ERASMUS-EDU-2022-CBHE-STRAND-1
ERASMUS-EDU-2022-CBHE

101083212
ERASMUS-AG-LS

WEIHENSTEPHAN · TRIESDORF
University of Applied Sciences

GROWTH
GREENING RELEVANCE IN OPERATIONS IN WESTERN - BALKANS TERTIARY - EDUCATION HABITATS

## Greening Relevance in Operations in Western-Balkans Tertiary-Education Habitats

# Planning for research or capacity building projects in framework of Erasmus + or Horizon Europe programs

**Dragan Brković**
**Weihenstephan-Triesdorf University of Applied Sciences (HSWT)**

**E2.6 STUDY VISIT TO HSWT**
15.11.2023.

Co-funded by the European Union

"Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or [name of the granting authority]. Neither the European Union nor the granting authority can be held responsible for them."

WEIHENSTEPHAN · TRIESDORF
University of Applied Sciences

GROWTH
GREENING RELEVANCE IN OPERATIONS IN WESTERN - BALKANS TERTIARY - EDUCATION HABITATS

Co-funded by the Erasmus+ Programme of the European Union

# Planning for research or capacity building projects in framework of Erasmus + or Horizon Europe programs

Dragan Brković, Project Coordinator "Technology and Transfer Pact with Africa" (TAP)

27.09.2023.

# Where to find calls for Erasmus + and Horizon proposals?

https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities



Co-funded by the Erasmus+ Programme of the European Union

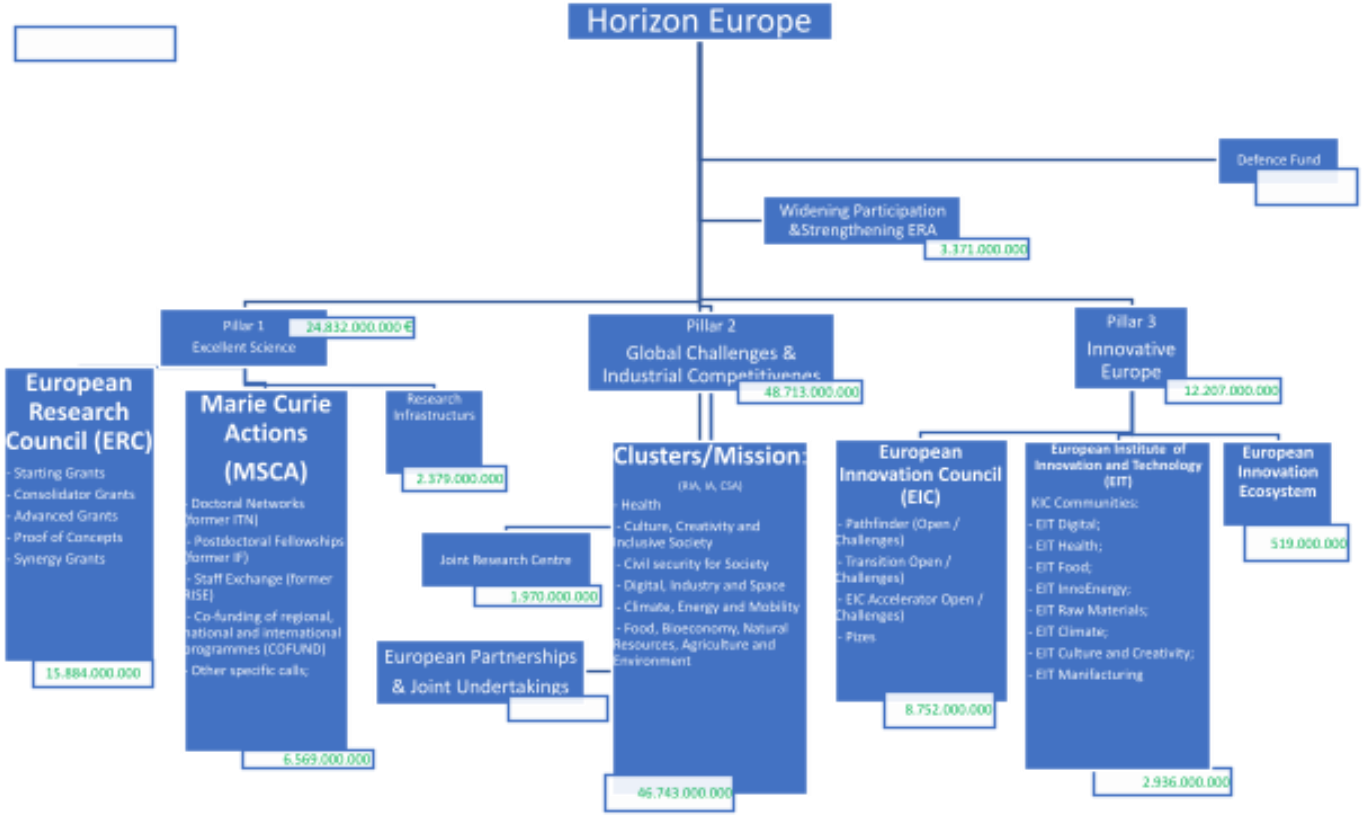
# Program
# VISION


A sustainable, fair and prosperous future for people and planet based on European values.

- Tackling climate change (35 % budgetary target)
- Helping to achieve Sustainable Development Goals
- Boosting the Union's competitiveness and growth

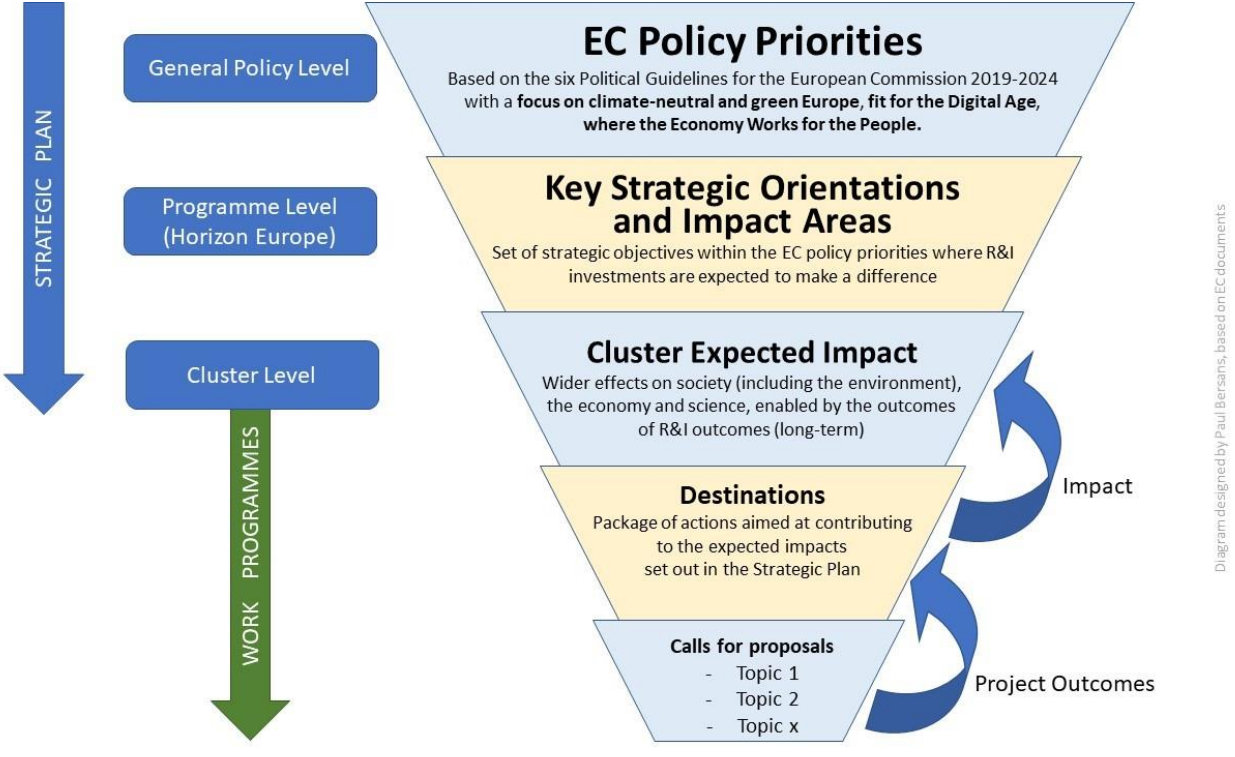


Co-funded by the Erasmus+ Programme of the European Union






Co-funded by the Erasmus+ Programme of the European Union






Co-funded by the Erasmus+ Programme of the European Union

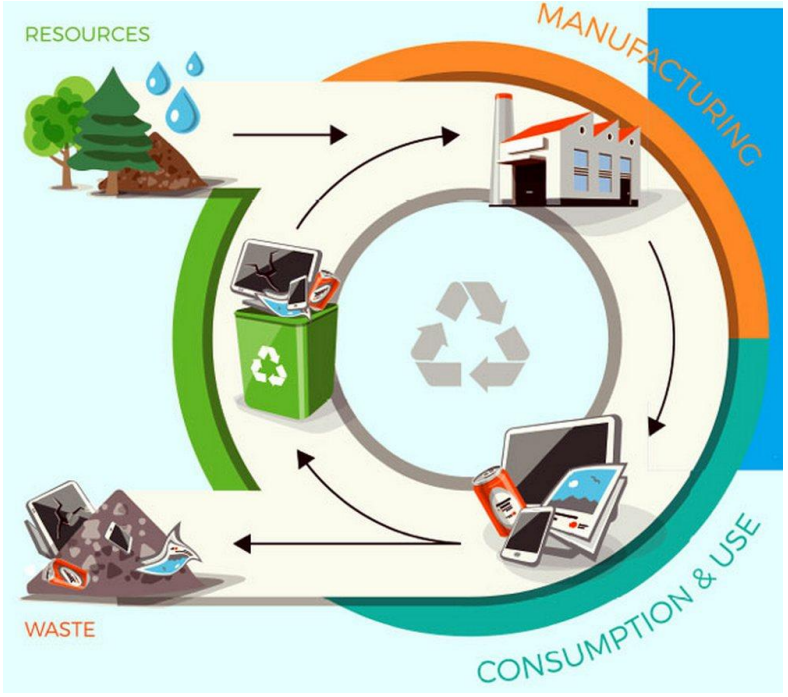
## Mission areas




Co-funded by the Erasmus+ Programme of the European Union

## Clusters in 'Global Challenges and European Industrial Competitiveness‘

**Cluster 6** :
Food, bioeconomy, natural resources, agriculture and environment



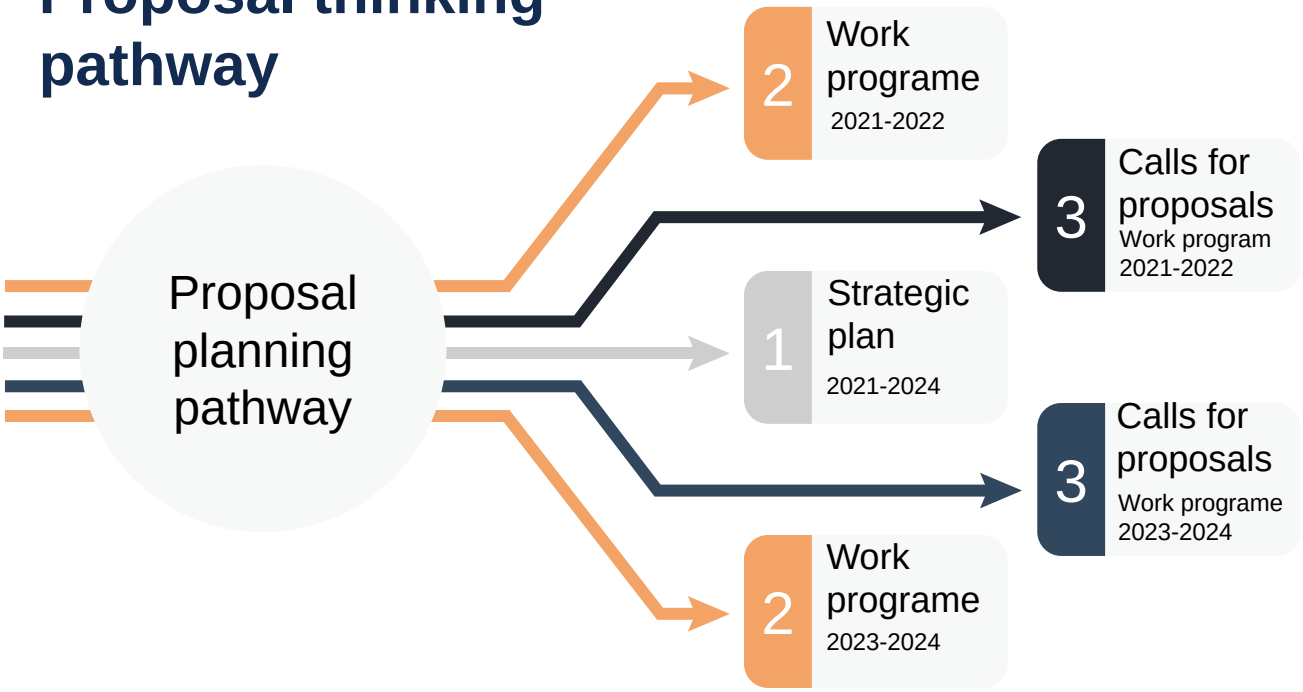

**Areas of intervention**:

- Environmental observation
- Agriculture, forestry and rural areas
- Circular systems
- Food systems
- Biodiversity and natural resources
- Seas, oceans and inland waters
- Bio-based innovation systems in the EU Bioeconomy



Co-funded by the Erasmus+ Programme of the European Union

# Proposal thinking pathway






Co-funded by the Erasmus+ Programme of the European Union

# Main Types of Actions/Projects

## Standard collaborative projects

RIA – Research & Innovation Actions

Activities aiming primarily to establish new knowledge or to explore the feasibility of a new or improved technology, product, process, service or solution. This may include basic and applied research, technology development and integration, testing, demonstration and validation on a small-scale prototype in a laboratory or simulated environment.

IA – Innovation Actions

Activities directly aimed at producing plans and arrangements or designs for new, altered or improved products, processes or services, possibly including prototyping, testing, demonstrating, piloting, large-scale product validation and market replication.

CSA – Coordination & Suppport Actions

Activities contributing to the objectives of Horizon Europe (i.e. dissemination, awareness-raising and communication, networking, coordination, etc.), excluding R&I activities (except when undertaken under the component "Widening participation and spreading excellence" of the Work Programme "Widening participation and strengthening the European Research Area").



Co-funded by the Erasmus+ Programme of the European Union

# Strategic Plan 2021-2024

## Cross cutting issues

- Gender

– relevance in areas such as health and care,
online-violence, artificial intelligence and robotics, or climate change mitigation and adaptation – in which sex and/or gender differences play an important role, and hence
determine the societal relevance and quality of research and innovation outcomes

- Social Sciences and Humanities
- Ethics & integrity
- Open science



Co-funded by the Erasmus+ Programme of the European Union

# Some observations on HEIs-CSOs cooperation opportunities in HORIZON

- Both HEIs and CSOs have educational missions (formal and non-formal education)
- There is some cooperation between HEIs and CSOs, mostly project related.
- For HEIs, projects are complementary activity. For CSOs they are primary activity.
- For both, projects bring added value (additional funds, equipment, networking and partnership building, new methods of work and approaches.
- Various HE funding models, due to which in some countries, teaching staff is not allowed to be additionally paid from the projects - lack of motive
- Constraint: lots of admin work, expectation from HEIs as that is their primary occupation



Co-funded by the Erasmus+ Programme of the European Union

# Some observations on HEIs-CSOs cooperation opportunities in HORIZON

- Highly competitive and resourceful tenders, demanding OUT OF THE BOX thinking
- While E+ projects are moderately attractive for HEIs, HORIZON attracts the most prestigious HEIs and leading researchers in the field
- Multi and interdisciplinary calls (partnerships from various disciplines)
- Long and comprehensive preparation process with 2 key domains to invest resources: scientific excellent (involvement of leading researchers) + coordination (CSOs may help)
- Research excellence (HEIs) + impact (HEIs & CSOs)
- Poor evaluations start with with excellence
- External support (including CSOs), such as BayFOR (Bayerische Forschungsallianz (Bavarian Research Alliance) GmbH)
- Being open for both leading and being partner



Co-funded by the Erasmus+ Programme of the European Union

# Consortium outline

- References on the topic (leading researchers and institutions)
- Interdisciplinary (2 or more disciplines + cross cutting gender expertise)
- Intersectoral (HEIs + SMEs, CSOs, policy makers...)
- Budget (who fits?)
- Call conditionality check (regions, countries if any, TRL)
- Who is the lead? HEIs in Horizont discussion



Co-funded by the Erasmus+ Programme of the European Union

# Roles & tasks distribution

- On **IPR/confidentiality statement** prior to proposal submission (optional)

- **Hosting of platform** with project drafting parts & all other working documents

- **Drafting**:
  - WPs coordination & drafting
  - Excellence section
  - Impact section



Co-funded by the Erasmus+ Programme of the European Union

# Roles & tasks distribution

- Weekly/bi-weekly **coordination meetings**
- **Administration**: PIFs, Bios/CVs, etc.
- Quality assurance – **internal reviewers** (optional)
- Consideration of **ethical issues** (at some HEIs this may be lengthy procedure)



Co-funded by the Erasmus+ Programme of the European Union

# Drafting of proposal

- **Coordination**

- Interconnectivity among the 4 application sections: excellence, impact, implementation, budget

- **Synchronisation**

- Within and among different WPs
- Within the project overall methodology



Co-funded by the Erasmus+ Programme of the European Union

# Budgeting

- 25% indirect costs (may be even more, depending on the call)
- Staff salaries – persons/months per WPs
- Travel, equipment, events organization, fees, printing and services (subcontracting)
- Always limited funding available!
- Realistic, balanced, reflecting partner involvement/contribution, and necessary costs!



Co-funded by the Erasmus+ Programme of the European Union

# Timeline – mind the backs and forths!

- 6 months approximately for submission
- **1-4 months** are least productive: lead partner sees the call late, effort is not dedicated, consulting and testing project ideas, late 1st consortium meetings, changing partners/roles, etc.
- **5-6 months** – most of the work is done and proposal submitted



Co-funded by the Erasmus+ Programme of the European Union

# Lobbying and/or pre-positioning?

- Who are the **competitors** and what is their focus?
  Proposal adaptation…

- Who are the (potential) **evaluators**?
  Proposal adaptation…

- Who is the topic **major advocate** (benefits from the impact)?
  Proposal adaptation…



Co-funded by the Erasmus+ Programme of the European Union

# Set-up steps

1. Matching our **research idea** and program topic

2. **Consortium** outline

3. **Roles** and tasks distribution

4. **Drafting** of proposal
- Coordination
- Synchronization

5. **Budgeting**




Co-funded by the Erasmus+ Programme of the European Union

# Impact section to show:

1. Credibility for the **pathways** (methods and procedures) to achieve the expected outcomes and impacts specified in the work prog., and the **likely scale and significance** of the project contributions.
2. Suitability and quality of the **measures to maximise expected outcomes** and impacts, as set out in the D&E plan, incl. comm. activities.




GROWTH
Co-funded by the Erasmus+ Programme of the European Union

# Impact section to show:

3. How the project could contribute to the outcomes and impacts described in the work prog., based on the **KPIs – Key Performance Indicators**.




Co-funded by the Erasmus+ Programme of the European Union

# Impact overall

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

**Medium term outcomes vs long term impact?**




Co-funded by the Erasmus+ Programme of the European Union

# Writing impact section

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

2.2 **Measures** to maximise impact - Dissemination, exploitation and communication
[e.g. 5 pages, including section 2.3]

2.3 **Summary**

*Analize the section writing instructions under 2.1 and 2.2*

*(20')*



Co-funded by the Erasmus+ Programme of the European Union

# Writing impact section

**2.3 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.

**KEY ELEMENT OF THE IMPACT SECTION**

| SPECIFIC NEEDS | EXPECTED RESULTS | D & E & C MEASURES |
|---|---|---|
| *What are the specific needs that triggered this project?*<br><br>Example 1<br>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.<br><br>Example 2<br>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?<br><br>Example 1<br>**Successful large-scale demonstrator: Successful large-scale demonstrator:** Trial with 3 airports of an advanced forecasting system for proactive airport passenger flow management.<br><br>**Algorithmic model:** Novel algorithmic model for proactive airport passenger flow management.<br><br>Example 2<br>Publication of a **scientific discovery on transparent electronics.**<br><br>**New product:** More sustainable electronic circuits.<br><br>**Three PhD students trained.** | What dissemination, exploitation and communication measures will you apply to the results?<br><br>Example 1<br>**Exploitation:** Patenting the algorithmic model.<br><br>**Dissemination towards the scientific community and airports**: Scientific publication with the results of the large-scale demonstration.<br><br>**Communication towards citizens:** An event in a shopping mall to show how the outcomes of the action are relevant to our everyday lives.<br><br>Example 2<br>**Exploitation of the new product:** Patenting the new product; Licencing to major electronic companies.<br><br>**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?*<br><br>Example 1<br>**9 European airports**: Schiphol, Brussels airport, etc.<br><br>**The European Union aviation safety agency.**<br><br>**Air passengers (indirect).**<br><br>Example 2<br>**End-users**: consumers of electronic devices.<br><br>**Major electronic companies**: Samsung, Apple, etc.<br><br>**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)?*<br><br>Example 1<br>**Up-take by airports:** 9 European airports adopt the advanced forecasting system demonstrated during the project.<br><br>Example 2<br>**High use of the scientific discovery published** (measured with the relative rate of citation index of project publications).<br><br>**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?*<br><br>Example 1<br>**Scientific:** New breakthrough scientific discovery on passenger forecast modelling.<br><br>**Economic:** Increased airport efficiency<br>Size: 15% increase of maximum passenger capacity in European airports, leading to a 28% reduction in infrastructure expansion costs.<br><br>Example 2<br>**Scientific:** New breakthrough scientific discovery on transparent electronics.<br><br>**Economic/Technological:** A new market for touch enabled electronic devices.<br><br>**Societal:** Lower clima<br>manufacturing (inclu<br>waste management). |





Co-funded by the Erasmus+ Programme of the European Union

# Project
# implementation section

**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.



Co-funded by the Erasmus+ Programme of the European Union

# Project
# implementation section

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

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



Co-funded by the Erasmus+ Programme of the European Union

# Project
# implementation section

Table 3.1a: List of work packages

| Work package No | Work Package Title | Lead Participant No | Lead Participant Short Name | Person-Months | Start Month | End month |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | Total person-months | | |



Co-funded by the Erasmus+ Programme of the European Union

What we must do?
*Clear Call referenced conditionality*:

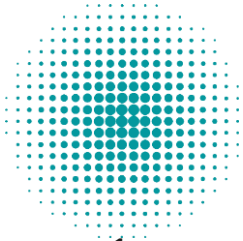
What we should do?
*Suggested Call referenced criteria*:

What we could do?
*Matching interest of lead and partners institutions and/or researchers*:



Co-funded by the Erasmus+ Programme of the European Union

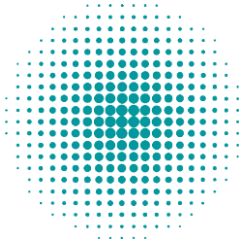
# Projects Drafting: Application sections



1. Excellence

1.1. Objectives

1.2. Methodology

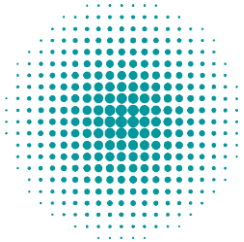


2. Impact

2.1. pathways

2.2. dissemination and communication

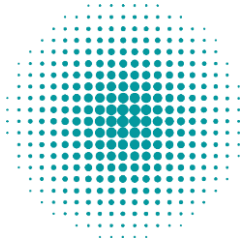
2.3. summary -key elements



3. Quality and efficiency of implementation

3.1. Work plan

3.2. Capacity of consortium

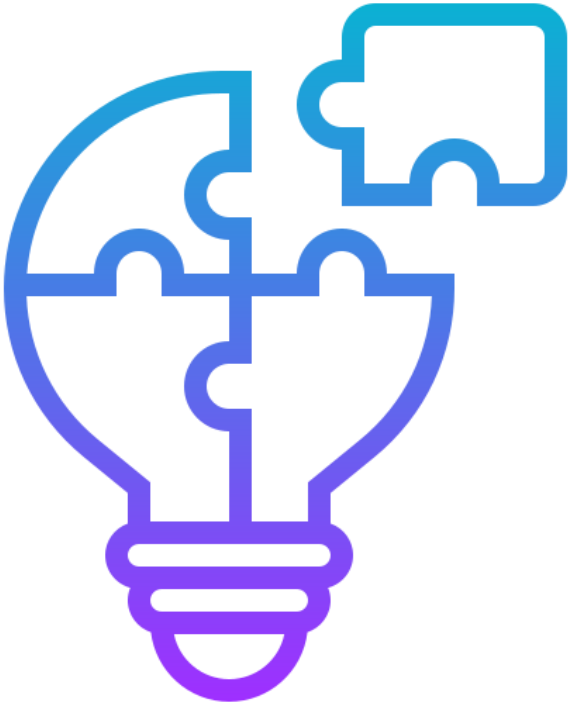


Budget and resources



Co-funded by the Erasmus+ Programme of the European Union

# Projects Drafting (application sections):



Excellence
What your project is about?
Convincing the reviewers with:
clear and realistic objectives, sound ambition and
state of the art methodology



Co-funded by the Erasmus+ Programme of the European Union


# Competitive proposals drafting considerations

**WHAT IS THE PROJECT AIMING TO ACHIEVE?**

**WHAT IS THE NOVELTY (AND/OR IMPORTANCE) OF THE PROJECT?**

Impress and intrigue the reviewers:

- the motivation for the project (excitement)
- the project's objectives & concept (clarity)
- the chosen methodology and approach (excitement and clarity)

*Establishing the knowledge gap in the field of interest, and showcasing how the project goes beyond the State of the Art in order to bridge this gap!*



Co-funded by the Erasmus+ Programme of the European Union


# Competitive proposals drafting considerations

**section 1.1 – Objectives (and Ambition)**

- 2 pages objectives + 2 pages ambition
- In defining **objectives** refer to the specific topic's *scope*, *focus* and *terminology*
- To the point! (*no long background texts!) - The main objective(s) of this project is/are….*
- overarching objective + a set of specific conceptual objectives (SMART – include verification means and/or indicators)
- Conceptual – macro level objectives vs. technical/ operation(work plan 3.1.)



Co-funded by the Erasmus+ Programme of the European Union


# Competitive proposals drafting considerations

**STRUCTURE & CONTENTS**

**section 1.1 – Objectives (and Ambition)**

- how and why proposal addresses the scope of the targeted topic in the work program:
  - single paragraph
  - story line should not be repetitive! (as in abstract and already stated)



Co-funded by the Erasmus+ Programme of the European Union


# Competitive proposals drafting considerations

- **Ambition - establish the need/motivation for the suggested project**

**1.** clearly describing the State of the Art within the relevant field (avoid missing the most recent and updated published work relating to your project, not only within academia but also in other relevant sectors such as industry)

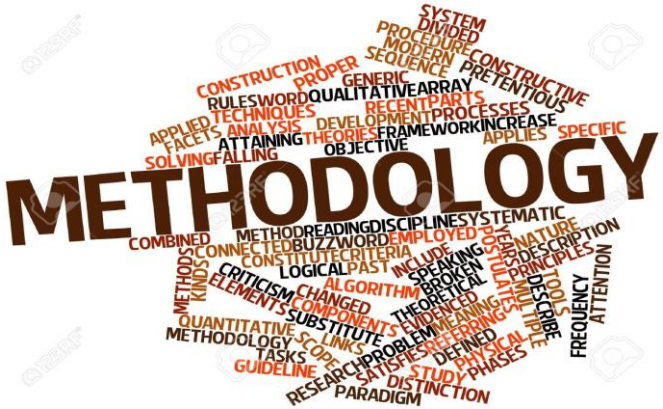
2. define the knowledge gap

3. explain a leap forward beyond the State of the Art which will establish the project's novelty (how your novel project provides a solution to these needs and closure of the knowledge gap)

4. clearly explain innovative potential of your project> breakthroughs, new products, services, business, organizational models, or anything else in this context



Co-funded by the Erasmus+ Programme of the European Union




# Competitive proposals drafting considerations

## STRUCTURE & CONTENTS

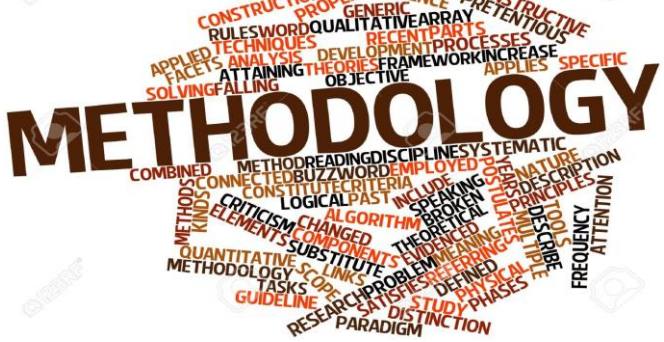
**Sub-section 1.2 – methodology**

**Thinking about how to 'deliver the goods' and facilitates the novelty?**

- cca. 15 pages (10 p. concept, approach and methodology + cross cutting and other)
- concept & approach, as well as the selected methodology that will enable these
- bridge to the more technical & operational Implementation section
- novel concept + constructed on sound methods for achieving objectives
- Addressing call topic requirements! (regarding particular organizations, networks, associations, initiatives, related projects)



Co-funded by the Erasmus+ Programme of the European Union




# Competitive proposals drafting considerations

## STRUCTURE & CONTENTS

**Sub-section 1.2 – methodology**

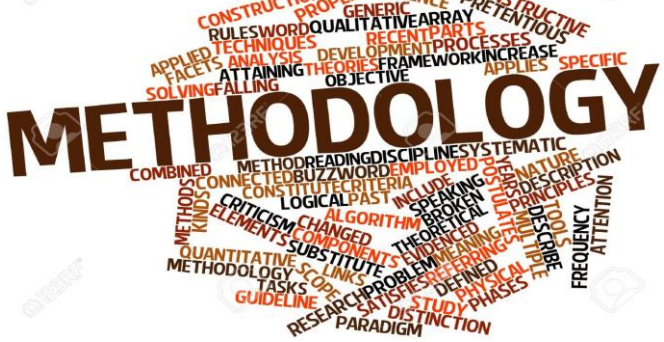
**Thinking about how to 'deliver the goods' and facilitates the novelty?**

1.2.1 Concept

- main ideas, models, assumptions, etc. should be listed and presented in detail
- Presentation of novelty (scientific reasoning for the concept chosen)
- Justify novelty claim through the use of: graphs, pathways, mechanisms, techniques, methods, mathematical formulas and expressions, description of algorithms, preliminary findings
- Hypothesis and Interdisciplinary aspects
- **TRL** - where will it be by the end of the project (see the Call!)



Co-funded by the Erasmus+ Programme of the European Union





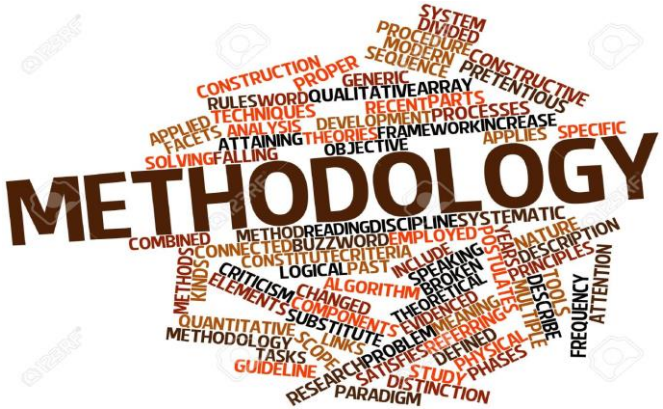
# Competitive proposals drafting considerations

**TRL 5 -** Reliability of technology significantly increases. Examples could involve validation of a semi-integrated system/model of technological and supporting elements in a simulated environment.

TRL 4 - Technology validated through designed investigation. Examples might include analysis of the technology parameter operating range. The results provide evidence that envisioned application performance requirements might be attainable.



Co-funded by the Erasmus+ Programme of the European Union




# Competitive proposals drafting considerations

## STRUCTURE & CONTENTS

**Sub-section 1.2 – methodology**

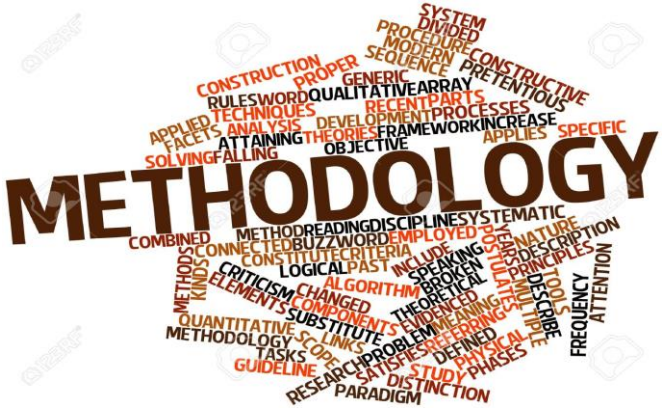
**Thinking about how to ‘deliver the goods’ and facilitates the novelty?**

1.2.2. Chose methodology

- elaborate on and explain the scientific and, if relevant, technological methods, models and assumptions
- reflect on the innovative aspects of your project
- Don’t go deep into the HOW (part of section 3)



Co-funded by the Erasmus+ Programme of the European Union




# Competitive proposals drafting considerations

## STRUCTURE & CONTENTS

**Sub-section 1.2 – methodology**

**Thinking about how to 'deliver the goods' and facilitates the novelty?**

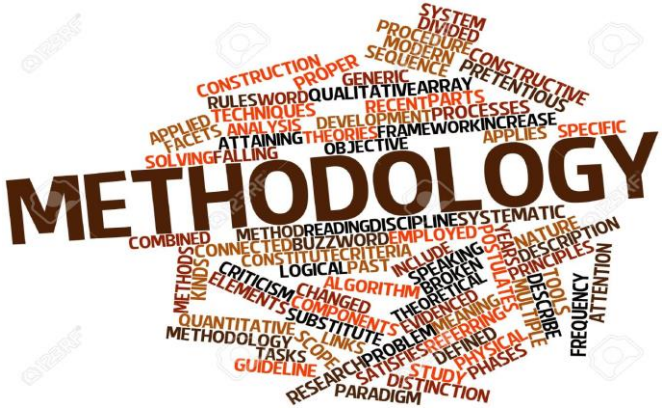
**Interdisciplinary** (how elements and expertise from different disciplines will be used in the project in a complementary and comprehensive way

**SSH integration** (1/2 page if required by call/topic; state included disciplines and their holistic approach)

**Sex & Gender** (1 page: refer to sex and gender aspects of the content of the project's activities, not gender balance – part of section 3)



Co-funded by the Erasmus+ Programme of the European Union




# Competitive proposals drafting considerations

## STRUCTURE & CONTENTS

**Sub-section 1.2 – methodology**

**Thinking about how to 'deliver the goods' and facilitates the novelty?**

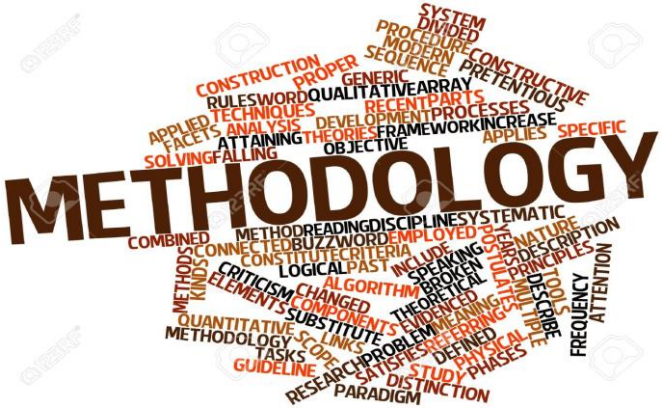
**Open science** (up to 1 p.)

- ✓ integration of Open Science practices in the methodology, i.e. early access to research results, open access to scientific publications and data, and co-creation of R&I content with stakeholders and the general public)
- ✓ mandatory - providing open access to scientific publications

**https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/our-digital-future/open-science_en**



Co-funded by the Erasmus+ Programme of the European Union




# Competitive proposals drafting considerations

**Sub-section 1.2 – methodology**

**Thinking about how to 'deliver the goods' and facilitates the novelty?**

**Data management plan (DMP)** - up to 1 page

- Proposals including collection, generation or creation of data
- FAIR principles:

- findability ( identifiers that would help to reach the data),

- accessibility, interoperability (ability to communicate/use the data by multiple people)

- reusability (permissions and tools for reuse of the data,

and the way they will be stored and its cost

https://www.openaire.eu/how-to-make-your-data-fair



Co-funded by the Erasmus+ Programme of the European Union

WEIHENSTEPHAN · TRIESDORF
University of Applied Sciences

# We are looking forward to intensify our work with you.

Dragan Brković, Project Coordinator "Technology and Transfer Pact with Africa" (TAP)
dragan.brkovic@hswt.de

Applied Sciences for Life

GROWTH

Co-funded by the Erasmus+ Programme of the European Union