Horizon 2020

General Introduction & Structure
Funding Mechanisms & Partner Search
Proposal Preparation & Support





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EEWRC



Presentation

Outline



H2020 "Briefly"....

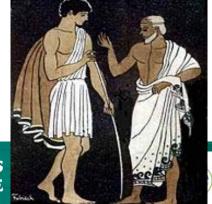
Structure, Programmes, Types of Actions..!

•Consortium... "Mechanics"

Partner Search overview



• Proposal Support... "Prescreening"... Hints-&-Tips
Philosophy Approach Competencies











NAXOS2018 Presenter's Background and Organization

Professional (past) Experience:

- 2000-2005. Laboratory Researcher (Aegean & Stevens)
- 2007-2008. Environment Research Officer (Univ. Nicosia)



→ "Marie Curie" | EURAXESS | "Climate Action & Environment" | Space



-EMME-CARE...!



- Project Management
- Identification of (funding) Opportunities and Networking
- Proposal Writing Support
- Mentoring/ Training/ Capacity Building for European Grants
- MSCA-IF/ ERC/ EURAXESS/ Environment/ Space/ Security/ et.al. ...









Eaast

Mediterranean & Middle

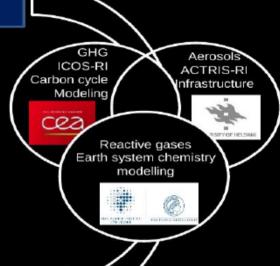
The... "EMME-CARE" Project...!



Atmosphere & Climate Division

7-year project Starting in 2019 > 30M€











New Centre of Excellence

http://emme-care.cyi.ac.cy/





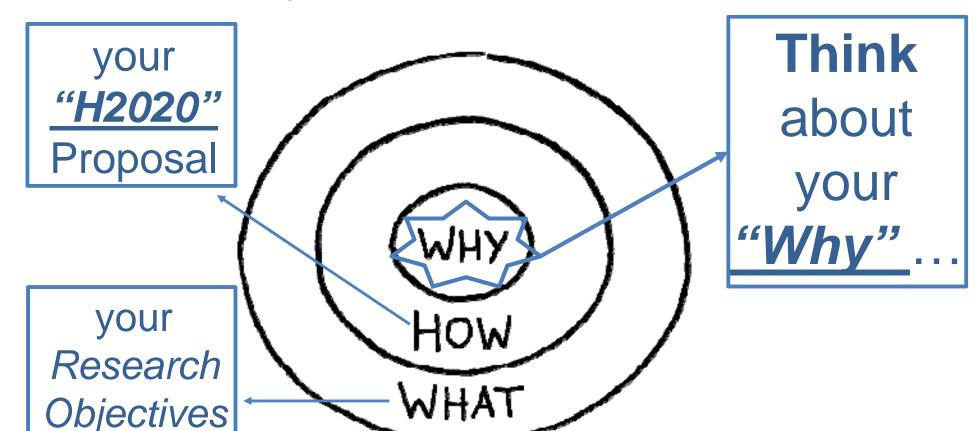








The Golden Circle





C2013 Simon Sinek nc. Simon Sinek – https://www.startwithwhy.com/

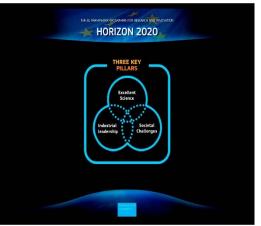






- 1.EU's largest legal instrument for <u>funding research</u>
 <u>and innovation</u> in Europe (proposed by the Commission and adopted by the Council and Parliament)
- 2.≈ <u>€ 80 billion</u> for the period <u>2014 2020</u>
- 3.Programmes address <u>Societal Challenges</u>
 (Environment, Health, Energy,...), <u>Industrial Leadership</u>
 and Competitiveness (ICT, Space, Nano,...), as well as
 <u>Excellence</u> in world leading scientists, future &
 emerging technologies and training & career
 development through mobility
- 4. Projects are funded through <u>competitive Calls-for-Proposals</u>, stemming from 2-year Work Programmes, and must have a "<u>European Dimension</u>" and "Impact"













NAXOS2018 "Truths" to...Realize Before Starting..!

- The Proposal is NOT a Paper/ Article for a Journal...
- It is a *science-&-innovation pitch* of your research...
 - → so as to receive funding...!
- EC has been doing this for quite a few FPs... There are particular policy and mandate backgrounds. There's a particular language-jargon, structure, process...
- The philosophy is "Competitive Calls" for Proposals...

NOT "subsidies"...!

















NAXOS2018 "Truths" to...Realize Before Starting..!

- You need EUROPEAN ADDED VALUE...!
- Problem/ Issue attempted to be solved or the technology/ innovation attempted to be developed cannot be of local or regional character but rather of pan-European... scale/complexity of the "solutions" for EU and not "just X-Country".
- Transnationality, replicability and transferability should be the keywords for both the "challenges"/ "problems" addressed, and the "solutions" proposed.
- not just through "transfer of knowledge" or "networking" or "EU-wide" dissemination", but rather it should be clearly shown in the proposal how the issue addressed is of a "wider interest" and how the solution proposed indeed has wide applicability.

2014 Main Report of DG RTD:

https://ec.europa.eu/research/iscp/pdf/publications/Final_European_Added_Value_inco_MainReport.pdf **Strategic Forum for International S&T Cooperation (SFIC):**

http://ec.europa.eu/research/iscp/pdf/sfic/sfic-annual-report-2011_en.pdf#view=fit&pagemode=none









H2020... "Knowledge-Check" Exercise



Before... "Glancing" further...:

- In...three (3) minutes:
- Let's think quickly together about what you already know of H2020:
 - How many / Which are the H2020 Pillars...
 - How many / Which Programmes per Pillar do you know...
 - How many / Which Types of Actions do you know...





Pillar 1. Excellent science



European Research Council (ERC)

Frontier research by the best individual teams

Future and Emerging Technologies

Collaborative research to open new fields of innovation

Marie Skłodowska-Curie Actions (MSCA)

Opportunities for training and career development

Research infrastructures (including e-infrastructure)

Ensuring access to world-class facilities

















Pillar 2. Industrial leadership

Leadership in enabling and industrial technologies (LEITs)

(ICT, nanotechnologies, materials, biotechnology, manufacturing, space)

Access to risk finance

Leveraging private finance and venture capital for research and innovation

Innovation in SMEs

Fostering all forms of innovation in all types of SMFs















Pillar 3. Societal challenges





- 1. Health, demographic change and wellbeing
- 2. Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the bioeconomy
- 3. Secure, clean and efficient energy
- 4. Smart, green and integrated transport
- 5. Climate action, Environment, resource efficiency and raw materials
- 6. Inclusive, innovative and reflective societies
- 7. Secure societies

Excellence Science

 European Research Council

Frontier research by the best individual teams (ERA)

 Future and Emerging Technologies

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Industrial Leadership

Leadership in enabling and industrial technologies

- ICT
- Nanotechnologies materials, biotechnologies, manifacturing
- Space
- Access to risk finance
 Leveraging private finance and venture capital for research and innovation
- Innovation in SMEs
 Fostering all forms of innovationin all types of SMEs

Societal Challange

- Health, demographic change and wellbeing
- Food security, sustainable agriculture, marine and maritime research, and the bio-economy
- Secure, clean and efficient energy
- Smart, green and integrated transport
- Climate action, resource efficiency and raw materials
- Europe in a changing world – inclusive, innovative, reflective societies
- Secure Societies

European Institute of Innovation and Technologies (EIT)

Spreading Excellence and Widening Participation

Science with and for society

Joint Research Center (JRC)

Euratom

Fast Track to Innovation

Source: APRE.it





EEWRC



Rules...

One project one funding rate

Maximum of 100% of the total eligible costs (except for innovation actions, where a 70% maximum will apply for profit making entities)

Three Evaluation Criteria
 Excellence
 Impact
 Implementation

International Cooperation facilitated









Rules...

Who Can Participate?

☐ Basically everybody - but always check Call for Proposals

In Europe and the rest of the world

(legal entities and natural persons)











Rules...



Who Can Participate and Receive Funding?

All participants from:

- Member States
- Associated Countries(eg. Iceland, Norway, Israel, Serbia)
- ➤ Participants from Third Countries where identified in the Calls for Proposals

High Income Countries are generally not eligible









Rules...

Minimum Conditions

Standard collaborative actions

At least three legal entities each established in a different Member State or an Associated Country;

SME instrument:

One SME established in a Member State or in an Associated Country.

Additional Conditions

Always check the Work Programme!

√There might be specific conditions for participation









NAXOS2018 Types of Actions...

TYPES OF ACTIONS

Source: CY-RPF

TYPE OF ACTION	DESCRIPTION OF ACTION	MINIMUM CONDITIONS	FUNDING RATE
Research and Innovation Actions	Main Activity Type: Research & Development (e.g. basic and applied research, technology development and integration, testing and validation)	≥ 3 legal entities from 3 MS/AC	100%
Innovation Actions	Main Activity Type: Innovation Activities close to the market (e.g. prototyping, testing, demonstrating etc)	≥ 3 legal entities from 3 MS/AC	70% - except 100% for non-profit legal entities
Coordination & Support Actions	Main Activity Type: Accompanying Measures, Dissemination, Networking & Coordination or Support Services	1 legal entity from MS/AC	100%
SME Instrument	Phase 1: Concept & Feasibility Assesement (e.g. risk assessment, market study, IPR etc) Phase 2: Innovation Activities (e.g. demonstration, testing, prototyping, piloting etc) Phase 3: Commercialisation and access to the financial facilities supported under H2020	1 SME from MS/AC	Phase 1 lump sum 50,000 € Phase 2 70%, except 100% where the research component is strongly present Phase 3 no direct funding
COFUND Actions	ERA-NET: Implementation of the co-funded joint Call for Proposals to fund trans-national research and innovation projects Pre-Commercial Procurement (PCP): Steer development to public sector needs Public Procurement of Innovative Solutions (PPI): First buyer for innovative solutions Marie Skłodowska - Curie Actions (MSCA): Co-funding new or existing Programmes to open up to, and provide research training	ERA-NET ≥ 3 legal entities from MS/AC PCP & PPI ≥ 3 legal entities from MS/AC & 2 ≥ public procurers from MS/AC 1 legal entity from MS/AC	PCP 70% PPI 20% MSCA 50%
Prizes	Inducement Prize: Induce future activities Recognition Prize: Recognise past achievements	1 legal entity	n/a



"NAXOΣ-2018 6th International Conference on Sustainable Waste Management" Consortium "Mechanics"...









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Consortia...

Partners...





- To achieve European Added Value...
- to achieve Transnationality,
 replicability and transferability...you

need...

• Good **PARTNERS** and good **Consortium**...!









NAXOS2018 Consortia... Partners... in H2020...

Good characteristics in partners...

- Are they reliable?
- Are they suitable for the purposes of the **Project?**
- Is their Organisation able to provide the necessary resources?
- they bring added value to the **Consortium?**
- Do they contribute to gender balance?













Consortia... Partners... in H2020...

Characteristics of a Good Consortium

- **✓** Experienced coordinator
- ✓ Scientists with track record ✓ Multidisciplinary
- ✓ Relevant expertise and skills
- ✓ Good infrastructure and resources
- ✓ Involvement of competent staff
- ✓ Partners contributing to "triple helix" and "triple i" dimension

- ✓ Gender Balance
- ✓ Partners have **Complementarity (no major** overlaps) and synergies
- ✓ Relevant stakeholders
- ✓ Good distribution of work
- ✓ Added value of each partner
- ✓ Previous collaborations
- ✓ Commitment













Consortia... Partners... in H2020...

H2020... "Networking Means" Exercise



- In...three (3) minutes:
- Let's think together...
 - Three (3) Partner Search means and/or approaches you would suggest
 - One (1) that you would not suggest





Consortia... Partners... in H2020...

Where should I look for "Core" Partners?

- Personal contacts with (reliable)
 people and institutions you have
 worked with in other scientific/
 research endeavours
- Previous Collaborations in (EU)Projects
- Contacts from participation in Working Groups / Committees















NAXOS2018 Consortia... Partners... in H2020...

How about additional Good Partners?

- COST Actions: www.cost.eu
- NCP Networks' Partner Search Tools:
- → http://ec.europa.eu/research/participants/docs/h2020-funding- guide/grants/applying-for-funding/find-partners_en.htm
- → ICT, Health, Energy, Environment, Transport
- **EEN Cooperation Opportunities Database**
- → http://een.ec.europa.eu/tools/services/SearchCenter/Search/Profile SimpleSearch
- **Brokerage Events, Info-days, Seminars, Conferences**
- Linked In, ResearchGate.net, Academia.edu, Angel List













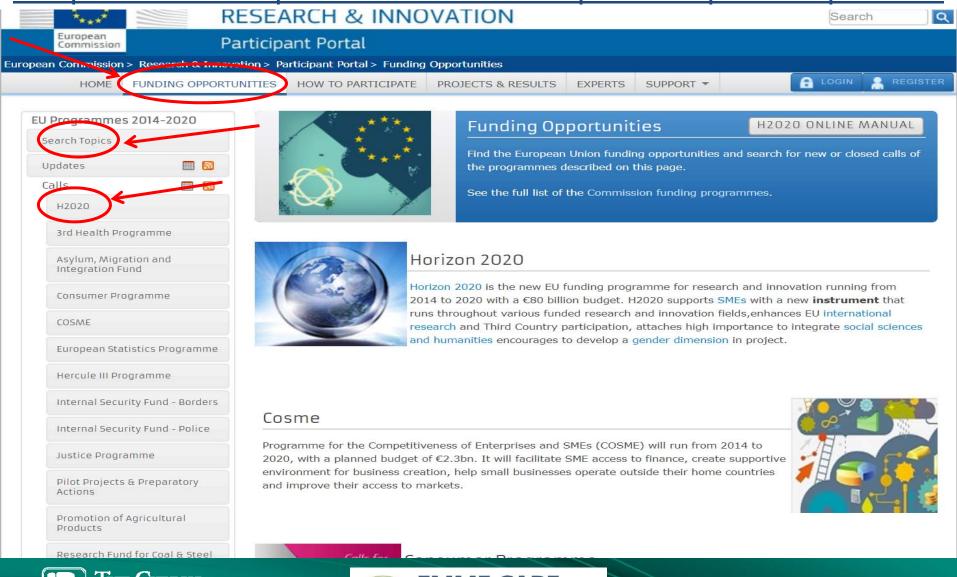
Now...let's Suppose...:

- Researcher / Research Team:
- Environmental Protection...
- Sustainable Use of Resources
- Sustainable Development and Management...
- Waste Management...
- Renewable Energy Sources...
- Climate Change (Adaptation and Mitigation)...
- Use of Novel Technologies and Innovations for the Environment...





NAXOS2018 Where to look for Calls and Info...? http://ec.europa.eu/research/participants/portal

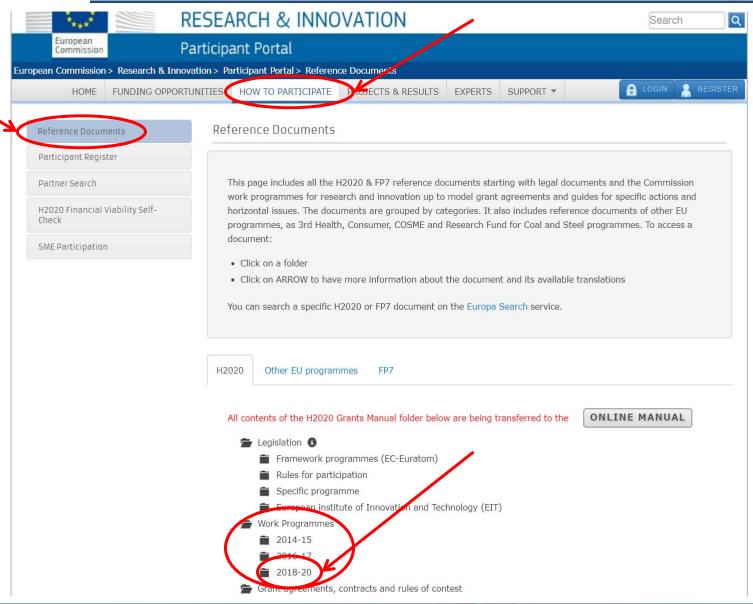








Where to look for Calls and Info...?









NAXOS2018 Where to look for Calls and Info...?

But also the... "less obvious"...

> Keep an eye at the... obvious...



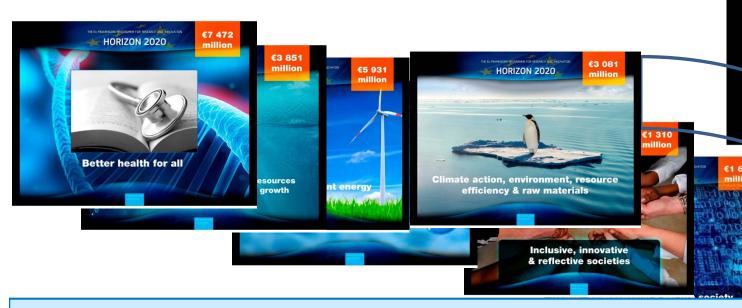






Priority 3.

Societal Challenges



Tackling societal challenges for a better society

- 1. Health, demographic change and wellbeing
- 2. Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the bioeconomy
- 3. Secure, clean and efficient energy
- 4. Smart, green and integrated transport
- 5. Climate action, Environment, resource efficiency and raw materials
- 6. Inclusive, innovative and reflective societies
- 7. Secure societies



http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-climate_en.pdf



Decarbonisation.



Climate adaptation, impacts and services.



Connecting economic and environmental gains - the circular economy.

Inter-relations between climate change, biodiversity and ecosystem services



Water for our environment, economy and society

Innovating cities for sustainability and resilience.



Protecting and leveraging the value of our natural and cultural assets: Earth observation







Priority 3. Societal Challenges



Tackling societal challenges for a better society

- 1. Health, demographic change and wellbeing
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http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-energy_en.pdf





Energy efficiency

Global leadership in renewables.

Smart and clean energy for consumers.

Smart citizen-centred energy system.

Enabling near-zero CO2 emissions from fossil fuel power plants and carbon intensive industries.....









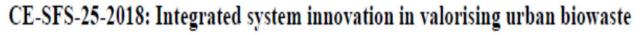


... some Topics...!



LC-CLA-03-2018: Climate change impacts in Europe...

LC-CLA-03-2016. Chiniate change impacts in Europe	· P
CE-SC5-01-2018: Methods to remove hazardous substances and contamina	ants from
secondary raw materials	
CE-SC5-04-2019: Building a water-smart economy and society	
CE-SC5-06-2018: New technologies for the enhanced recovery of by-pro	ducts
CE-SC5-07-2018-2019-2020: Raw materials innovation for the circular e	conomy:
sustainable processing, reuse, recycling and recovery schemes	
SC5-15-2018: Strengthening the benefits for Europe of the Global Earth Observation	
System of Systems (GEOSS) - establishing 'EuroGEOSS'	
SC5-16-2019: Development of commercial activities and services through the use of	
GEOSS and Copernicus data	
SC5-17-2018: Towards operational forecasting of earthquakes and early warming	ig capacit
for more resilient societies	
LC-SC3-RES-1-2019-2020: Developing the next generation of renewable energy	
technologies	
LC-SC3-RES-2-2018: Disruptive innovation in clean energy technologies	
LC-SC3-RES-22-2018: Demonstration of cost effective advanced biofuel pat	hways in
retrofitted existing industrial installations	
LC-SC3-NZE-1-2018: Advanced CO2 capture technologies	
CE-SC3-NZE-2-2018: Conversion of captured CO2	
•	











"Hints"...





Evaluator's "Eyes"

H2020

Proposal Writing



Best Practice

Common Errors







"Official"

Criteria

	Excellence		
Weighting and <i>Ex Aequo</i> Priority			
"Content"	 Clarity and pertinence of the objectives; Credibility of the proposed approach. Soundness of the concept; Quality of the proposed coordination and/or support measures; Progress beyond the state-of-the-art. 		
Excellence Just Ahead			

Impact

Implementation

Check Calls!!!

- •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 and delivering innovations meeting the needs of European and global markets;
- •Effectiveness of the proposed measures to exploit and disseminate the project results (including management of IPR), to communicate the project, and to manage research data where relevant.

- •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.





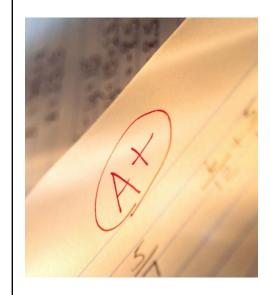


Criteria

	•		
	Excellence	Impact	Implementation
"Hints"	Objectives and overview Research methodology and approach: highlight the type of research and innovation activities proposed Explain the contribution that the project is expected to make to advancements within the project field. Describe any novel concepts, approaches or methods that will be employed.	 Important field of research for Europe High practical value of the project and also results can be applied to larger class of problems (tackling also multidisciplinarity) Comparison of experience in relevant field outside Europe and showing that project will promote European research and excellence and EU competitiveness (also showing potential for new jobs creation) Dissemination, Exploitation and Outreach of the project results IPR, Open Access, Scientific Community but also Wider Public. 	Work Packages description Deliverables (= tangible output: report, document, technical diagram, software, etc.) Milestones (=control/ decision points that help to chart progress) Gantt Chart (=Table of Activities over planned time) and PERT- gram •Synergies of Partners: each has clear contribution and role Progress monitoring and management structure, including the financial management strategy •Risk management for Risks that might endanger reaching the project's objectives and the contingency plans to be put in place should risk occur.

→ What Evaluators expect

- Well-organised, "flowing" text. Proposal should make the Evaluator's "life" easier: consistent, well-written, following guidelines/templates.
- Proposal should help the Evaluators score it more easily: "built" around the Evaluation Criteria.
- Proposal has to convince that it will add value in the specific field, for the EU at large.
- Clear description of the contribution to beyondthe-state-of-the-art, as well as of the competencies and synergies of Consortium.
- Clear Work Plan with Contingency Planning, IPR management considerations, and Outreach/Dissemination Plans.





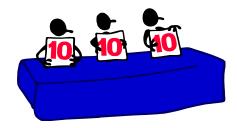




- Evaluators don't have too much time... Keep it simple and concise
- Always revisit the Criteria-questions... Stay within "Scope" and "Expected Impact"
 (→ copy from Documentation and work around it)
- No duplications of previous works/projects, but... building on them
- Clear language and organised contents
- Explain abbreviations / Use Glossary
- Use tables and diagrams (relevant and easily understandable)
- Use Structure and Table-of-Contents from Templates...Use Headings and subheadings from Templates...

General "Good Practice"











"Hints"...

"Tips"...

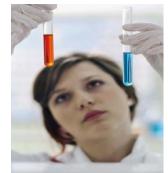
- Use Margins and Font Size / Page-Numbering / Page Limits set in Templates...!
- Accurate, Verifiable and Professional content (refer. where needed)
- No "emphatic" statements and claims that are unsubstantiated
- Consistent in UK English throughout. NO jargon or slang.
- Write for the "non-specialist" educate te Evaluator to understand what you want to do and why it's worth the funding...!
- No typos, no inconsistencies, no obvious cut-&paste, no numbers which don't add up, no missing pages...
- Proof Read at the end...

General

"Good
Practice"













"Hints"...

"Tips"...

Good to follow the "Logical Framework" approach:

- •WHY a project is carried out
- •WHAT it is expected to achieve (and what not...)
 - →So, Project Objectives (and non-Objectives)
- •WHO is going to do the work...
 - →So, Consortium and the synergies and complementarity of Partners
- •HOW the project is going to achieve the above...
 - →So, Work-Plan and Phases of Work, as well as Means/ Resources to be utilized.











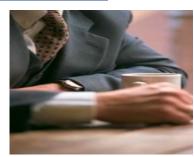




"Hints"... "Tips"...

Proposal - Writing Basic Hints by Cyl-EEWRC...!

- ✓ Develop end-to-end applications!
- ✓ Showcase and build on trials, and develop/ further enhance any early prototypes...
- ✓ Underline the Innovative, Beyond-the-State-of-Art character of your solution/ project...
- ✓ Provide Public Benefits from your solution/ project...
- ✓ Strengthen the community of relevant developers of technologies!
- ✓ Exploit (if any) mature business concepts...
- ✓ Don't forget Technology Readiness Level(s)…!
- √Take into account relevant standards and regulations (eg. Safety and security)...!













Technology Readiness Level – TRL

to assess the maturity of evolving technologies during its development.

L 1) Basic principles observed and reported

TRL 2: Technology concept and/or application formulated

TRL 3: Analytical and experimental critical function and/or characteristic proof of concept

TRL 4: Component and/or breadboard validation in laboratory environment

TRL 5: Component and/or breadboard validation in relevant environment

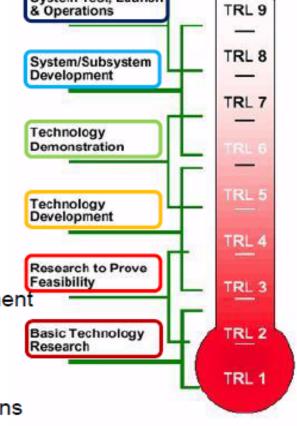
TRL 6: Prototype demonstration in relevant environment

TRL 7: Prototype demonstration in an operational environment

TRL 8: System completed and qualified through test
and demonstration

RL 9: System proven through successful mission operations





System Test, Launch



"Hints"...

"Tips"...

→Overall Useful Links...!

Participant portal

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/index.html

Horizon 2020 Helpdesk

http://ec.europa.eu/research/participants/ortal/desktop/en/support/research_enquiry_service.html

Horizon 2020 On-line manual

http://ec.europa.eu/research/participants/docs/h2020-fundingguide/index_en.htm

Annotated Model Grant Agreement (version 26Oct2017)

http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/amga/h2020-amga_en.pdf

EURAXESS (Charter-&-Code, Policy...)

https://euraxess.ec.europa.eu/

https://euraxess.ec.europa.eu/useful-information/policy-library















"Hints"... "Tips"...

Proposal - Writing "General Advice" by Cyl-EEWRC...!

- ✓ Start early... Get Guidance and Info...!
- ✓ Create/Join Consortia on time, based on whom
 you know/ have worked with or valid suggestions
- ✓ Get your "Policy Background" together → Impact...
- √ Follow the Template-GfA → cover all requested
- ✓ Divide effort over the Evaluation Criteria!
- ✓ When you write...KISS (keep it simple & short)
- √When you image/table...KILL (keep it large & legible)
- ✓ Details! Details!
- ✓ Get your Proposal PRESCREENED... and PROOF-READ...!













"Hints"... "Tips"...

Proposal - Writing "General Advice" by Cyl-EEWRC...!

Successful Proposals are...

Specific

Measurable, verifiable

Achieveable

Relevant

Timely











(Doran, G.T., 1981. Management Review)







Services..!

SMART Proposals are... "Prescreened"...!!!

 We offer FREE (but not cheap...) guidance to our Team and Collaborators.



- Cyl-EEWRC "Intensive Mentoring" approach:
- proof-reading ("commas" and "fullstops")



→ Strategy and Text Suggestions





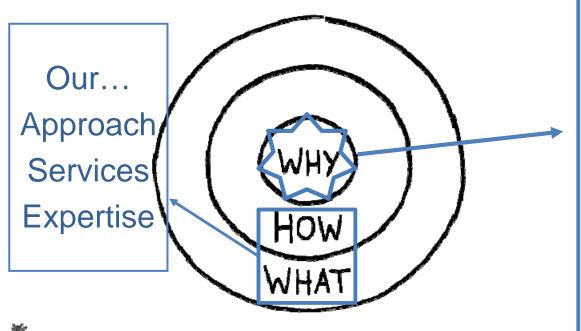






Define ... your <u>"Why"</u>...

The Golden Circle



Our Credo

Inspire...

Motivate...

Empower...

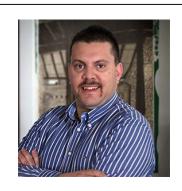
... We believe in holistic and inspirational solutions, of environmental, social and technological consciousness and maturity, motivating scientific research and empowering next generations for the future...







Thank You ...



Pierantonios Papazoglou

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https://cy.linkedin.com/in/pierantoniospapazoglou

https://www.researchgate.net/profile/Pierantonios_Papazoglou

