

CAFÉ CON TUS NCPs

Escritura de la parte técnica B1 Convocatoria MSCA PF 2021

22-23/07/2021



Part B- Excellence

EXCELLENCE (50%)
Quality and pertinence of the project's research and innovation objectives (and the extent to which they are ambitious, and go beyond the state of the art)
Soundness of the proposed methodology (including interdisciplinary approaches , consideration of the gender dimension and other diversity aspects if relevant for the research project, and the quality and appropriateness of open science practices)
Quality of the supervision, training and of the two-way transfer of knowledge between the researcher and the host
Quality and appropriateness of the researcher's professional experience , competences and skills

B.1.1 Quality and pertinence of the project's research and innovation objectives (and the extent to which they are ambitious, and go beyond the state of the art)

- Introduction and state-of-the-art: do not write an abstract, **write an introduction** (do not start with: “This research project focuses on...”, but “Since Einstein’s ground-breaking theory of relativity, curvature of space is ...” – draw the **bigger picture** and raise curiosity
- Objectives (i.e. research goals) and overview of the action (Research work packages should be mentioned here): describe your research goals and how they are embedded into your work plan
- Number the objectives O1, O2, O3 ect. and connect the with the research WP
- Are they measurable and verifiable? Are they realistically achievable?

B.1.1 Quality and pertinence of the project's research and innovation objectives (and the extent to which they are ambitious, and go beyond the state of the art)

- Originality and innovative aspects of the research programme → how does the research project contribute to the advancement of the field?
- New analysis, concepts, methods that will be implementated; collaboration with non-academic sector...
- use words like “novel”, “innovative”, “first-time”, “advance”, “inter-multidisciplinary”)

B.1.2 Soundness of the proposed methodology (including interdisciplinary approaches, consideration of the gender dimension and other diversity aspects if relevant for the research project, and the quality and appropriateness of open science practices, including sharing and management of research outputs and engagement of citizens, civil society and end users, where appropriate)

- Describe overall methodology + concepts, models and assumptions
 - Describe how the research will be carried out
 - Highlight the experiments, techniques and equipment that will be used
 - Each method/steps described connect with the relevant WP (in brackets)
- Challenges related with you project idea and how you will overcome
- Interdisciplinary: How methods and expertise will help you
 - Demonstrate how the research will go beyond the discipline that is strictly yours
 - Highlight the key interdisciplinary aspects of your proposal (research methodology, supervision, dissemination)

B.1.2 Soundness of the proposed methodology (including interdisciplinary approaches, consideration of the gender dimension and other diversity aspects if relevant for the research project, and the quality and appropriateness of open science practices, including sharing and management of research outputs and engagement of citizens, civil society and end users, where appropriate)

- Gender dimension in research content means integrating sex and gender analysis into research.
- In other words, taking into account biological characteristics (sex) and social/cultural features (gender) of both women and men in R&I.
- Does it matter whether test persons are male or female?
- Will the results affect male and females in the same way?

RESOURCES



[Understanding gender dimension in MSCA Projects](#)
EU Science and Innovation



[Trinity Centre for Gender Equality and Leadership](#)

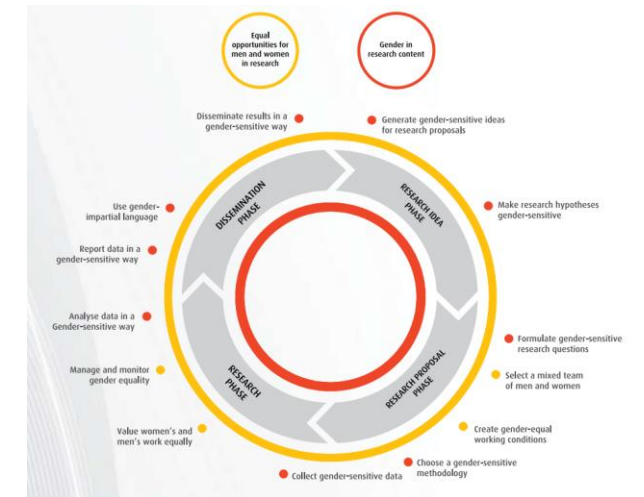


[What is the gender dimension in Research?](#)

Cases studies by Trine Rogg Korsvik &
Linda M. Rustad



[GE Academy repository](#)



[Checklist for Gender in Research](#)



Gender dimension in R&I content

Gender Dimension

Addressing the gender dimension in research and innovation entails taking into account sex and gender in the whole research & innovation process.

The **integration of the gender dimension** into R&I content is **mandatory**, unless it is explicitly mentioned in the topic description

Why is gender dimension important?

- Why do we observe differences between women and men in infection levels and mortality rates in the COVID-19 pandemic?
- Does it make sense to study cardiovascular diseases only on male animals and on men, or osteoporosis only on women?
- Does it make sense to design car safety equipment only on the basis of male body standards?
- Is it responsible to develop AI products that spread gender and racial biases due to a lack of diversity in the data used in training AI applications?
- Is it normal that household travel surveys, and thus mobility analysis and transport planning, underrate trips performed as part of caring work?
- Did you know that pheromones given off by men experimenters, but not women, induce a stress response in laboratory mice sufficient to trigger pain relief?
- And did you know that climate change is affecting sex determination in a number of marine species and that certain populations are now at risk of extinction?

B.1.2 Soundness of the proposed methodology (including interdisciplinary approaches, consideration of the gender dimension and other diversity aspects if relevant for the research project, and the quality and appropriateness of open science practices, including sharing and management of research outputs and engagement of citizens, civil society and end users, where appropriate)

- Applicants and beneficiaries should respect the Horizon Europe strategic priority of Open Science.
- Open Science also provides significant new **opportunities for researchers to disseminate**, share, explore and collaborate with other researchers.
- Describe how the **Open Science** is integrated in your methodology.
- <https://ec.europa.eu/digital-single-market/en/news/open-innovation-open-science-open-world-vision-europe>
- Include **Research Data Management**.
 - <https://www.youtube.com/watch?v=CuINFhY66-Y&t=214s>
 - <https://www.youtube.com/watch?v=4jvAzT0lvlo&t=6688s>



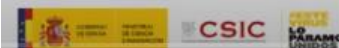
[Open Innovation, Open Science, Open to the World](#)

European Commission

Datos sobre el curso “Los fogones de los datos”

Fecha de impartición (online): 2 junio de 2021

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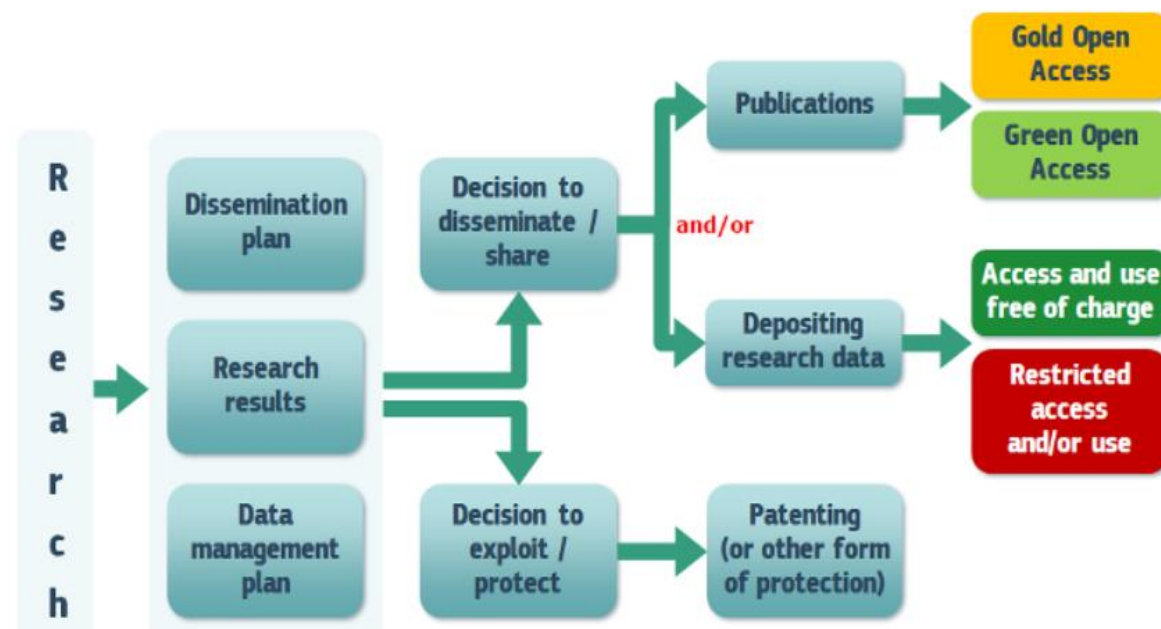


[Curso “Los fogones de los datos, como elaborar un Plan de Gestión de Datos”](#)

[Curso “Gestión y planificación de datos de investigación para afrontar los requerimientos de Horizonte Europa”](#)

Courses on **Research Data Management**, organized by Fundación Madrimasd para el Conocimiento

- **Immediate open access through trusted repository** (at the latest at the time of publication)
- Information provided via the repository about any **research output, tool, or instrument** needed to validate the conclusions of a publication;
- Beneficiaries/authors must retain sufficient IPR to comply with their OA requirements
- Only publication fees (if any) in full open access venues for **peer-reviewed scientific publications** are eligible for reimbursement.
- Open access to research data ‘**as open as possible as closed as necessary**’, i.e. there can be exceptions to open access to research data.





Open Science across the programme

Open Science

Open science is an approach based on open cooperative work and systematic sharing of knowledge and tools as early and widely as possible in the process. Including active engagement of society

Mandatory immediate Open Access to publications: beneficiaries must retain sufficient IPRs to comply with open access requirements;

Data sharing as 'open as possible, as closed as necessary': mandatory Data Management Plan for FAIR (Findable, Accessible, Interoperable, Reusable) research data

- Work Programmes may incentivize or oblige to adhere to **open science practices** such as involvement of citizens, or to use the **European Open Science Cloud**
- Assessment of open science practices through the **excellence award criteria** for proposal evaluation. Under **quality of participants** previous experience on open sciences practices will be evaluated positively.
- Dedicated support to **open science policy actions**
- **Open Research Europe** publishing platform

Important aspects apart from the mentioned sub-criteria

Strengths

- Inter/multidisciplinary as well as innovative aspects are emphasized distinctively
- Research methodology is attuned to the research object and objectives explicitly
- Introduction is a launch to the overall topic, not an abstract of the proposal
- Brief mentioning of potential risks of the research project

Weaknesses

- Lack of current state-of-the-art; most recent international results/developments are not mentioned
- Methodology is described in no satisfying conjunction with the objectives; pros and cons of the methodology are not explained explicitly enough
- Description of advancement of the field is missing
- No potential risks are mentioned (briefly)

B.1.3 Quality of the supervision, training and of the two-way transfer of knowledge between the researcher and the host

- Qualifications and experience of the supervisor(s) - [Guidelines on Supervision](#)
- Track record (academic positions – short)
- Level of experience on the proposed research topic
- How many publications (number) + most important journals?
H-Index? Any major patents?
- Major international collaborations + renowned prices/awards/grants
- How many PhD students/postdocs so far? → “success stories” - are they in leading positions now?

Describe also supervisors in **Global fellowship, secondment supervisor**

....

Co-supervisors – can be the member of the same team of the main supervisor

Role of the supervisor in **Career development plan**
- Mention review of CDP every 6 months, meeting schedules, meetings, open door policy

Integration of the researcher to new research environment (international research group, collaboration opportunities, technical support)

B.1.3 Quality of the supervision, training and of the two-way transfer of knowledge between the researcher and the host

- Training in detail: Scientific / Transferable

Separate subchapters for:

1. Scientific skills
 2. Transferable skills
 3. Transfer of knowledge from the researcher to the host
- How will the researcher acquire new scientific skills and transferable skills?
 - Relevance and quality of the additional scientific education and the training of transferable skills. Be Innovative.
 - **Global Fellowship:** How will the newly acquired skills be transferred back to the European host institution?
 - **Intersectoral – interdisciplinary training** during the secondment (why, when, what knowledge)

B.1.3 Quality of the supervision, training and of the two-way transfer of knowledge between the researcher and the host

- Mention the Career Development Plan (will become a deliverable of the project if funded)
- **Two / Three way transfer of knowledge** between the researcher and host organisation
- What **new knowledge researcher will gain** during the fellowship and how it will be acquired (staff development programmes, workshops, seminars, online courses, internal meetings,)
- Outline **previously acquired knowledge and skills** that the researcher will transfer to organisation
- **Transfer of special scientific (unique) expertise** to the host organisation via teaching and mentoring undergraduates and PhD students
- Providing **new network opportunities** for the host institution

Scientific skills:

- Which new techniques and methods will be acquired?
- How will they be acquired? Through research or through specific courses?
- Training on “Research integrity”, “big data/open science”, digital techniques, tools, new techniques

Transferable skills (examples):

- Teaching as well as tutoring/mentoring of students and doctoral candidates (→ leadership/communication skills)
- Project/Financial/Organisational Management (project planning, organisation of a conference)
- Development and organisation of follow-up projects (fundraising, proposal writing)
- Acquisition/Development of abilities in working in an international environment (communication, building networks)
- Business thinking (through your own project)
- Handling IPR, training in patent law, course in gender awareness

Some things to consider:

- Adjust training and transfer of knowledge to **the specific needs** of the researcher and the host organisation
- **“Doing more with less”** - concentrate on a few training activities you really need instead of trying to be trained in everything → unrealistic
- **Acquire management and leadership skills** → you will need them in your (non-) academic future as an independent and mature researcher
- Why is the host institution the **perfect match** regarding your accumulated (scientific and transferable) needs?
- How can your expertise promote the host institution?

Frequently expressed criticism:

- Description of training aspects too short (how the goals will be achieved)
- Transferable skills are not described significantly enough (holistic development of the researcher is important, not only scientific development)
- Lack of a concrete training scheme and its phases
- Lack of indicators/milestones to screen the training progress
- Training scheme is too ambitious
- Particular training elements are missing (esp. secondment to the industrial sector if possible/appropriate)

B.1.4 Quality and appropriateness of the researcher's professional experience, competences and skills

- Research experience and results
- International publications (first authorships/single authorships)
- Experience in project implementation/management
- Fellowships/awards
- Experience in supervision/teaching
- Experience in the industrial sector
- International collaborations

Explain why:

- Your scientific background is unique
- You have excellent potential
- You are perfectly able to carry out the project
- You would greatly benefit from this project

Self-description:

- Do not be too modest (but stay authentic), your competitors are not modest either
- Describe your individual achievements and potential

Explain why:

- your scientific background is (to a certain degree) unique
- you have excellent potential
- you are perfectly able to carry out the project
- you would greatly benefit from this project

Example:

7 publications so far → 4 more during the fellowship

xy international cooperation projects so far → new networks

No supervision/mentoring/tutoring so far → will gain first experience in this field

Some experience/skills in organisational/project management → will gain new skills (which are necessary for the next step – in 2.1)

Positive feedback:

- Being proactive/showing initiative (initiation of cooperation, also with the industry or foreign countries), research stays abroad, short research stays in well-respected labs/research groups, organisation of scientific events)
- Proactive pushing of research activities, participation in project management, acquisition of third-party funds
- Publications as single/first author
- Supervision of students/doctoral candidates

Part B- Impact

IMPACT (30%)
Credibility of the measures to enhance the career perspectives and employability of the researcher and contribution to his/her skills development
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 magnitude and importance of the project's contribution to the expected scientific, societal and economic impacts

B.2.1 Credibility of the measures to enhance the career perspectives and employability of the researcher and contribution to his/her skills development

- Explanation of **how the research and training activities** (incl. secondments/placement) make a **positive impact** on the researcher's career (after the fellowship)
- Focus on how the **new competences and skills can make the researcher more successful** in long-term inside/outside academia – give specific examples
- Where do you want to go? How does the PF contribute to getting there?

Impact – Impact on personal skill development

Now you are at 80% → the MSC-PF gives you the missing 20%

- You will be integrated into existing European and international networks of the host institution and also have created your own (transnational) networks
- You will apply the project management experience in the future
- You will apply the leadership skills you learnt through the supervision of undergraduates and PhD students in the future
- You will be able to work in an international and interdisciplinary research environment

Academia – Research staff:
Teaching/lecturing staff
Postdoc position
Junior Researcher
Research Fellow

Higher
Education:
Teaching Staff

NGOs:
Lobbyist
Campaign
Manager

Business Sectors: Senior
Manager
Pharmaceutical
Professional
Statistical Professional
Scientific editor/writer
Project manager
Team leader

Governmental
sector: Policy
Officer
Research council
Research
manager

Consultancies
(big or small):
Management
Finances
Journalist
Grant Writing

Who are non-academic employers in YOUR field?

B.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

- How will research results be **transferred to potential users, scientists, society?**
- Description of how the new knowledge will be **disseminated and exploited**, and what the potential impact is expected to be.
- Summary of each dissemination activity with specific & realistic details - **using tables**:
 - Conferences, industry events, journal publications, workshops, social media, tradeshow, book chapter etc.
- Who are the **target audiences** and who will be interested in the results described and why?

Example of how to describe <u>1</u> dissemination activity				
Activity	Target Audience	When	Where	Metrics
Conference (provide the full name)	List the TA at the conference	Estimated month of project it will take place (M12, M14 etc.)	If known at the time or applicable	Number of attendees etc.

Measures to reach your target groups (examples):

- invite them to a talk
- arrange a special section for them when organising a conference/workshop
- explain why your results will be of interest to them

Dissemination via journals:

- explicitly name the journals, do not just write “high impact journals/most renowned journals”

Dissemination via conferences:

- explicitly name the conferences you are going to attend, do not just write “the results will be presented at the international conferences of the field”
- Always mention open access when you publish – although it is mandatory in MSCA anyway, one has to mention that there will be open access
- but → do not only aim for publications in free open access journals! Publication fees can be paid with the institutional unit contributions

Exploitation of results and intellectual property:

- What is the benefit of exploiting results? **How will the results of the project be exploited?**
- Description of **the potential exploitation methods** of your project results that will be used and the impact of the method on the target user/society/industry
- Applicability and commercialisation of the research results (**product, new techniques/methods**)
- If not applicable directly: give a prospect how your results may be applicable in the long-term (pure research is seldom applicable immediately)
- Mention possible patents
- IPR must always be respected: refer to IP Department of your institution, refer to the partnership agreement and the [IP Guidelines](#)

Communication:

The project must reach a broad public (the tax payers, who, in fact, finance your research), not only a broad scientific community.

Adequate measures to reach this goal are (examples):

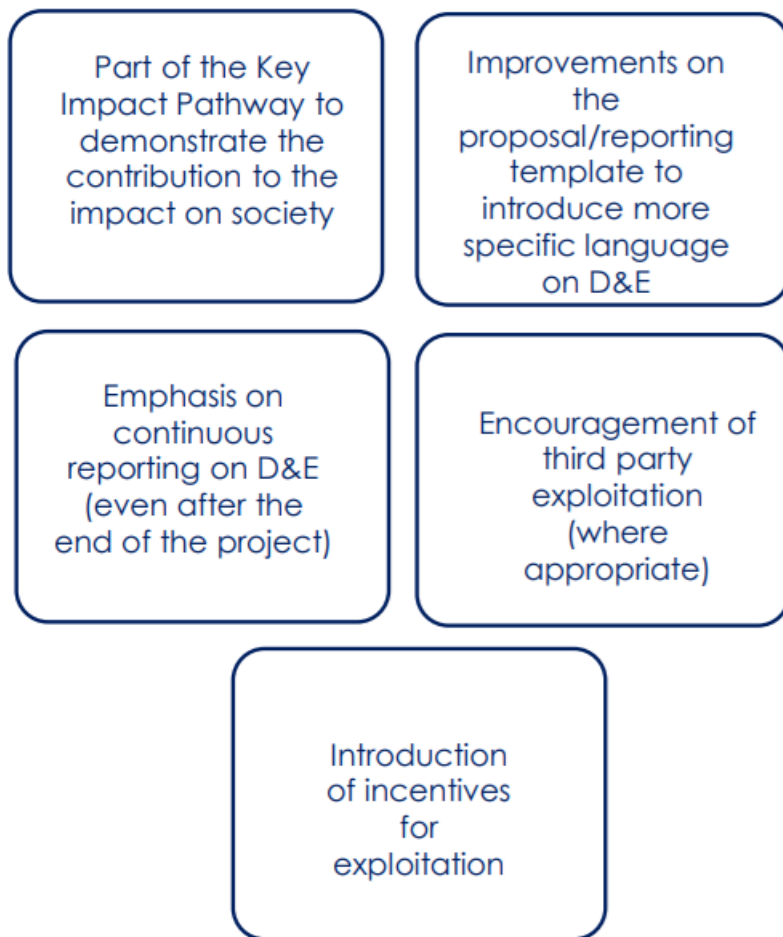
- Collaborations with schools
- Participation in Girls' Day/Boys' Day or similar events → especially in STEM
- Open Lab Days, participation in science nights (MSCA Researchers' Night)
- Participation in scientific events, e.g. science slams

Communication:

- Interviews with newspapers, articles in local press or articles in popular science magazines
- Public lectures (can be in the context of conferences)
- Apply for “MSCA fellow of the week” on Facebook (<https://www.facebook.com/Marie.Curie.Actions>) and make use of social media (Youtube, Twitter, blog, etc.)
- Website: make sure it is linked to other websites to generate enough visitors (e.g. your university’s / institute’s website and their social media channels)
- The activities must be credible and, at best, match your own experience as well as existing activities of the host institution
- Always refer to the support of the institution’s Press Office and Event Office and their contacts to the media etc.
- Explain why you chose the communication measure: Do not just write you will participate in the Girls’ Day – you will participate because one cannot start early enough to try to raise curiosity for research (pupils) and, in this special case, to attract women for science (as they are underrepresented in e.g. Physics)



Medidas para maximizar el impacto_ Comunicación, Explotación y Diseminación



D&E AT PROPOSAL STAGE UNDER THE KEY IMPACT PATHWAY

- **Overall project life cycle**, from the proposal until after the end of the project
- Not a full fledged D&E plan is required at proposal stage (just a short description), but a **complete exploitation, dissemination and communication plan has to be submitted during the first 6 months of the project**

FOLLOW UP OF RESULTS AFTER THE END OF THE PROJECT THROUGH THE REPORTING TOOLS

- The follow up of the exploitation activities will **continue after the end of the project**
- The first year after the end of the project, and if no exploitation takes place, beneficiaries must use the **Horizon Results Platform** for making their exploitable results visible
- For the following period there will probably be a structured **questionnaire** available to beneficiaries to report on the progress, their needs and obstacles on their path for exploitation
- This questionnaire could be part of the EC grant management system and will remain open until the conclusion of the follow up period after the end of the project where a final report will be created



Measures to maximise impact

Dissemination,
exploitation and
communication

To include a draft plan in 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 maximize 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.

B 2.3 The magnitude and importance of the project's contribution to the expected scientific, societal and economic impacts

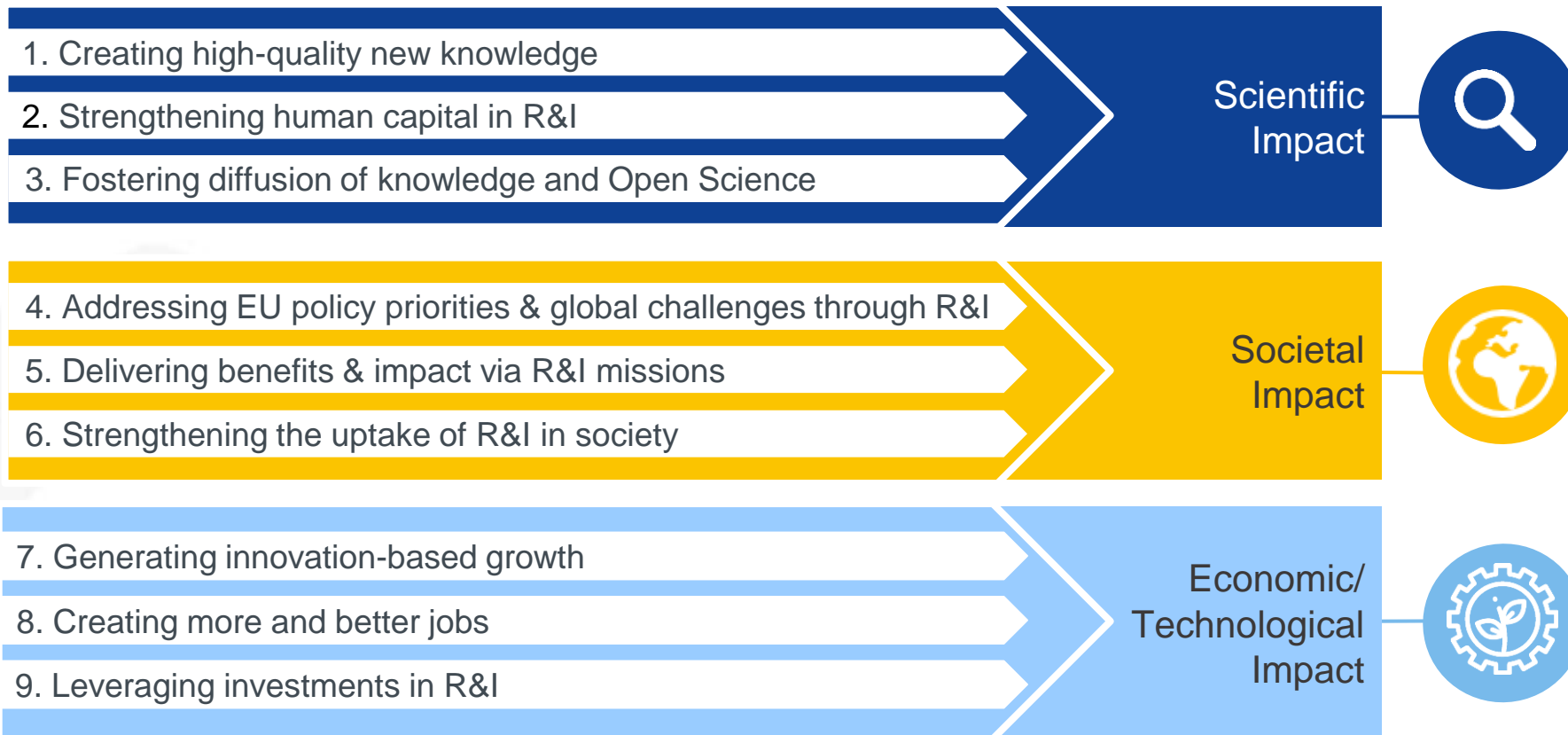
- Sustainable Development Goals // Green Deal, [MSCA Green Charter](#)
- Horizon Europe Missions
- Embed your project into those overarching goals – how do they contribute? At a very small scale is perfectly fine
- Demonstrate that you do not only know about the MSCA, but about the EU strategies

Impact on ERA:

- Your research is beneficial for Europe, strengthening its world-leading position in your field of research (if Europe holds this position now), or
- Your research will help to reduce or close the gap to e.g. the USA/Asia (if they are currently leading)
- And the new networks will be sustainable and contribute to European researcher's mobility in the future

THREE TYPES OF IMPACT

HORIZON EUROPE **LEGISLATION** defines three types of impact, tracked with Key Impact Pathways



Article 50 & Annex V 'Time-bound indicators to report on an annual basis on progress of the Programme towards the achievement of the objectives referred to in Article 3 and set in Annex V along impact pathways'

IMPACTS ≠ RESULTS

Be sure to avoid a common mistake: **the impact of a project is not the results of the project**. Of course, they contribute to the impact, but it goes much further than that!

The impact are the **effects** the project's results will have on the scientific community, the European citizens, the European economy, your institution, the companies involved in your consortium...

For example, if the result of your project is a new treatment against cancer, the impacts could be the cure of xxx millions of persons in the next 10 years and the creation of a new company to commercialize your treatment.

Ask yourself what is the **value** your project will bring to the society.

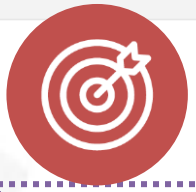
You can base your reflection on this list of impacts:

Scientific: definition of a new state-of-the-art in your field, scientific publications, better reputation and increased visibility of the institutions involved, new collaborations...

Societal: how your project will affect the quality of life, health, safety of the EU citizens, will contribute to the preservation of the environment, will raise awareness of citizens on a specific problem, change their behaviours...

Socio-economic: job/company creation, company growth, leading position in the field in Europe, increase of Europe competitiveness...

Exploitable: new products, new techniques, new services provided by the institution, patent...



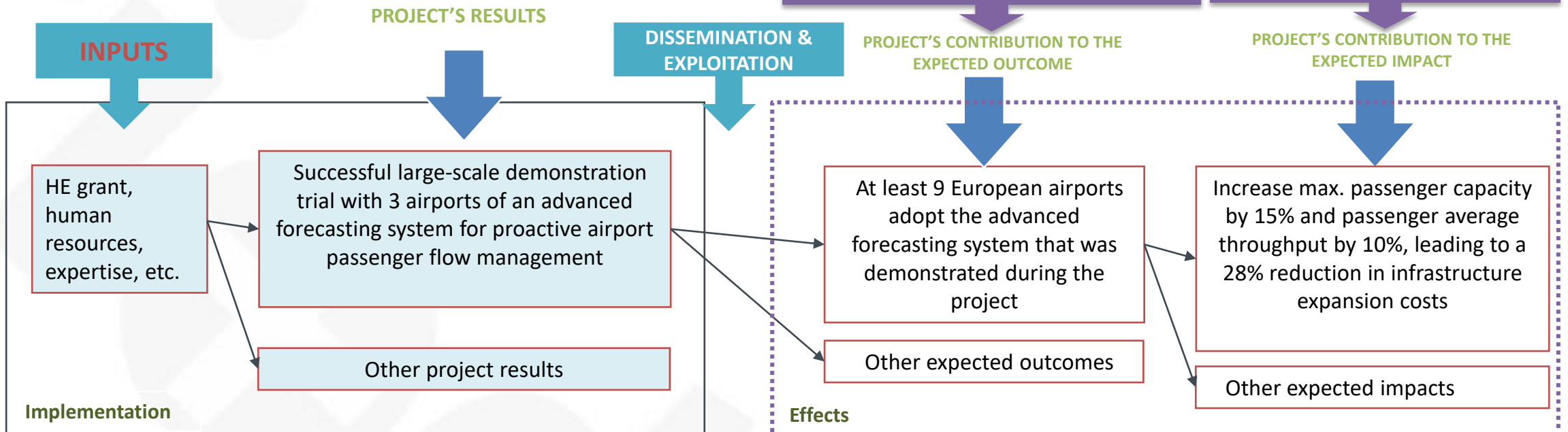
Describing the impact of your proposal

Project's pathway
towards impact

...by thinking about the specific contribution the project can make to the expected outcomes and impacts set out in the Work Programme.

Work Programme outcome: "Innovative accessibility and logistics solutions applied by the European Transport sector"

Work Programme impact: "Seamless, smart, inclusive and sustainable mobility services"



Part B- Implementation

Implementation (: 20%)
Quality and effectiveness of the work plan , assessment of risks and appropriateness of the effort assigned to work packages
Quality and capacity of the host institutions and participating organisations , including hosting arrangements

B.3.1 Quality and effectiveness of the work plan, assessment of risks and appropriateness of the effort assigned to work packages

Write an introductory phrase that the plan is perfectly thought through,

Then shortly describe each work package (research work packages should have been described in the Excellence chapter in more detail) with its corresponding deliverables and milestones (and the secondment/placement, if applicable) → in running text, marked (D1.1, D1.2 ..., M1.1 ...) – you do not have to use tables which waste space

There should be at most **6 work packages**

2-3 research work packages only!

These can run sequentially or concurrently and can be interconnected.

Ensure they are in line with details provided in 1.1 research objectives and methodology.

WP for Management

Meetings with supervisor(s), and standard reports to EU (financial and technical reports at end of fellowship).

WP for Training and Transfer of Knowledge

Tasks/events should match the details in 1.2.

WP Dissemination/Exploitation, Communication/Public Engagement

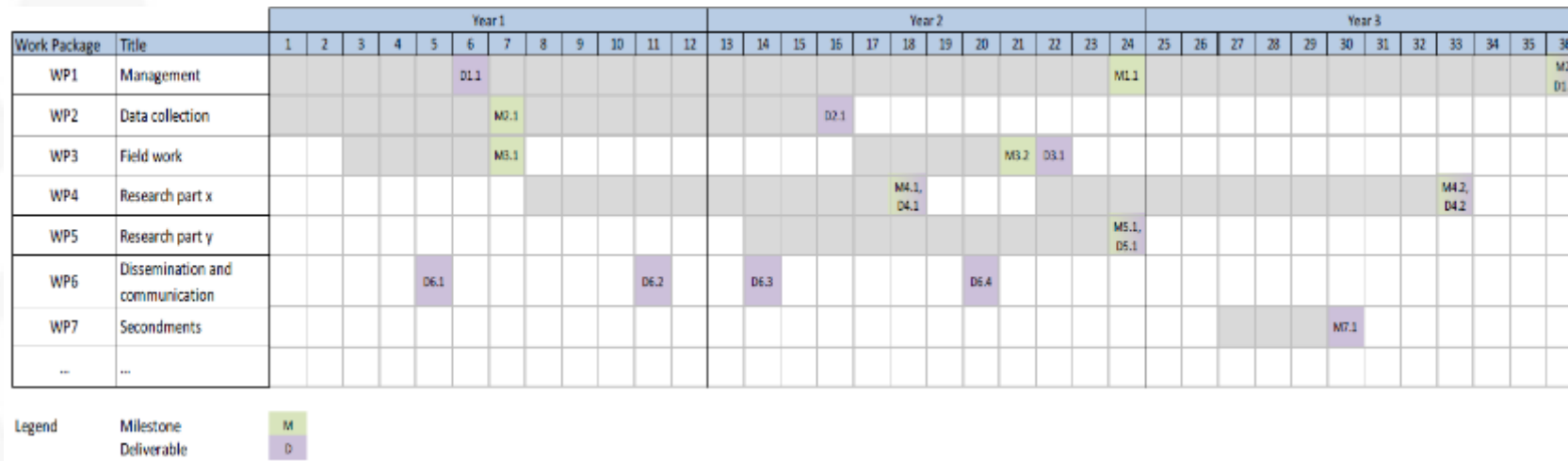
Tasks/events should match the details in 2.2 and 2.3. This is why it is important to have specific examples of dissemination & communication activities rather than listing general examples.

Deliverables:

- mobility declaration submitted within 20 days of the start
- career development plan not later than 6 months after its start
- evaluation questionnaire completed by the recruited researcher
- data management plan submitted within the first 6 months of the project;
- plan for the dissemination and exploitation of results submitted towards the end of the project

Gantt chart (not more than 1/3 or 1/2 page)

You do not have to use the one from the Guide for Applicants, this is just an example; put it in grouped style according to the text



B.3.1 Quality and effectiveness of the work plan, assessment of risks and appropriateness of the effort assigned to work packages

- Risk evaluation (research risks), especially if the project depends on external parameters/preconditions; outline alternatives in case of problems – if there is no risk at all, then maybe it is not first-class research

If no risks and corresponding alternative strategies are mentioned, it is considered a major weakness.

Risk	Level	WP number	Contingency measures

B.3.1 Quality and effectiveness of the work plan, assessment of risks and appropriateness of the effort assigned to work packages

- Describe how the **work planning and the resources mobilised** will **ensure** that the research and training objectives will be reached
- Explain why the amount of person-months is appropriate in relation to the activities proposed
- Brief justification why your research will be conducted exactly the way as proposed

B.3.2 Quality and capacity of the host institutions and participating organisations, including hosting arrangements

- **Experience** of the involved **scientists** and the **finance department** with the implementation of third-party funded projects;
- **Allocation of tasks in the project** (who manages what?);
- Progress monitoring mechanisms (e.g. bi-weekly meetings, short progress reports, attending colloquia to get feedback, CDP etc.)

B.3.2 Quality and capacity of the host institutions and participating organisations, including hosting arrangements

- Mention the **Welcome Centre**/International Office that will support in:

- flat-hunting,
- dealing with public authorities,
- insurances,
- organisation of events for incoming fellows etc.),

→ Helps you in settling in your new surroundings

- Mention the Career Centre (or other departments that offer the training courses) and that the host is a family-friendly employer (childcare etc.)

- Describe the **workplace offered by the institution** (equipment) and the institute (very briefly)
 - **Describe the key facilities** (laboratories, libraries (access to how many e-journals etc.) necessary for your project
 - Mention further **institutions in the region** (other research centres with their facilities (if applicable), universities (if applicable), access to other libraries
- draw a picture of an inspiring research region

Hosting arrangements

- Further members of the research group
- Further chairs/working groups at the institution
- Interdisciplinary discourse at the institutions – collective colloquia?
- Integration into (inter-)national networks

In case of a **Global Fellowship**: explain the practical issues and the help by the Welcome Centre/International Office: flat hunting, insurances, dealing with public authorities...

Conclusion:

- Write a short and concise statement why this project in exactly this constellation (you, the host (expertise and infrastructure), the proposed research with its great goals and expected results) must be considered as outstanding/is a perfect match. It is synergetic and bigger than the sum of its parts.

Make the reviewer think “Wow! This has to be funded without ifs and buts.”