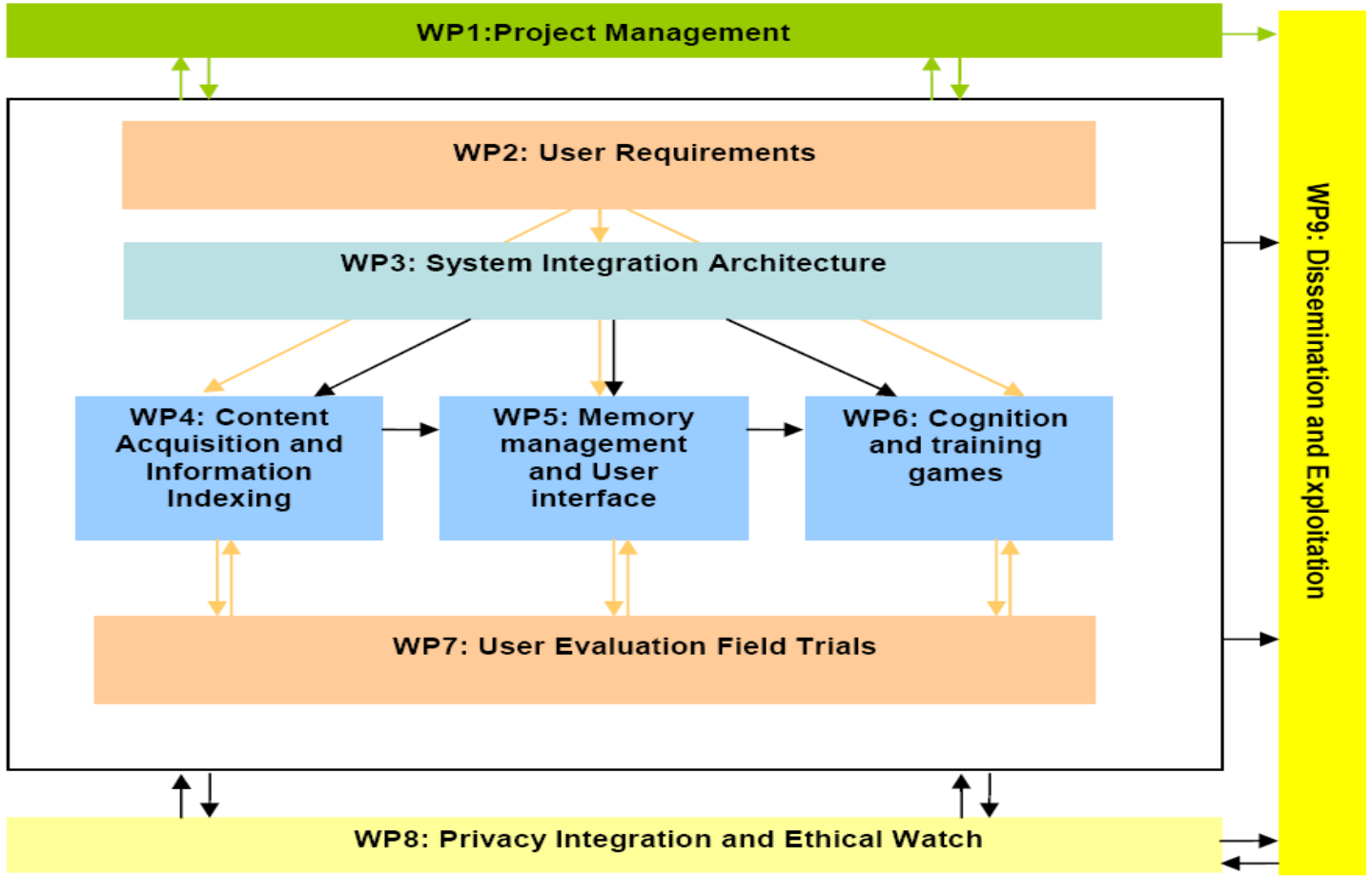


Figure 3: PERT Diagram

Work plan – Work packages

Tipp: Maximum 3 pages per Workpackage!

Table 3.1a: Work package description (For each work package):

Work package number		Start Date or Starting Event					
Work package title							
Participant number							
Short name of participant							
Person/months per participant:							

Objectives → SMART, short Bulletpoints, in line with objectives in Part 1!!!

Description of work (where appropriate, broken down into tasks), lead partner and role of participants → Detailed description of tasks (with Taskleader!) to achieve objectives

Deliverables (brief description and month of delivery) → Results of the tasks, optimal 1 Deliverable per Task

Work plan – Deliverable

Definition: Deliverable

- Distinct output / **concrete result of the project** / WP / task
- meaningful **in terms of the project's overall objectives**
- constituted by a report, a document, a technical diagram, software etc
- Every deliverable **has to be** delivered – **so be sure you can deliver it!**
- **TIPP: maximum 5 -7 per WP**

Good examples:

- *Report on synthetic production of compound x*
- *Results of metabolomics for neurodegeneration-protein mouse models*
- *Project quality procedures established*
- *Study report demonstrating clinical efficacy over 3 months*

3.1 Work plan and resources *[e.g. 14 pages – including tables]*

Please provide the following:

- 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).

Work plan – Milestones

Definition:

- ❑ Structure project into **important periods** or **interim goals**
- ❑ **Control points** in project, help to chart progress

- *Status of the project?*
- *Aims achieved so far?*
- *Need for change of direction?*

Table 3.2a: List of milestones

Milestone number	Milestone name	Related work package(s)	Estimated date	Means of verification

KEY

Estimated date
Measured in months from the project start date (month 1)

Means of verification
Show how you will confirm that the milestone has been attained. Refer to indicators if appropriate. For example: a laboratory prototype that is 'up and running'; software released and validated by a user group; field survey complete and data quality validated.

- ❑ **Aims achieved** so far?
- ❑ May **correspond to completion of key deliverable**.
- ❑ Mark critical **decision point / turning points**.

Risk Management

The risks will be controlled by:

- The coordination responsibility within large WPs being clearly divided up between WP Leaders and Task/Sub-task Leaders that represent the special excellence in the field of the particular tasks.
- Regular intercommunication, review and reporting on progress within WPs (by WP Leaders and Task/Sub-task Leaders);
- The identification and prioritization of risks inherent in the project;
- Selecting the appropriate risk management approaches and avoiding risks that the project is not competent to or willing to manage;
- Implementing controls to manage the remaining risks;
- Learning from experience and making improvements to the project.

Example

Specific risks and contingency plans:

Possible risk	*Contingency plans*
Under- or over-estimate work load.	Management team discussion and adaptation of the work plan, in agreement with the scientific officer, for deliverables and milestones.
Insufficient communication and data/and material delivery between partners.	Improved communication infrastructure. Extra meetings (face-to-face, telephone, Skype conferences).
Conflicts within the Consortium.	Evaluated reasons and try to resolve. If necessary, use of a mediator from outside to solve disagreements.
Trial site and personnel changes	Commitment letter undersigned by partners. Management team discussions. Reorganization of project activities in agreement with the scientific officers.
SMEs interests and economical situation changing	Careful selection of SME Partners, replacing some of SME work and/or adaptation of work plan .
Project timescales are too short to get data on slow-growing species. Delay in trials.	WP1 and WP2: – Planting of the slowest-developing species prior to the project's commencement date. Adapt timetable, in agreement with the scientific officer. If delay is extreme, replacement of trial with other

3.2 Capacity of participants and consortium as a whole *[e.g. 3 pages]*

The individual members 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.
- 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.

Consortium as a whole – Skills matrix

Example

	Coordinator	Partner 2	Partner 3	Partner 4
Project Management	X			
Technology Domain 1	X		X	
Technology Domain 2		X		
Technology Domain 3			X	X
Technology Domain n				X
Dissemination	X	X	X	X

Consortium as a whole

Questions to ask and describe:

- Describe how the consortium as a whole will **achieve the project aims**.
- Describe **why these partners** are necessary to achieve the project aims.
- Describe the **partner‘s special skills** relevant to the project.
- Describe the **complementarity** of the partners.
- Describe the **balance** of the consortium.
- Describe how **many SME/industry partners** are involved: tasks, status, budget
- Describe how the **(commercial) exploitation of results** will be ensured.
- Describe (if applicable) why **partners from other industrial or third countries** need to be involved – especially if you are asking for funding for third country partners!.

What should I consider when forming a consortium?

The **most important criteria** are **excellent qualifications and experience of your partners** in their field of research.

- Just like the project itself, the **consortium needs to demonstrate** its **European dimension**. Try to **avoid strong geographic asymmetries**, i.e. the majority of partners coming from one particular country. However, **don‘t just add partners for reasons of regional coverage**.

- The **individual partners** need to have **clearly defined roles and tasks within the project**. Their **expertise and skills** should be **crucial and complementary** rather than additive.

- Depending on the **challenges** and **requirements** of the project, a **successful team** should consist of **partners from different backgrounds** (**academia, industry, user groups**) to **maximize impact**.

- Where **relevant, cross cutting aspects**, such as **gender dimensions** or the **integration of social sciences** and **humanities** should be taken into account.

Proposal Part A

Section 4 'Ethics Issues Table' – 10 Questions:

1. HUMAN EMBRYONIC STEM CELLS AND HUMAN EMBRYOS			Page
Does this activity involve Human Embryonic Stem Cells (hESCs)?		○ Yes ○ No	
If YES:	Will they be directly derived from embryos within this project?	○ Yes ○ No	
	Are they previously established cells lines?	○ Yes ○ No	
	Are the cell lines registered in the European registry for human embryonic stem cell lines?	○ Yes ○ No	
Does this activity involve the use of human embryos?		○ Yes ○ No	
If YES:	Will the activity lead to their destruction?	○ Yes ○ No	
2. HUMANS			Page
Does this activity involve human participants?		○ Yes ○ No	
If YES:	Are they volunteers for nonmedical studies (e.g. social or human sciences research)?	○ Yes ○ No	
	Are they healthy volunteers for medical studies?	○ Yes ○ No	
	Are they patients for medical studies?	○ Yes ○ No	
	Are they potentially vulnerable individuals or groups?	○ Yes ○ No	
	Are they children/minors?	○ Yes ○ No	
	Are they other persons unable to give informed consent?	○ Yes ○ No	
Does this activity involve interventions (physical also including imaging technology, behavioural treatments, etc.) on the study participants?		○ Yes ○ No	
If YES:	Does it involve invasive techniques?	○ Yes ○ No	
	Does it involve collection of biological samples?	○ Yes ○ No	
Does this activity involve conducting a clinical study as defined by the Clinical Trial Regulation (EU 536/2014)? (using pharmaceuticals, biologicals, radiopharmaceuticals, or advanced therapy medicinal products)		○ Yes ○ No	

If 'yes' for any questions, ethic-self assessment to be completed in Part A *(next slide)*

Proposal Part A — Section 4 'Ethics Issues Table' – Explanation:

ETHICS SELF-ASSESSMENT

If you have entered any issues in the ethics issue table, you must perform an ethics self-assessment in accordance with the guidelines "How to Complete your Ethics Self-Assessment" and complete the table below.

Ethical dimension of the objectives, methodology and likely impact
Explain in detail the identified issues in relation to: – objectives of the activities (e.g. study of vulnerable populations, etc.) – methodology (e.g. clinical trials, involvement of children, protection of personal data, etc.) – the potential impact of the activities (e.g. environmental damage, stigmatisation of particular social groups, political or financial adverse consequences, misuse, etc.)
Compliance with ethical principles and relevant legislations
Describe how the issue(s) identified in the ethics issues table above will be addressed in order to adhere to the ethical principles and what will be done to ensure that the activities are compliant with the EU / national legal and ethical requirements of the country or countries where the tasks are to be carried out. It is reminded that for **activities performed in a non-EU countries**, they should also be allowed in at least one EU Member State.

Explanation about how you will deal with your Ethics issues in the proposal

Provide appropriate documents as evidence

If not, timeframe for approvals/ authorizations

Finally…

From the evaluator perspective

Criterion	DO	DON'T
Excellence	Define objectives clearly. Be ambitious, but stay realistic. Choose appropriate methodology. Choose relevant partners and reliable coordinator. Put effort on describing the state-of-art and proof of concept. Create links with previous networks/projects and relevant policies. Engage interdisciplinary expertise. Stay accurate, concise throughout the proposal Bring out the innovation potential. If something stays unclear, contact your NCP.	Don't rush; poorly prepared proposal ruins even the most excellent plans. Don't repeat something what is already done. Don't forget to include partners from differe regions, disciplines, stakeholder groups to compose a balanced consortium. Don't forget to show the credibility of your consortium. Don't hesitate to provide detailed descriptio about your methodology, technical solution etc. Superficial description of the processes is often brought out as a major shortcoming If you have a novel approach – don't forget to describe it thoroughly and to support it with relevant references.

From the evaluator perspective

Impact	When planning be concrete and precise. Quantify as much as possible. Use financial figures and develop a business model and/or business plan. Elaborate a convincing commercialisation plan. Take into account all the expected impacts described in the topic. Expected impacts should be derived and justified on previous results. Plan a good cooperation with end users from the beginning of the project. Involve policy makers, SMEs and industry in the proposal or plan a sustainable cooperation with them. Describe industrial uptake of research results in details. Develop an excellent dissemination plan (with diverse dissemination measures). Address adequately and clearly explain dissemination of project results. Ask for evaluation of impacts (by professionals). Ask NCPs for cooperation.	Don´t list irrelevant and unreal impacts. Don´t try to be very optimistic as it may cause the lack of credibility. Don´t use general descriptions, without any specific focus. Don´t use a weak or general analysis of the market and competition. Don´t miss concrete market details: potential market volumes, which markets, specific products, prices, etc. Don´t copy proposal´s parts (mainly IPR management) from your previous project proposals. Don´t forget that the impact should be related to the particular concept, not to the call fiche. Don´t repeat (or copy) required impact from the call instead of development of your own proposal content. Don´t confuse dissemination with communication or exploitation. Don´t forget to use concrete information about expected environmental savings.

From the evaluator perspective

Implementation	Concrete and precise planning. Details and Quantification. Use Tables. Well-timed tasks and activities with well-balanced allocation to partners. Well-balanced and justified resources and budget. Consortium with partners who complement and synergize well in expertise and tasks. Consultation with NCP.	Don't use repetitions from within the text of the proposal. Don't do "copy-pastes" from other/ previous proposals. Don't forget the details - unsubstantiated/ unreferenced content/ figures/ numbers are causing a negative impression. Don't take beneficiaries/ Partners who are "joyriders" with no significant role and tasks. Don't plan vague Deliverables and Milestones. Lack of "Plan B" and contingency measures.

thank you

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