

HORIZON 2020

THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION



Le modalità di valutazione dei
progetti presentati nell'ambito
di Horizon 2020

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Palermo

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Assistive Technologies...



Brain Injury Association

No-profit organization serving acquired brain injured individuals and their families



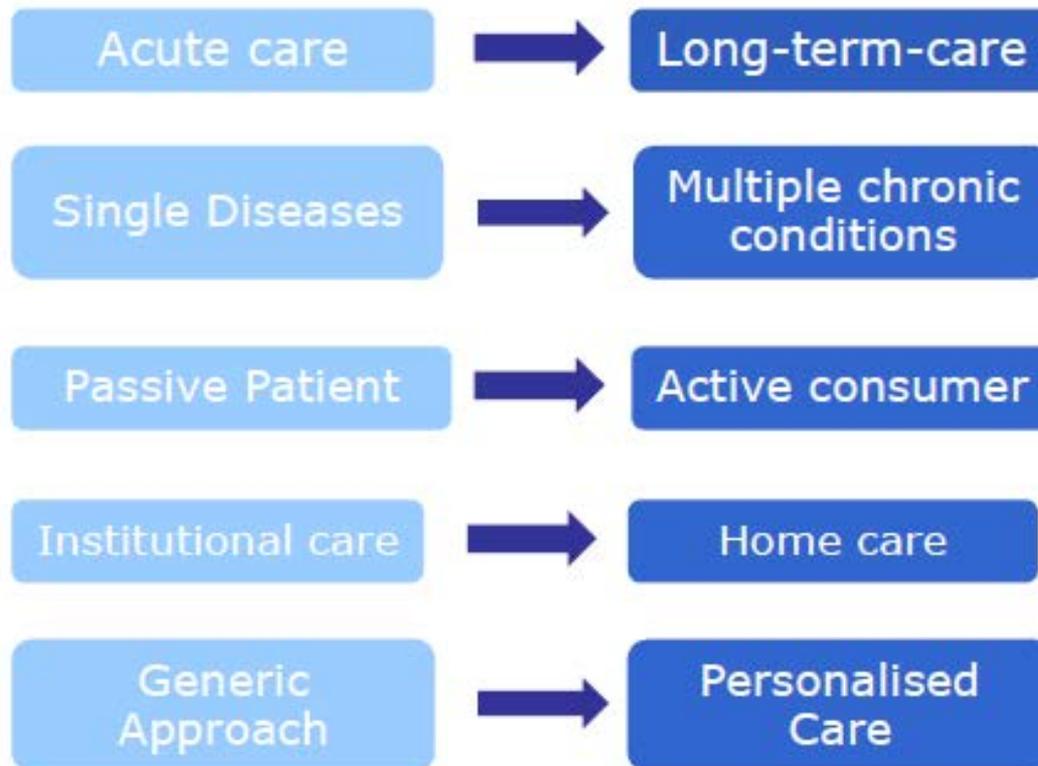
**Easy Coop – www.cooperativaeasy.it
Acquired brain injury Work and Social
Rehabilitation Institute**



**UNIVERSITÀ
DEGLI STUDI
DI PADOVA**



Transforming Health and Care



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END USER

ICT for Health – Principles, areas and strategy

- ❖ More strategic patient-centred approach and health promotion
- ❖ Creating a body of evidence for IT technologies, support for SME's growth, IT skills for healthcare workforce
- ❖ New approaches in managing health, from well-being to personalisation
- ❖ Data and sharing data challenges
- ❖ Decrease of time to market, better adaptation to innovation and support to policy
- ❖ Contribution to WHO activities and US cooperation

Self-management of health and mobile health. Digital Health literacy

Evidence on IT technologies, Opportunities for SME's

Well-being

Prevention, Personalisation

Data security and privacy

Interoperability and standards

In-silico clinical trials

Big data

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THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION

The challenges

- Ageing population
- Increased disease burden
- Unsustainable and unequal health & care systems
- Health & care sector under pressure to reform



Health, demographic change and wellbeing challenge objectives

- Less prescription – **what to do, but not how to do it**
- Strengthening competitiveness of EU industries – **development of new market opportunities**
- Multidisciplinary approach - **fostering cooperation between academic and industrial sectors**
- Personalised medicine and **Assistive Technology**

What are the three main achievements that can be expected from the proposed research actions?

1. Better health in old age (important for the labour market), more active years and better quality of life, as well as slowing down of chronic disease “epidemics”.
2. A more effective, coordinated and sustainable care system in which the elderly easily find their way. Focus on investments for prevention rather than costs of diseases.
3. A better living environment for the elderly, enabling them to stay independent for as long as possible, also with medical conditions, thus freeing resources in the care system and enhancing their well-being.

What are the three main potential game changers:

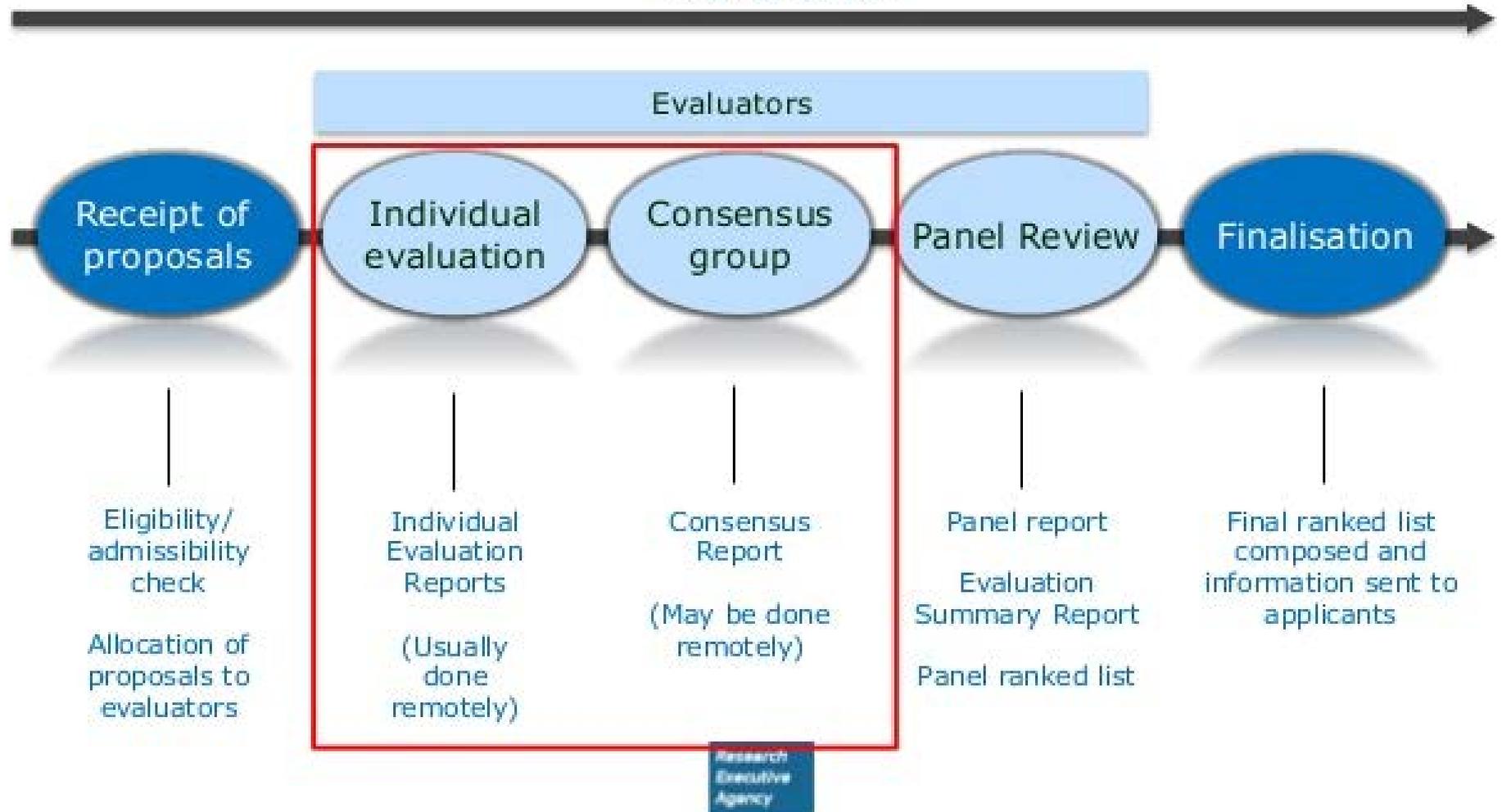
1. A paradigm shift in the healthcare domain from 'healthcare technologies' to 'well-being and prevention technologies': society needs not only technologies to help elderly persons recover, but rather technologies that support a better lifestyle and a socially included and active elderly person.
2. True market adoption of technology and best-practice, making sure invention becomes innovation and thus that real impact is achieved.
3. Attention to and drive for outcomes, and for the transformation of health systems towards being more coordinated, outcome-oriented and patient-centred.

Innovation?

- The main issue with innovation is market adoption: if not adopted, new ideas remain inventions, but not innovations.
- Also, the impact of innovation deserves attention:
 - a. Broader issues such as ethics, integrity, making ICT technology accessible to older people.
 - b. Sufficient attention to the impact of innovation on people, roles, processes in the care setting. Change management is required to fully benefit from technology.

Evaluation process for each call

Max. 5 months



Quale azione? RIA, IA and CSA actions

- **Research and innovation actions (RIA)**: R&D aiming to establish new knowledge or explore the feasibility of a new technology, product, process, service or solution (including basic and applied research, technology development and integration, testing and validation on a small-scale prototype in a laboratory or simulated environment)
- **Innovation actions (IA)**: innovation activities directly aiming at producing plans and arrangements or designs for new, altered or improved products, processes or services (including prototyping, testing, demonstrating, piloting, large-scale product validation and market replication).
- **Coordination and support actions (CSA)**: accompanying measures (*such as standardisation, dissemination, awareness-raising and communication, networking, coordination or support services, policy dialogues and mutual learning exercises and studies*).

CRITERI...VALUTAZIONE

CRITERI DI CONCESSIONE STANDARD

ECCELLENZA

IMPATTO

QUALITÀ &
EFFICIENZA
DELL'AZIONE



END USER... TARGET



OUTCOME... MEASURES



The image features a monochromatic blue background with several highly reflective, metallic spheres of varying sizes. The largest sphere is positioned in the upper right, while smaller spheres are scattered throughout the scene, some appearing to be in motion or reflecting light in a way that creates a sense of depth and movement. The lighting is dramatic, highlighting the smooth, polished surfaces of the spheres and creating bright highlights and deep shadows. In the lower-left corner, the word "EXCELLENCE" is written in a bold, white, sans-serif font, standing out prominently against the dark blue background.

EXCELLENCE

1- Excellence (science)

- Objectives
- Relation to the work programme: addressing the challenge and scope
- Concept and approach: TRL! trans-disciplinary approach, methodology
- Ambition: ground-breaking nature of the objectives, concepts involved, issues and problems to be addressed beyond state-of-the-art = innovation potential!)

Concept

- Describe the main ideas, models or assumptions involved. Identify any inter-disciplinary considerations and, where relevant, use of stakeholder knowledge;
- Describe any national or international research and innovation activities which will be linked with the project, especially where the outputs from these will feed into the project
- Describe the positioning of the project e.g. where it is situated in the spectrum from 'idea to application', or from 'lab to market'. Refer to Technology Readiness Levels where relevant.



Methodology

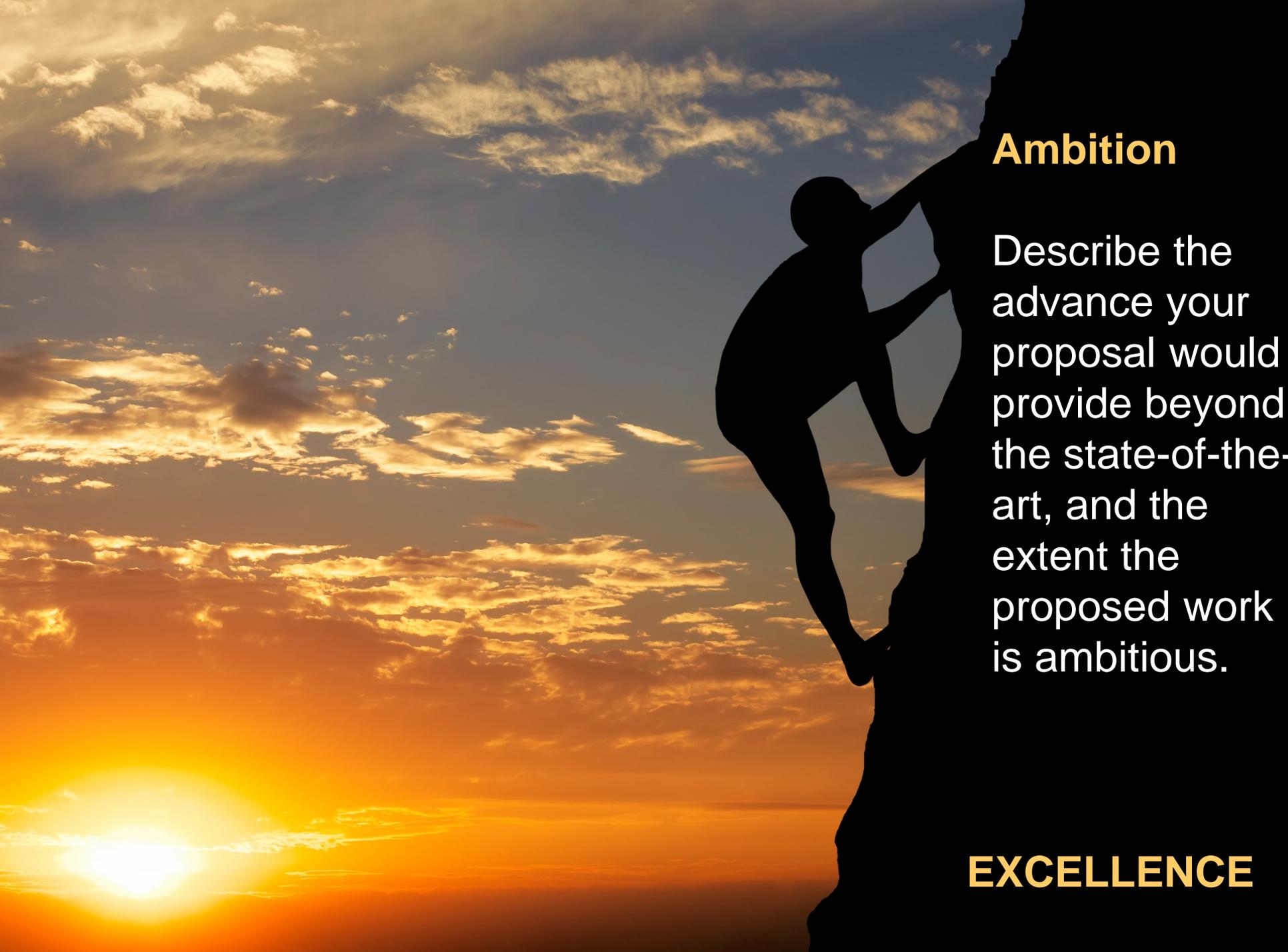
- Describe and explain the overall methodology, distinguishing, as appropriate, activities indicated in the relevant section of the work programme, e.g. for research, demonstration, piloting, first market replication, etc;
- Where relevant, describe how sex and/or gender analysis is taken into account in the project's content.





Technology Readiness Levels

- TRL 0: Idea.** Unproven concept, no testing has been performed.
- TRL 1: Basic research.** Principles postulated and observed but no experimental proof available.
- TRL 2: Technology formulation.** Concept and application have been formulated.
- TRL 3: Applied research.** First laboratory tests completed; proof of concept.
- TRL 4: Small scale prototype** built in a laboratory environment ("ugly" prototype).
- TRL 5: Large scale prototype** tested in intended environment.
- TRL 6: Prototype system** tested in intended environment close to expected performance.
- TRL 7: Demonstration system** operating in operational environment at pre-commercial scale.
- TRL 8: First of a kind commercial system.** Manufacturing issues solved.
- TRL 9: Full commercial application,** technology available for consumers.



Ambition

Describe the advance your proposal would provide beyond the state-of-the-art, and the extent the proposed work is ambitious.

EXCELLENCE

Innovation?

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Frequent shortcomings and weaknesses

- *The acceptability and usability of the ICT solutions and the way they are going to evaluate them, are not well described.*
- *The definition of end user requirements and acceptance are not described.*
- *The proposed approach is credible. The only concern is that the applicants is not clearly showing in real user environments... CASE SCENARIO*
- *State of the art and beyond...*

IMPACT



Health, Demographic Change and Wellbeing

2- Impact

Expected impact on:

- impact indication in the work programme
- enabling and improving innovation capacities (new knowledge, knowledge transfer, evidence based policy making, policy innovations) **EU-level!!!**
- barriers/obstacles/assumptions/risks (impact level, not project level)

Health, Demographic Change and Wellbeing

Measures to maximise impact:

- dissemination and exploitation of R&D results
- transfer of R&D results
- sustainability of impact?
- knowledge management strategy (data management, IPR?, open access!)
- communication, promotion, dissemination and networking

The expected impacts listed in the work programme under the relevant topic

Enhancing innovation capacity and integration of new knowledge

Strengthening the competitiveness and growth of companies by developing innovations meeting the needs of European and global markets, and where relevant, by delivering such innovations to the markets

Any other environmental and socially important impacts (not already covered above)

Effectiveness of the proposed measures to exploit and disseminate the project results, to communicate the project, and to manage research data where relevant

Frequent shortcomings and weaknesses

- Describe how your project will contribute to each of the expected impacts mentioned in the work programme.
- Indicatori, misure dell'impatto e Metrics...
- Dissemination and exploitation of results = *'Plan for the dissemination and exploitation of the project's results'* – *individual role & end-user*
- *Addestramento, coinvolgimento End User e GP*
- The commercialization strategic approach is not clearly defined – *market plan...*
- Outline the strategy for **knowledge management and protection**

IMPLEMENTATION



3- Quality and Efficiency of the Implementation

- Work plan — Work packages, deliverables and milestones
- WP-objectives, timeline, description, deliverables, lead partner and role of partners and risk analyses (including mitigation measures)
- Management structure
- Consortium description (multi-sector, geographical)
- Resources needed (direct and indirect)

Coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources

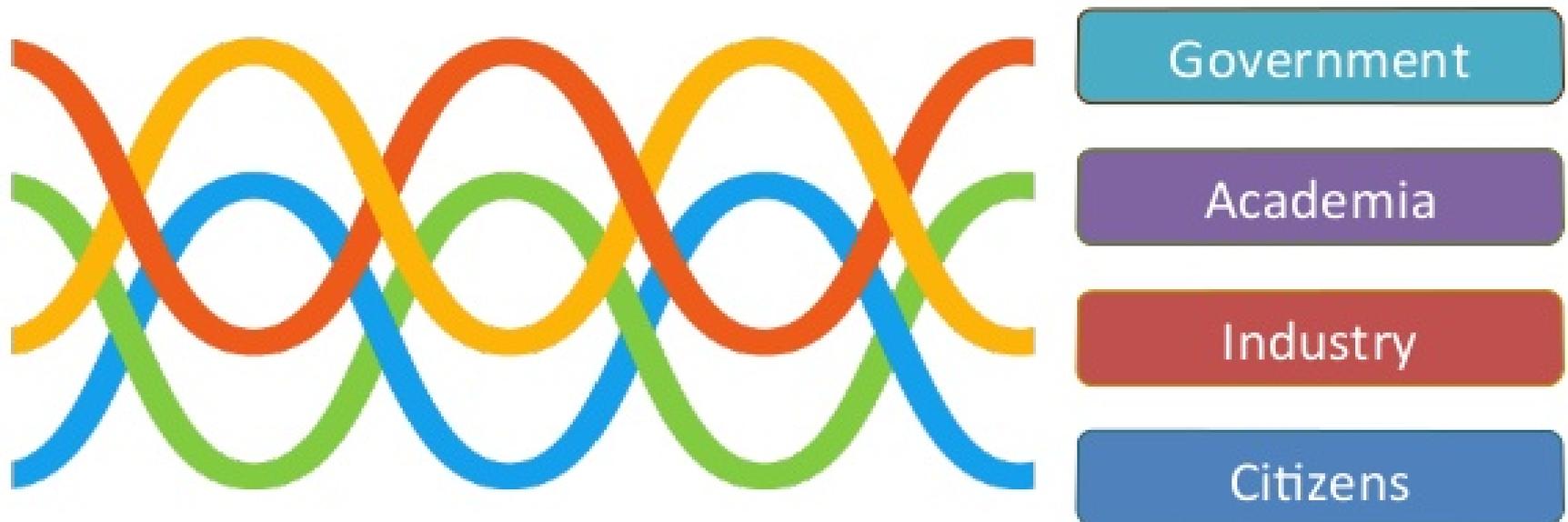
Complementarity of the participants within the consortium (when relevant)

Appropriateness of the management structures and procedures, including risk and innovation management

The quadruple helix

Government, academia, industry and citizens can collaborate together to drive structural changes and sustainable development, going far beyond the scope of any one organization could achieve on it's own.

That's a way to re-localize value in our regions and to give an opportunity to our young entrepreneurs!



Frequent shortcomings and weaknesses

- *The proposed work plan is coherent with the research and it has been well described in work package,... the WP describing the interactivity, friendly interfaces and usability is not adequately addressed.*
- *The budget for the partner n. X is not justify. The subcontracting tasks are not clear (seems like there will be subcontractors but they are not described and the budget is not quantify).*
- *Risk and innovation managment are not well detailed - Risk assessment fails to identify key problematic areas*

Innovation management

Innovation Management: is a process which requires an understanding of both market and technical problems, with a goal of successfully implementing appropriate creative ideas.

- Typical Output: new or improved product, service or process.
- For consortium: it allows to respond to an external or internal opportunity.

Interpretation of the scores

0

The proposal fails to address the criterion or cannot be assessed due to missing or incomplete information.

1

Poor. The criterion is inadequately addressed, or there are serious inherent weaknesses.

2

Fair. The proposal broadly addresses the criterion, but there are significant weaknesses.

3

Good. The proposal addresses the criterion well, but a number of shortcomings are present.

4

Very Good. The proposal addresses the criterion very well, but a small number of shortcomings are present.

5

Excellent. The proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.

GRAZIE!!!!

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