European Commission

LIVEWASTE

# Horizon 2020

## General Introduction & Structure
## Funding Mechanisms
## Proposal Preparation & Support

**"LIVEWASTE-2016", Limassol, 24 June 2016**

**Pierantonios Papazoglou**

**BSc, MEng, 6-sigma, NEBOSH, CSTC, PhD Cand.**

**National Contact Point**

**«Marie Skłodowska-Curie»**

**«ENVIRONMENT», «SPACE», «EURAXESS»**

**Cyprus Research Promotion Foundation**


HORIZON 2020

# Research Promotion Foundation

## "Setting" of the NCP...!

- ✓ Research Promotion Foundation
- ✓ Established in 1996 by the Government of the Republic of Cyprus as an Independent organization, serving as the National Research Funding Agency

- 2 Broad Categories of Activities:

→ Designing, Launching and Monitoring of the National Research and Innovation Programmes

→ Coordinating the participation of Cyprus in European Research Programmes and Initiatives:

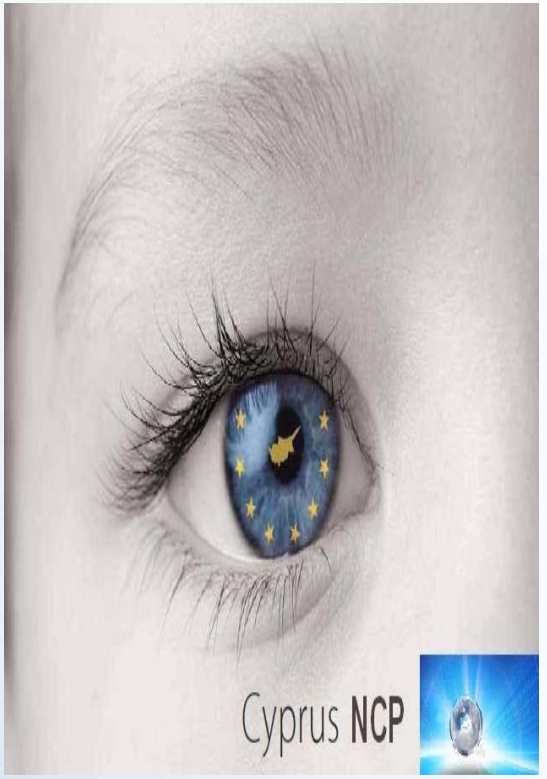
- Framework Programmes of the EU, COST, EUREKA,
- Bilateral Agreements on R&D

# Research Promotion Foundation

## "Setting" of the NCP...!

✓ The Role RPF:

- Coordinating the activities concerning the participation of Cyprus in Horizon 2020
- Hosting the NCP Network for Cyprus (Team of 12, including Head-of-Unit and Helpdesk) and **coordinating Cypriot representation in the Programme Committees**
- Collecting and processing data regarding Cypriot participation



# H2020 in a Nutshell

Projects are funded through ***competitive Calls-for-Proposals***

Policy Background: ***Europe 2020 and 7 Flagship Initiatives*** (Digital Agenda, Innovation Union, Youth on the Move, Agenda for New Skills and Jobs etc.)

**EU's largest legal Instrument**

- Funding *Research & Innovation*
- ≈80 billion (2014-2020)

**Simplified Access**

- For *companies, universities, young people*
- Entities in EU and beyond

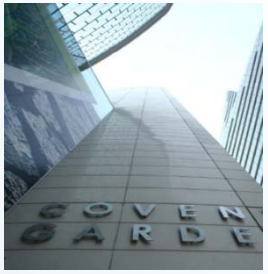
**Three Pillars**

- Targeting *Excellent Science, Industrial Leadership, Societal Challenges*

***European Dimension***

# "Truths" to…Realize Before Starting..!

- The Proposal is **NOT a Paper/ Article for a Journal**…




- It is a… "marketing/ sales" 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"**…!

# "Truths" to…Realize Before Starting..!

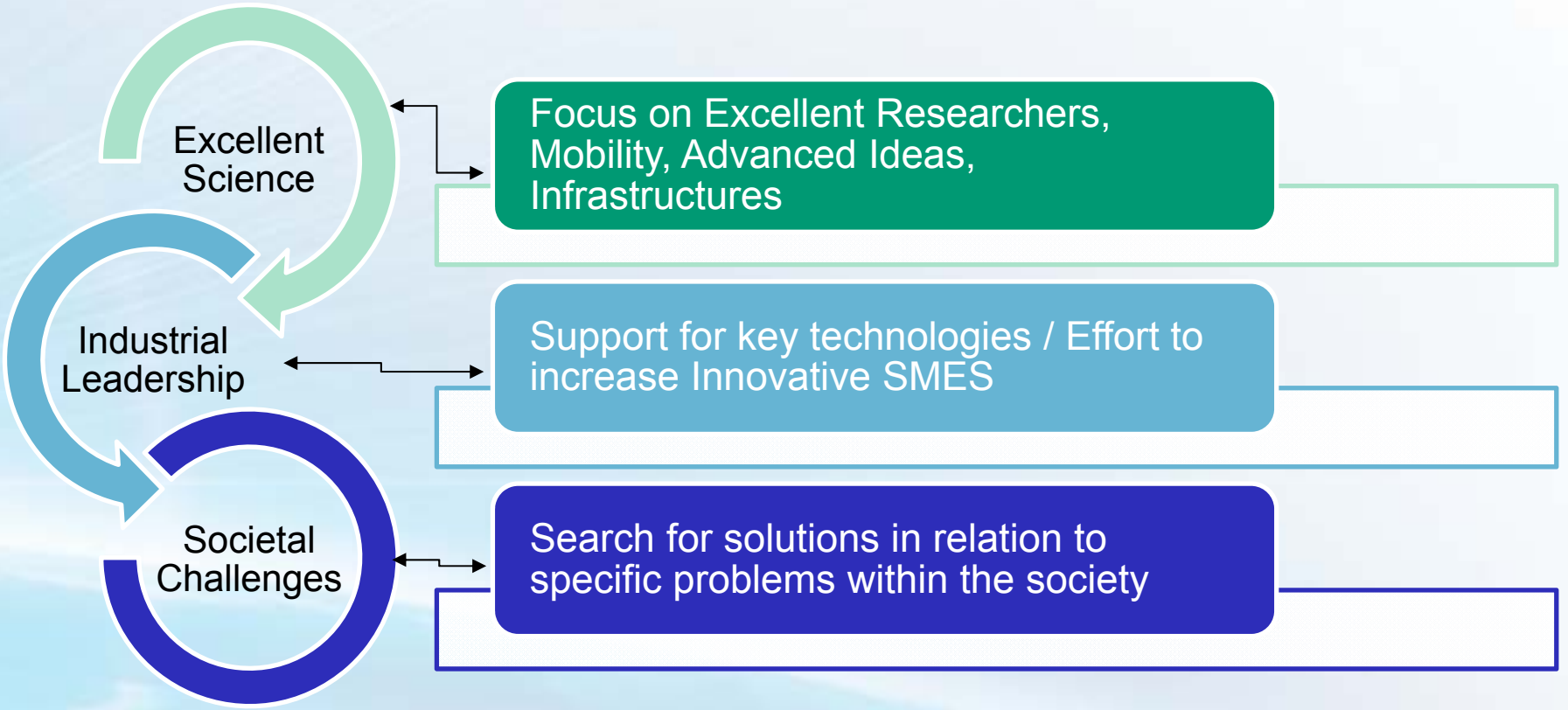
- You need **EUROPEAN ADDED VALUE**…!
- Problem/ Issue attempted to be solved or the technology/ innovation attempted to be developed **cannot be of local or regional character but rather of pan-European**… scale/complexity of the "solutions" for EU and not "just X-Country".
- **Transnationality, replicability 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.

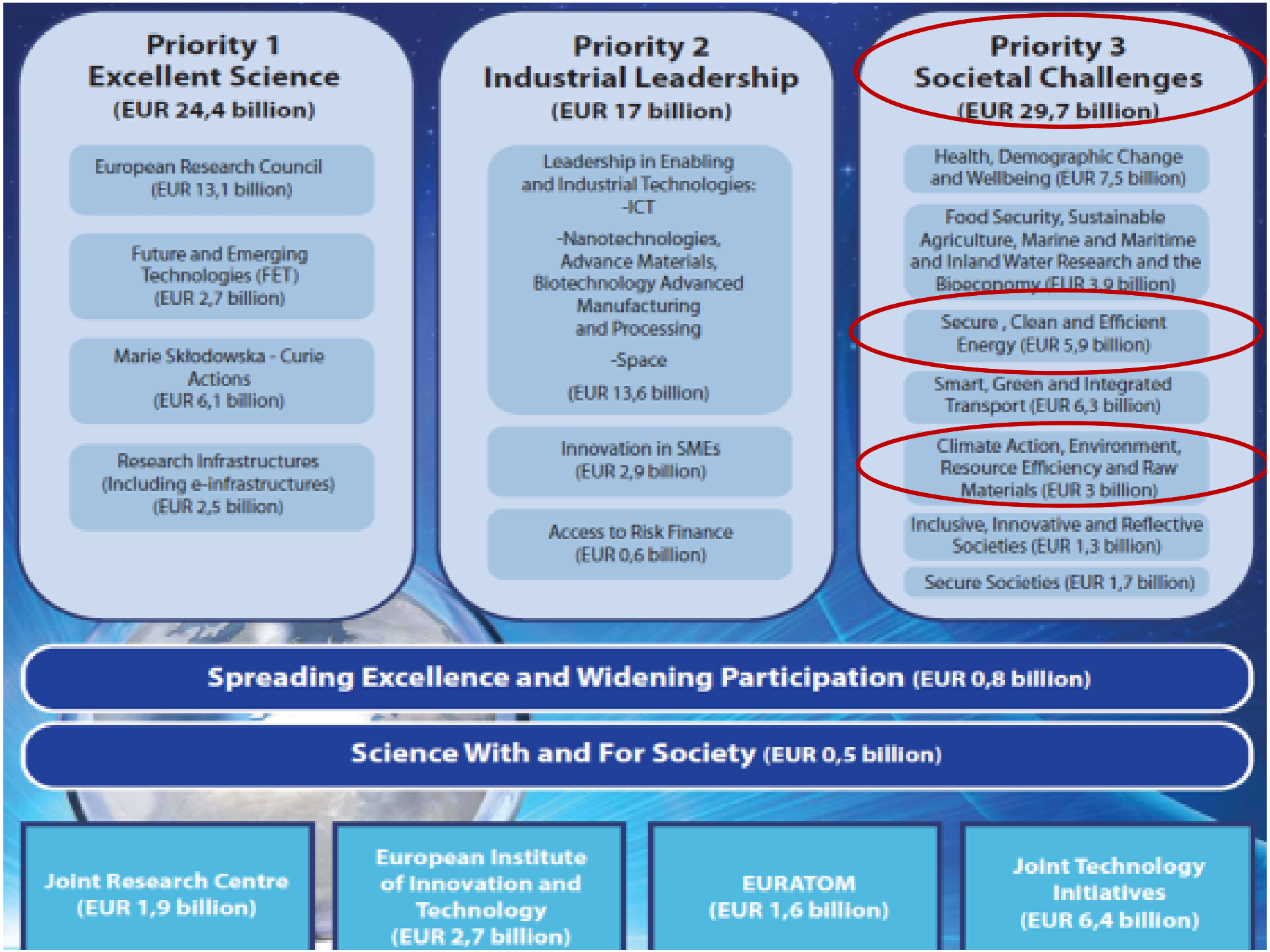
**2014 Main Report of DG RTD:**
**https://ec.europa.eu/research/iscp/pdf/publications/Final_European_Added_Value_inco_MainReport.pdf**
**Strategic Forum for International S&T Cooperation (SFIC):**
**http://ec.europa.eu/research/iscp/pdf/sfic/sfic-annual-report-2011_en.pdf#view=fit&pagemode=none**

# The Structure

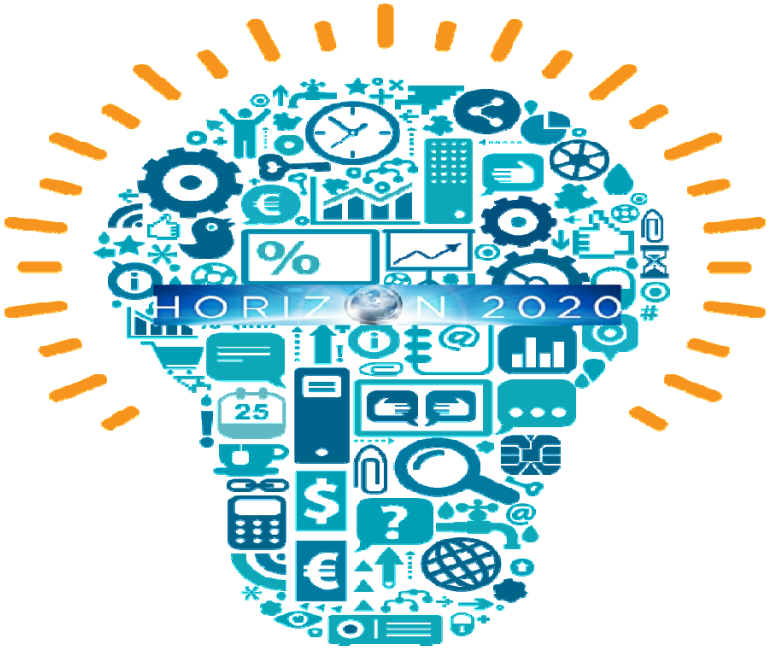
## …how Programmes are organised

# Three Pillars




Priority 1
Excellent Science
(EUR 24,4 billion)
European Research Council
(EUR 13,1 billion)
Future and Emerging Technologies (FET)
(EUR 2,7 billion)
Marie Skłodowska - Curie Actions
(EUR 6,1 billion)
Research Infrastructures
(Including e-infrastructures)
(EUR 2,5 billion)
Priority 2
Industrial Leadership
(EUR 17 billion)
Leadership in Enabling and Industrial Technologies:
-ICT
-Nanotechnologies, Advance Materials, Biotechnology Advanced Manufacturing and Processing
-Space
(EUR 13,6 billion)
Innovation in SMEs
(EUR 2,9 billion)
Access to Risk Finance
(EUR 0,6 billion)
Priority 3
Societal Challenges
(EUR 29,7 billion)
Health, Demographic Change and Wellbeing (EUR 7,5 billion)
Food Security, Sustainable Agriculture, Marine and Maritime and Inland Water Research and the Bioeconomy (EUR 3,9 billion)
Secure , Clean and Efficient Energy (EUR 5,9 billion)
Smart, Green and Integrated Transport (EUR 6,3 billion)
Climate Action, Environment, Resource Efficiency and Raw Materials (EUR 3 billion)
Inclusive, Innovative and Reflective Societies (EUR 1,3 billion)
Secure Societies (EUR 1,7 billion)
Spreading Excellence and Widening Participation (EUR 0,8 billion)
Science With and For Society (EUR 0,5 billion)
Joint Research Centre
(EUR 1,9 billion)
European Institute of Innovation and Technology
(EUR 2,7 billion)
EURATOM
(EUR 1,6 billion)
Joint Technology Initiatives
(EUR 6,4 billion)

# Types of Actions




## ...the types of activities that are expected within each Proposal

# Types of Actions – Synopsis…

Research Promotion Foundation

100%

70%

100%

**Research and Innovation Actions**

**Innovation Actions**

The Market

New Knowledge

New/Improved Technology, Product, Process, Solution

Limited Demonstration/Pilot Activities

Small-scale Prototype

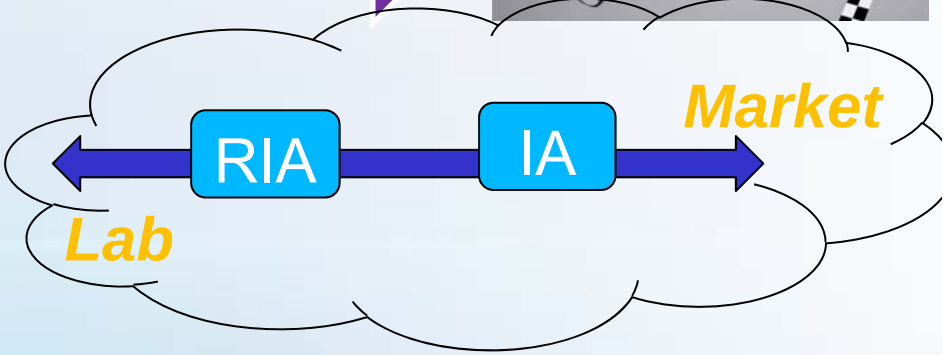
≥ 3 legal entities from 3 MS/AC

Close to Market

Demonstration or Pilot to validate in an operational environment (industrial or other).

Market replication to support the first application in the market

≥ 3 legal entities from 3 MS/AC




**Coordination and Support Actions** 1 legal entity from MS/AC

100%

**SME Instrument** 1 SME from MS/AC

Lump Sum (Ph-I)
70% (Ph-II)

# Who Can Participate?

- **Basically everybody - but always check Call for Proposals**

- **In Europe and the rest of the world, legal entities and natural persons**

# Who Can Participate and Get Funding?

All participants from:

- Member States
- Associated Countries

(eg. Iceland, Norway, Israel, Serbia)

- Participants from Third Countries *where identified in the Calls for Proposals*

**Switzerland has a special status: Partial Association**

**High Income Countries are generally not eligible**

# 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**

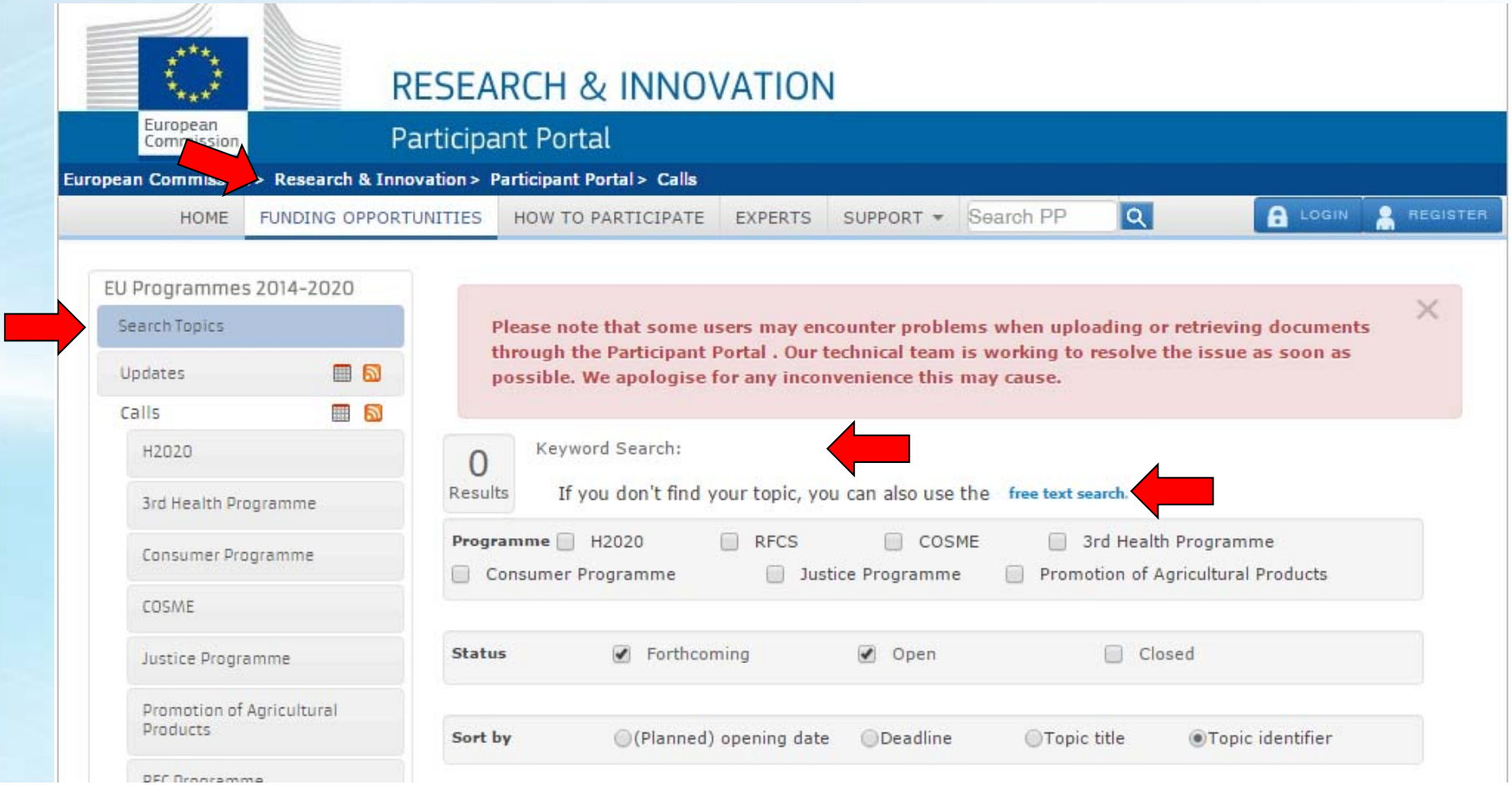
Always check the WP!

✓There might be specific conditions for participation

# How to Find a Topic

## Participant Portal

## http://ec.europa.eu/research/participants/portal/desktop/en/home.html



“As read”... By NCP!!

# Overview of main topics “as read” by the **NCP**

# Secure, Clean and Efficient Energy

## Policy Context

### 2030 Climate-Energy Package

- 40% reduction of Greenhouse Gases
- 27% of renewable energy
- 27% improvement in energy efficiency

### Energy Union

- *Energy security, solidarity and trust*
- *A fully integrated internal energy market*
- *Energy efficiency first*
- *Transition to a low-carbon society*
- *An Energy Union for Research, Innovation and Competiveness*

### SET-Plan

- *Integrated Roadmap*
- *Communication on Integrated SET-Plan (COM[2015]6317)*

# Secure, Clean and Efficient Energy

## The 2016-2017 Calls of the Energy Challenge

**Energy Efficiency (EE)**
- Heating and Cooling
- Engaging consumers
- Buildings
- Industry, services and Products
- Innovative financing

**Competitive low-carbon energy**
Technologies (LCE)
- Energy system (grids, storage)
- Renewable energies
- Decarbonising fossil fuels
- Socio-economic research
- European Research Area in energy

**Smart Cities and Communities (SCC)**
- Light-house demonstration projects

**SME Instrument**

**Work Programme**

http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016_2017/main/h2020-wp1617-energy_en.pdf

# Secure, Clean and Efficient Energy

## Some suggested topics

**EE-01-2017:** Waste heat recovery from urban facilities and re-use to increase energy efficiency of district or individual heating and cooling systems

**EE-06-2016-2017:** Engaging private consumers towards sustainable energy

**EE-07-2016-2017:** Behavioural change toward energy efficiency through ICT

**EE-09-2016-2017:** Engaging and activating public authorities

# Priority 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, resource efficiency and raw materials**
6. Inclusive, innovative and reflective societies
7. Secure societies

# "H2020-ENV" is... *Societal Challenge 5*

**Work Programme**

**http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016_2017/main/h2020-wp1617-climate_en.pdf**

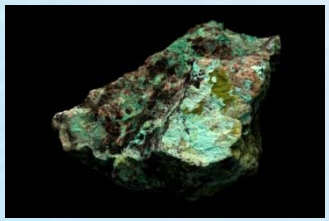
# Main SC5 Objective

- **"to achieve a resource – and water – efficient and climate change resilient economy and society, the protection and sustainable management of natural resources and ecosystems, and a sustainable supply and use of raw materials, in order to meet the needs of a growing global population within the sustainable limits of the planet's natural resources and eco-systems."**

# Main...Calls

- **Climate change and Climate Services**

- **Nature-based Solutions for Territorial Resilience**



- **Raw Materials**
- **Water**

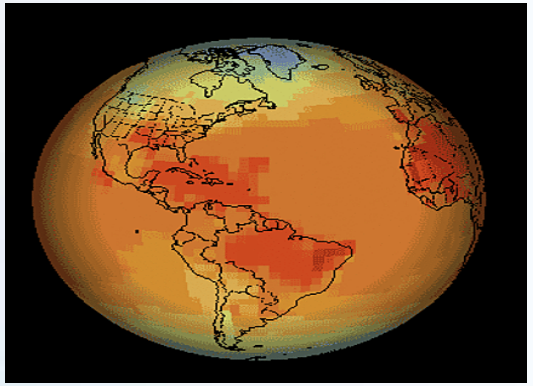
- **Towards a low-carbon Europe**

- **Earth observation**

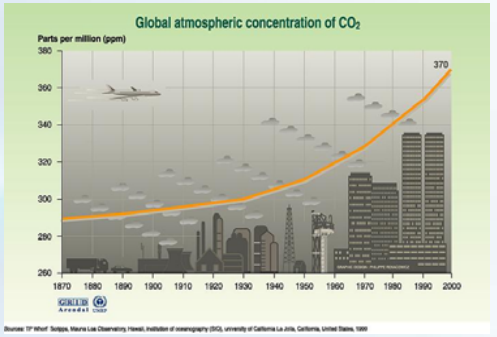
“As read”... By NCP!!

## Climate Change and Climate Services

- Exploiting the added value of climate services
- Integrated European regional modelling and climate prediction system



- Climate services market research
- Towards a robust and comprehensive greenhouse gas verification system
- A 1,5 million year look into the past for improving climate predictions



“As read”... By NCP!!

## Nature-based solutions for territorial resilience

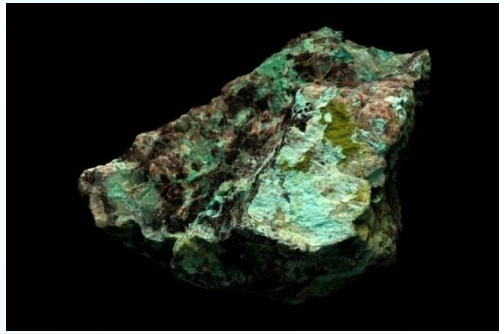
- **Large-scale demonstrators on nature-based solutions for hydro-meteorological risk reduction**

- **Operationalising insurance value of ecosystems**

- **Multi-stakeholder dialogue platform to promote innovation with nature to address societal challenges**

“As read”...

By NCP!!



## Raw Materials

- **New solutions for sustainable production of raw materials**
- **Raw materials Innovation actions**
- **Raw materials policy support actions**
- **Raw materials international cooperation**
- **ERA-NET Cofund on Raw materials**

“As read”...

By NCP!!

## Water

- **Supporting international cooperation activities on water**

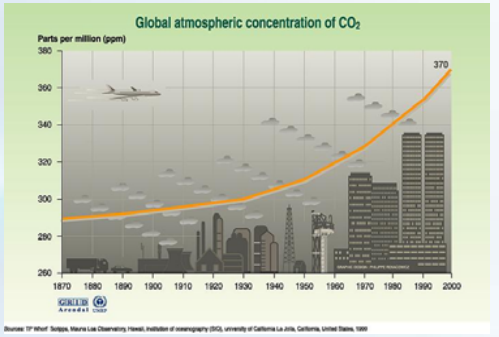
- **Food systems and water resources for the development of inclusive sustainable and healthy Euro-Mediterranean societies**

“As read”... By NCP!!

## Towards a low-carbon Europe

- Pathways towards the decarbonisation and resilience of the European economy in the timeframe 2030-2050 and beyond

- Coordinating and supporting research and innovation actions on the decarbonisation of the EU economy



“As read”...

By NCP!!

**Earth observation**

- **Novel in-situ observation systems**

- **Coordination of Citizens Observatories initiatives**

- **European data hub of the GEOSS information system**

# Evaluation Criteria...

• Know the Evaluation Criteria – their Weightings – and their ExAequo Priority

• In all H2020 we have: "Excellence – Impact – Implementation"

• However, MUST consider also "Cross-Cutting" Issues:

- Gender Balance in the Research Teams
- Social Dimension and Impact
- Inclusion / Involvement of Private Sector, particularly SMEs
- Ethics and Security Issues

• Address the Specific Challenge – the Scope – and the Expected Impact !!!

• Try to present your proposal against the background of the relevant Policy Context (Strategies, Initiatives, Directives, Communications, White/Green Papers, etc, etc...)

“Hints”... “Tips”...

# “Hints-&-Tips” by the **NCP**

European Commission

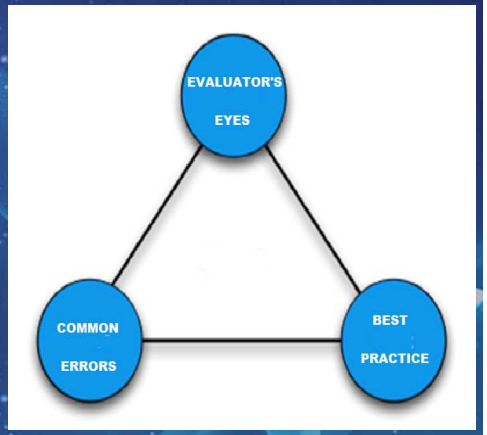
Research Promotion Foundation

# Time for an Energizer!

# Brainwalk on Proposal Writing

**(3 groups – 3 flipcharts – 1 rapporteur – 20 minutes)**

## Evaluator's Eyes
## Best Practice
## Common Errors




HORIZON 2020

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

→ Common Errors

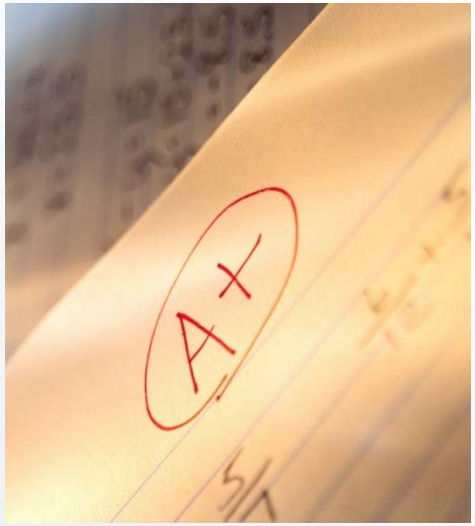
- Proposal written as Scientific Paper
- Objectives and "state-of-the-art" are elaborate and in-depth, but Implementation/ Methodology, "beyond-the-state-of-the-art" and Impact are under-developed
- Unclear Aims and Objectives
- Over-ambitious...or...Under-shooting...
- **Not addressing Scope and Expected Impact of the Topic**...!

- Off page limits...! Template/ structure not followed!
- Essential parts disregarded
- Not-final...Wrong draft submitted...!

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

→ 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 beyond-the-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**.

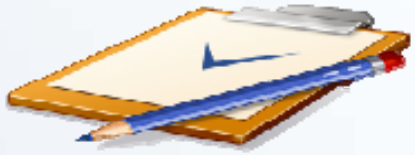


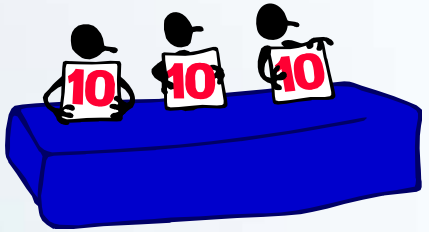
# "Hints"...

- 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...

# "Tips"...

General "Good Practice"

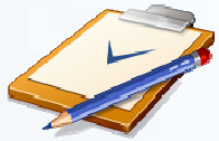




# "Hints"... "Tips"...

- 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…

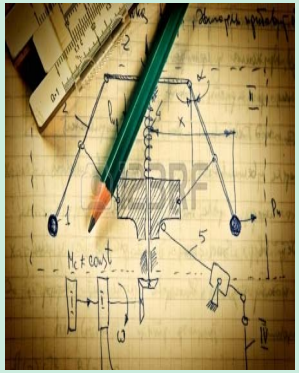
  → So, Consortium and the synergies and complementarity of Partners

- HOW the project is going to achieve the above…

  → So, Work-Plan and Phases of Work, as well as Means/ Resources to be utilized.

# "Official" Criteria

| | Excellence | Impact | Implementation |
|---|---|---|---|
| Weighting and *Ex Aequo* Priority | Check Calls!!! | | |
| "Content" | •Clarity and pertinence of the **objectives**;<br>•**Credibility** of the proposed approach.<br>•Soundness of the **concept**;<br>•Quality of the **proposed coordination and/or support measures**;<br>•Progress **beyond the state-of-the-art.** | •The **expected impacts listed in the work programme** under the relevant topic;<br>•Enhancing **innovation capacity** and integration **of new knowledge**;<br>•Strengthening the **competitiveness and growth** of companies by developing and delivering innovations meeting the needs of European and global markets;<br>•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;<br>•**Complementarity of the participants** within the consortium (when relevant);<br>•Appropriateness of the **management structures** and procedures, including **risk and innovation management.** |



# "Deciphered" 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<br>•**High practical value** of the project and also results can be applied to larger class of problems (tackling also **multidisciplinarity**)<br>•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)<br>•**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<br>•**Synergies of Partners**: each has clear contribution and role **Progress monitoring and management structure**, including the **financial management** strategy<br>•**Risk management** for Risks that might endanger reaching the project's objectives and the **contingency plans** to be put in place should risk occur. |

# “Hints”… “Tips”…

## Proposal – Writing Basic Hints by NCP…!

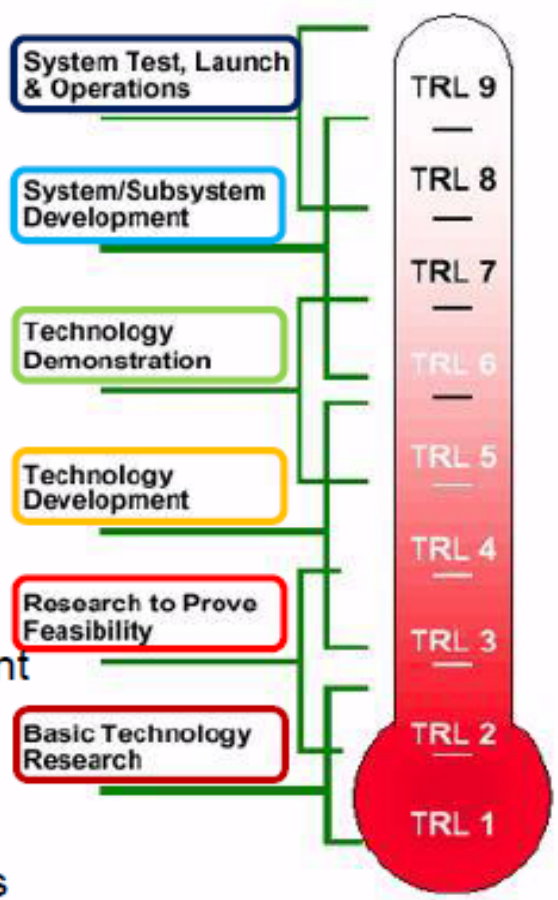
- ✓Develop end-to-end applications!
- ✓Showcase and build on trials, and develop/ further enhance any early prototypes…
- ✓Underline the Innovative, Beyond-the-State-of-Art character of your solution/ project…
- ✓Provide Public Benefits from your solution/ project…
- ✓Strengthen the community of relevant 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)…!

# T R L....  Levels...

## Technology Readiness Level – TRL

- to assess the maturity of evolving technologies during its development.

- TRL 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
- TRL 9: System proven through successful mission operations



# The Role of National Contact Points (NCPs) at the National Level

Mailing Lists, Websites, Info-days, Training Seminars, Direct Communication

**Proposal Pre-screening**, Assisting with **Partner Search**, Resolving Queries

Based on proposers' needs

(IPR Issues, Consortium Agreements, Grant Agreements, Project Management etc.)

**Disseminating Information** **Assisting with Proposal Preparation** **Customised Support**

# NCP Websites / Contact Details

**Secure, Clean and Efficient Energy**

**http://www.c-energy2020.eu/**

NCP: Eleana Gabriel (egabriel@research.org.cy, 22205046)

**Climate Action Climate action, environment, resource efficiency and raw materials**

**www.ncps-care.eu**

NCP: Pierantonios Papazoglou (ppapazoglou@research.org.cy, 22205048)

Partner Search

EU funding

News & EU Policy

EU networks

# “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/portal/desktop/en/support/research_enquiry_service.html

- **Horizon 2020 On-line manual**

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

- **Annotated Model Grant Agreement (version 30Oct2015)**

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

- **EURAXESS (Charter-&-Code, Policy…)**

http://ec.europa.eu/euraxess/index.cfm/rights/index

http://ec.europa.eu/euraxess/index.cfm/services/researchPolicies

# "Hints"… "Tips"…

## Proposal – Writing "General Advice" by NCP…!

- ✓Start early… Get Guidance and Info from NCP…!
- ✓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…(NCP) and PROOF-READ…!
- ✓Make sure you submit the latest, complete version in the system...!

# “Hints”… “Tips”…

## Proposal – Writing “General Advice” by NCP…!

## Successful Proposals are…

**S** *Specific*

**M** *Measurable, verifiable*

**A** *Achieveable*

**R** *Relevant*

**T** *Timely*

# Services..! Guidance

Research Promotion Foundation

## SMART Proposals are… "Prescreened"...!!!

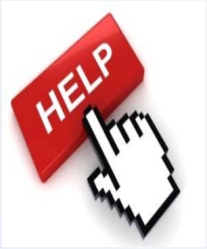
- The NCP at RPF offers FREE (but not cheap…) and confidential pre-screening of the proposal:

→ proof-reading ("commas" and "fullstops")

→ "Deciphering" of EC-jargon and Addressing of Template's Questions

→ Strategy and Text Suggestions

→ **Useful RPF Links**



- **www.research.org.cy**
- **http://horizon2020cyprus.blogspot.com**
- **www.facebook.com/horizon2020cyprus**
- **Direct RPF-H2020 Tel-line: 22 20 5050**

# More Information:


## Pierantonios Papazoglou

Research Promotion Foundation
PCM / NCP FP7 & H2020
MSCA, SC5, SPACE
Tel.: 22 20 50 48
Email: ppapazoglou@research.org.cy

# Thank you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**REA**


*Libens, Volens, Potens…*
(Ready, Willing, Capable)