Impact

General information on impact

Impact in Horizon Europe
Group work: Define the impact of your proposal

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From Activities to Impacts

Activities **produce** Outputs **use - create** Outcomes/ Results

OUTCOME/RESULT =what happens, if our **target group uses** our outputs!
- they become more knowledgeable (enlightenment!) or
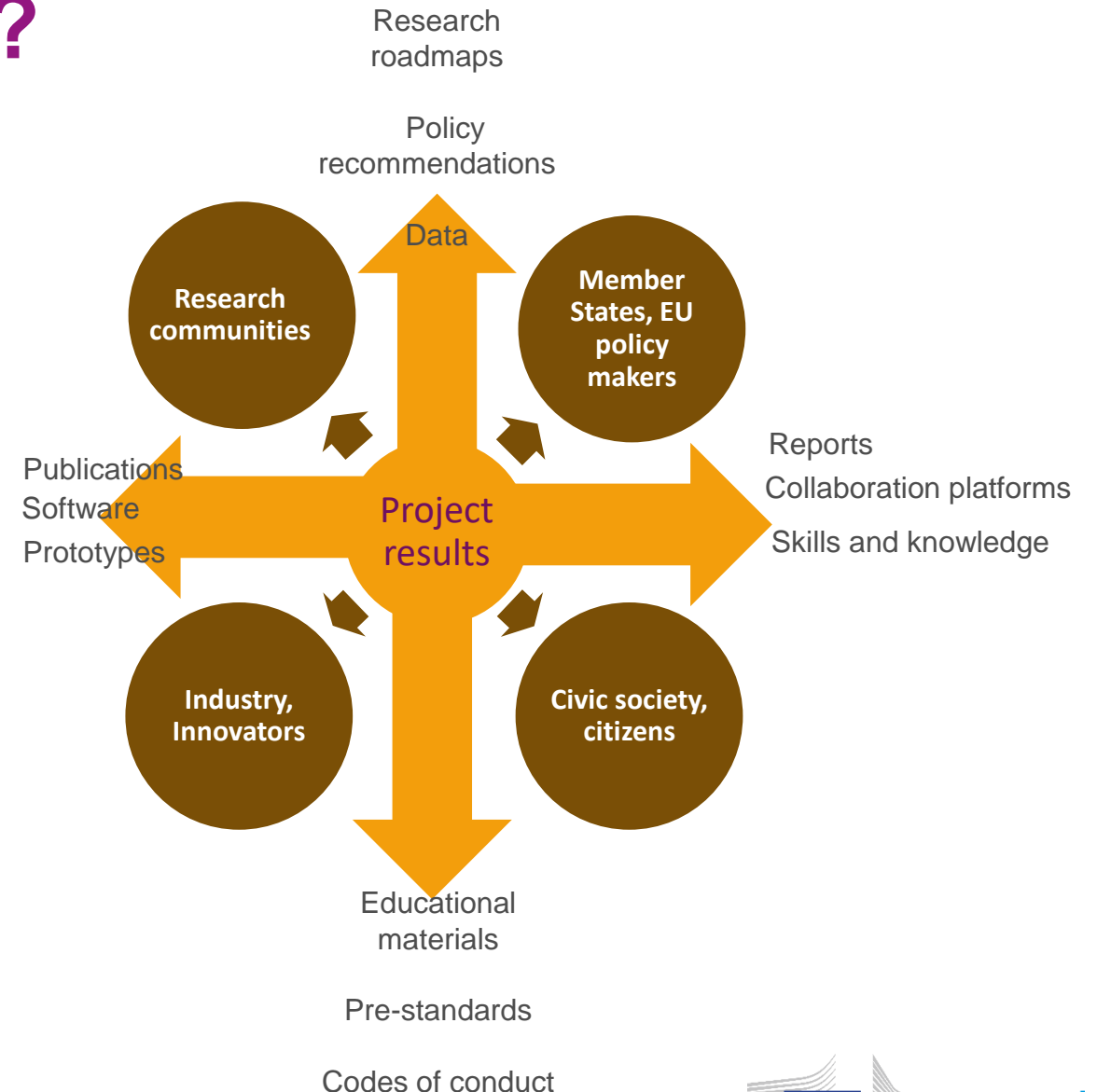- produce better products or
- reduce the ecological footprint

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

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What are project results?

Results

Any tangible or intangible output of the action, such as data, knowledge and information whatever their form or nature, whether or not 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

*http://ec.europa.eu/research/participants/portal/desktop/en/support/reference_terms.html

Research roadmaps

Policy recommendations

Data

Research communities

Member States, EU policy makers

Publications
Software
Prototypes

Project results

Reports
Collaboration platforms

Skills and knowledge

Industry, Innovators

Civic society, citizens

Educational materials

Pre-standards

Codes of conduct

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Types of effects / impacts

Results-oriented impacts: usually quantitative measurable results

- creation of jobs

- publications

- patents

Behavioural impacts:

- changes in the (social, economic, …) behaviour (e.g. changes concerning innovative behaviour

- change of environmental behaviour

- change of images & awareness etc

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Various categories of impacts

- **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.

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Dimensions of the impacts

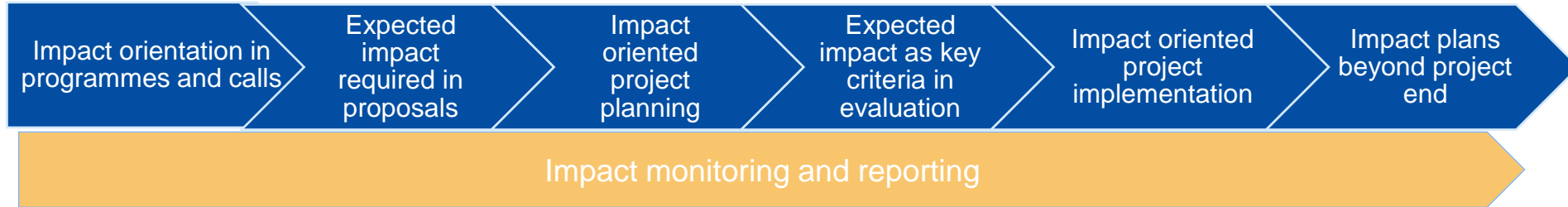|	
Science impacts: Knowledge, Research activities, Training **Technology impacts:** Products, Processes, Services, Know-how	**Organization impacts:** Planning, Work organization, Administration, Human resources **Health impacts:** Public health, Health systems
Economy impacts: Production, Financing, Investments, Commercialisation, Budget	**Environment impacts:** Management of natural resources and the environment, Climate and meteorology
Culture impacts: Knowledge, Know-how, Attitudes, Values	**Symbolic impacts:** Legitimacy/credibility/visibility
Society impacts: Welfare, Discourses and actions of groups	**Training impacts:** Curricula, Pedagogical Tools, Qualifications, Graduates, Insertion into the job market, Fitness of training/work, career, use of acquired knowledge
Policy impacts: Policymakers, Citizens, Public programs, National security	

Source: Godin and Doré, 2006

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Impact orientation in all stages

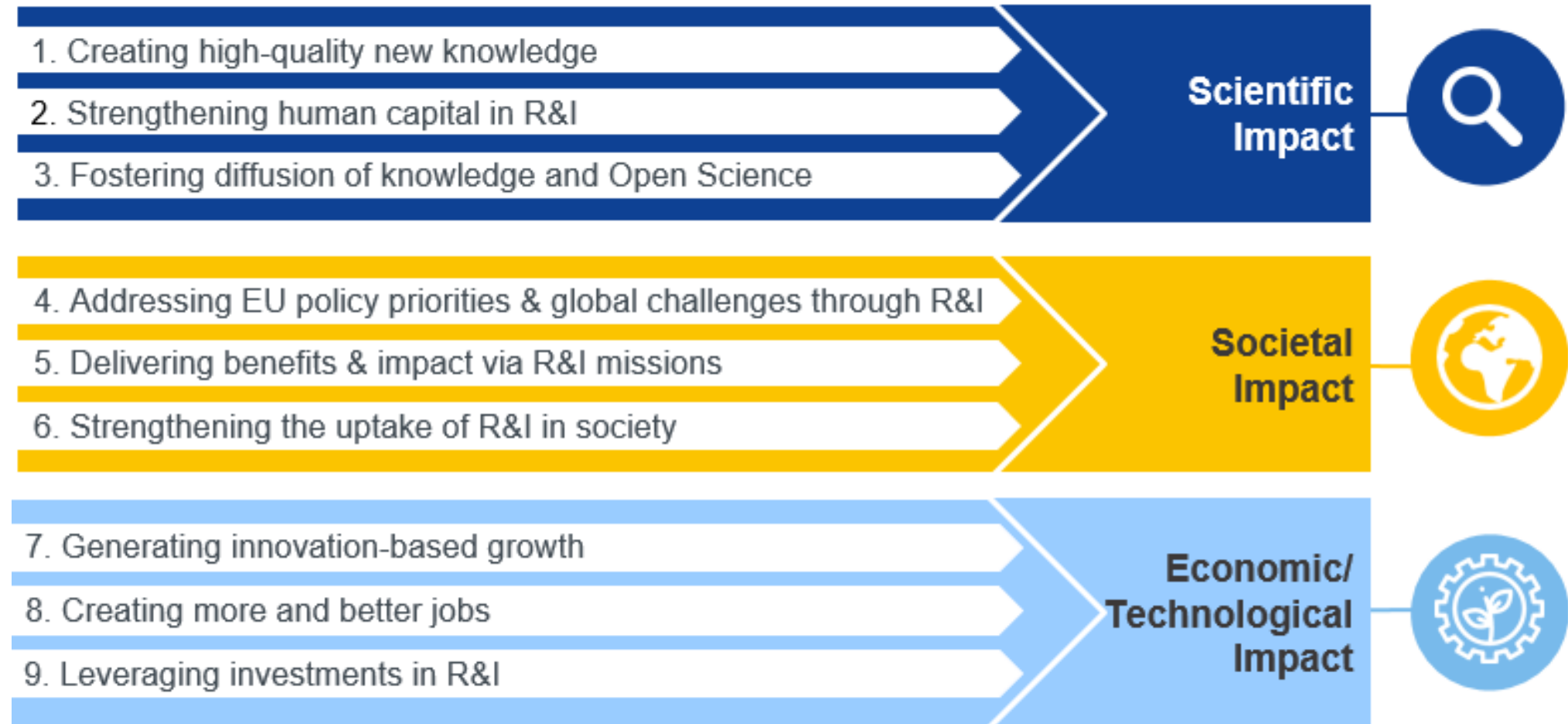| Impact orientation in programmes and calls	Expected impact required in proposals	Impact oriented project planning	Expected impact as key criteria in evaluation	Impact oriented project implementation	Impact plans beyond project end

Impact monitoring and reporting

- Most programmes have an impact-oriented approach

- Horizon Europe balances research and innovation and aims to drive competitiveness/growth and to tackle societal challenges (e.g., through missions)

- Many programmes encourage collaboration between different stakeholders (researchers, industry including SMEs, public sector organisations and citizens)

- Expected impacts are crucial for successful proposals and projects

- Aspects of the project (activities, partnership, open access of results, etc.) intend to maximise potential impacts

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Impact pathways in HE - EXAMPLES

1. Creating high-quality new knowledge
2. Strengthening human capital in R&I
3. Fostering diffusion of knowledge and Open Science

Scientific Impact

4. Addressing EU policy priorities & global challenges through R&I
5. Delivering benefits & impact via R&I missions
6. Strengthening the uptake of R&I in society

Societal Impact

7. Generating innovation-based growth
8. Creating more and better jobs
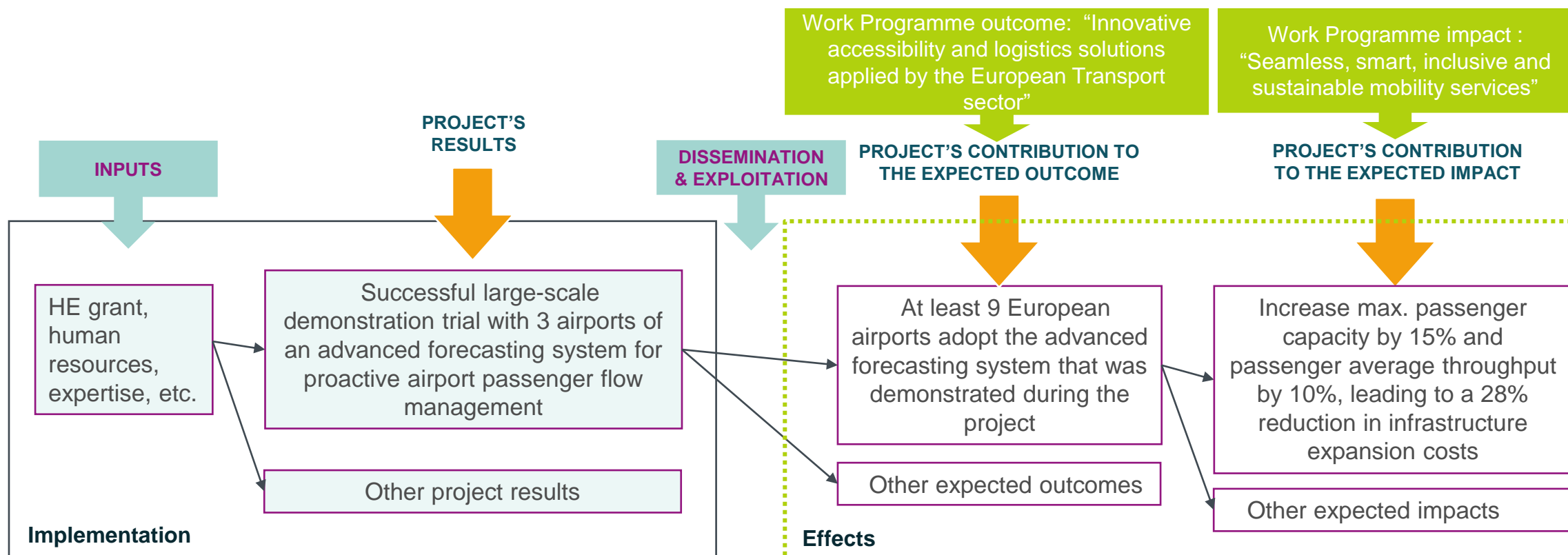9. Leveraging investments in R&I

Economic/ Technological Impact

Source: EC

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"

INPUTS

PROJECT'S RESULTS

DISSEMINATION & EXPLOITATION

PROJECT'S CONTRIBUTION TO THE EXPECTED OUTCOME

PROJECT'S CONTRIBUTION TO THE EXPECTED IMPACT

HE grant, human resources, expertise, etc.

Successful large-scale demonstration trial with 3 airports of an advanced forecasting system for proactive airport passenger flow management

At least 9 European airports adopt the advanced forecasting system that was demonstrated during the project

Increase max. passenger capacity by 15% and passenger average throughput by 10%, leading to a 28% reduction in infrastructure expansion costs

Other project results

Other expected outcomes

Other expected impacts

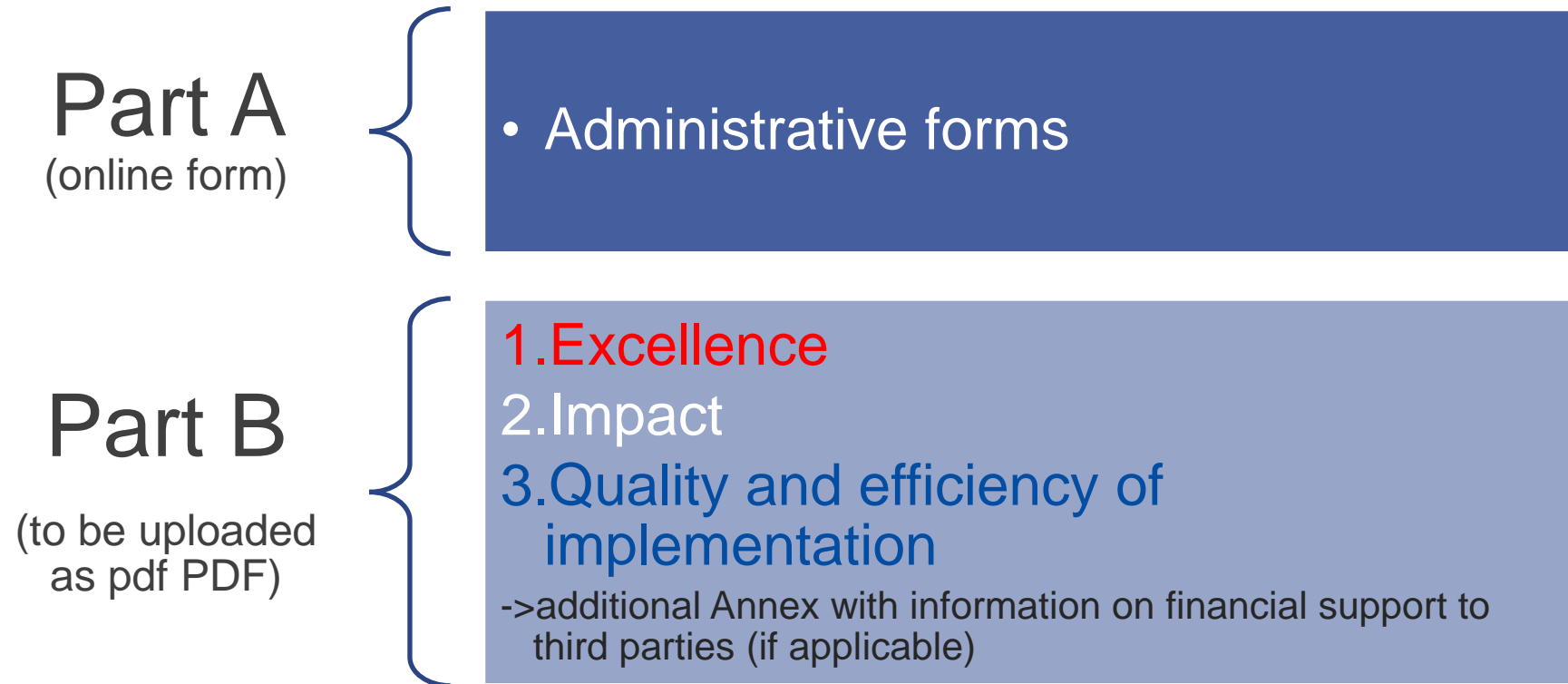Implementation

Effects

Source: EC

Example of framework conditions for impact

- 1. **Employment**
  - 75% of the 20-64 year-olds to be employed

- 2. **R&D**
  - 3% of the EU's GDP to be invested in R&D

- 3. **Climate change and energy sustainability**
  - **greenhouse gas emissions 20%** (or even **30%**, if the conditions are right) **lower than 1990**
  - **20% of energy from renewables**
  - **20% increase in energy efficiency**

- 4. **Education**
  - **Reducing the rates of early school leaving below 10%**
  - **at least 40% of 30-34–year-olds completing third level education**

- 5. **Fighting poverty and social exclusion**
  - at least **20 million fewer people in or at risk of poverty and social exclusion**

Example: structure of impact (RIA)

Part A
(online form)

- Administrative forms

Part B

(to be uploaded
as pdf PDF)

1. Excellence
2. Impact
3. Quality and efficiency of implementation

->additional Annex with information on financial support to third parties (if applicable)

What are the evaluators 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...

RIA (Part B)

2. Impact

2.1 Project´s pathways to impact
2.2 Measures to maximise impact Dissemination Exploitation and Communication
2.3 Summary

B2. IMPACT

2.1 Project´s pathways to impact (4 pages)
2.2 Measures to maximise impact Dissemination
 Exploitation and Communication (5 pages)
2.3 Summary

Impact – aspects to be taken into account.

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

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

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B2.1 Project's pathways towards impact

Provide a narrative **explaining how the project's results are expected to make a difference in terms of impact, beyond the immediate scope and duration of the project.** The narrative should include the components below, tailored to your project.

- 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.

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B2.1 Project's pathways towards impact (2)

- 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.**

B2.2 Measures to maximise impact - **Dissemination, exploitation and communication**

- Describe the planned measures to maximise the impact of your project by providing a first version of your 'plan for the dissemination and exploitation including communication activities'.

- Describe the dissemination, exploitation and communication measures that are planned, and the target group(s) addressed (e.g. scientific community, end users, financial actors, public at large).

- Outline your strategy for the management of intellectual property, foreseen protection measures, such as patents, design rights, copyright, trade secrets, etc., and how these would be used to support exploitation.

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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
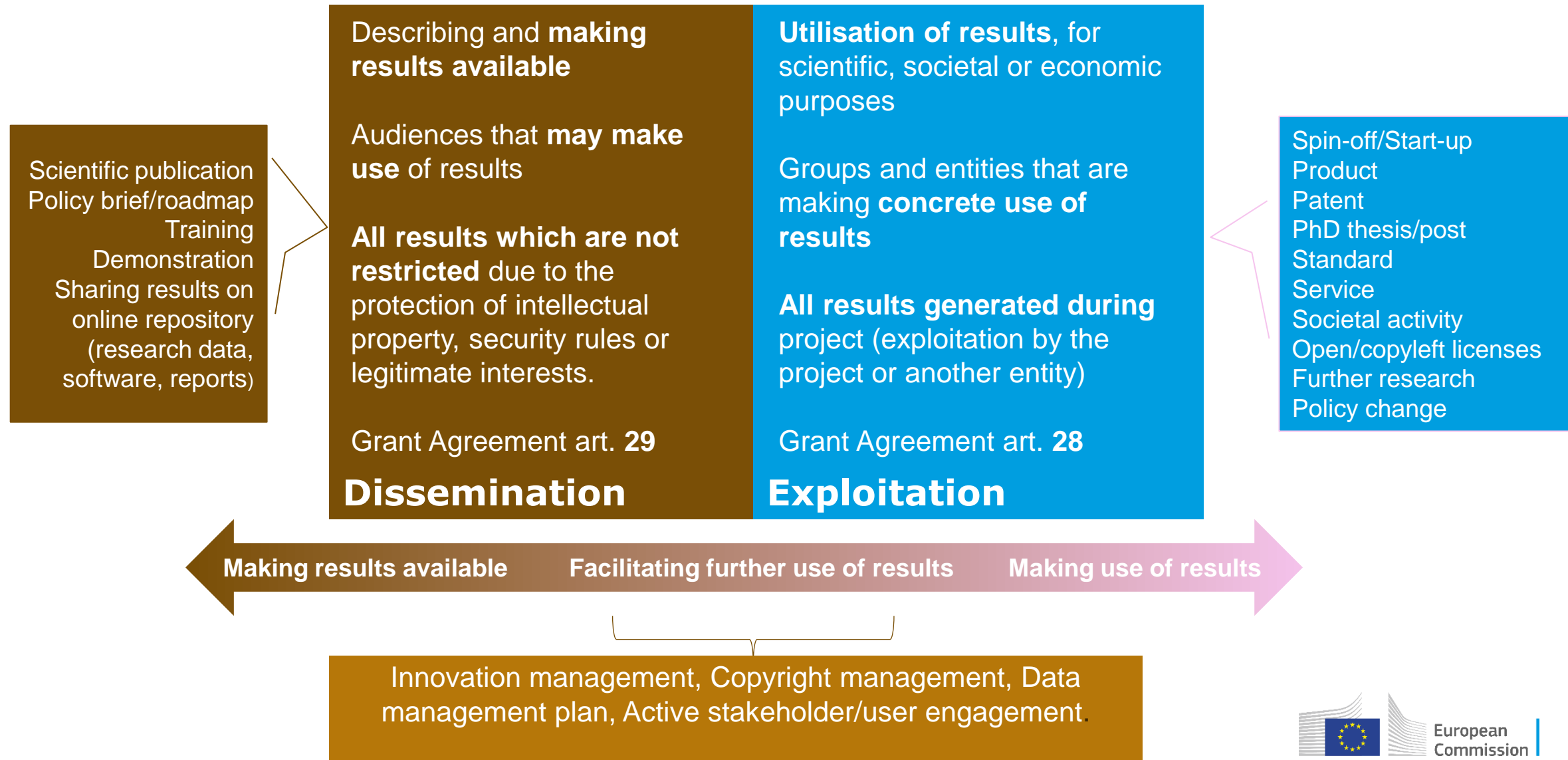
Elements of the D&E&C plan

- **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

What is the difference Communication - Dissemination?

Newsletter

Press release

Project factsheet, brochure

Social media (blogs, Twitter, Facebook, LinkedIn)

About the project results

Multiple audiences

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**

Project website, videos, interview, articles in magazines, exhibitions/ open days, guided visits, conference, presentation and workshops.

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What is the difference Dissemination - Exploitation?

Scientific publication
Policy brief/roadmap
Training
Demonstration
Sharing results on
online repository
(research data,
software, reports)

Describing and **making results available**

Audiences that **may make use** of results

All results which are not restricted due to the protection of intellectual property, security rules or legitimate interests.

Grant Agreement art. **29**

Dissemination

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**

Exploitation

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

Making results available   **Facilitating further use of results**   **Making use of results**

Innovation management, Copyright management, Data management plan, Active stakeholder/user engagement.

B2.3 Summary

- Provide a summary of this section by presenting in the canvas below the key elements of your project impact pathway and of the measures to maximise its impact.

B2.3 Summary

KEY ELEMENT OF THE IMPACT SECTION

SPECIFIC NEEDS	EXPECTED RESULTS	D & E & C MEASURES
What are the specific needs that triggered this project?	What do you expect to generate by the end of the project?	What dissemination, exploitation and communication measures will you apply to the results?
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 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 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 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.	**Example 2** Publication of a **scientific discovery on transparent electronics.** **New product:** More sustainable electronic circuits. **Three PhD students trained.**	**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.

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B2.3 Summary

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?	*What change do you expect to see after successful dissemination and exploitation of project results to the target group(s)?*	*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 **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).	**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.	**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).

Group Work

GROUP WORK

Follow the instructions from the application form

Group Work: Describe how your project will contribute to…

- Each of the **impacts** mentioned in the work programme, under the relevant topic; impacts that would enhance innovation capacity; create new market opportunities, strengthen competitiveness and growth of companies, address issues related to climate change or the environment, or bring other important benefits for society

- Describe any **barriers/obstacles**, and any framework conditions (such as regulation, standards, public acceptance, workforce considerations, financing of follow-up steps, cooperation of other links in the value chain), that may determine whether and to what extent the expected impacts will be achieved.

Homework: Continue your work on impact section…

- Refine impact pathways

- Think of and outline a few appropriate communication/dissemination/exploitation measures

- Prepare the summary tables 2.3 – see templates at next slides

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Exercise – Preparation of the summary 2.3

Specific needs	Expected results	D&E&C measures
What are the specific needs that triggered this project?	What do you expect to generate by the end of the project?	What dissemination, exploitation and communication measures will you apply to the results?

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Exercise – Preparation of the summary 2.3

Target groups	OUTCOMES /RESULTS	D&E&C measures
Who will use or further up-take the results of the project? Who will benefit from the results of the project?	What change do you expect to see after successful dissemination and exploitation of project results to the target group(s)?	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?

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Thank you!

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