

Grant Writing of EU-Projects

Formulating a convincing proposal

ESR – Workshop 2019

SEPOMO

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Content

I. HORIZON2020 Framework Programme

II. Proposal setup

III. Lessons learned

IV. Writing skills

V. Writing style



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HORIZON 2020 – What are European collaborative projects?

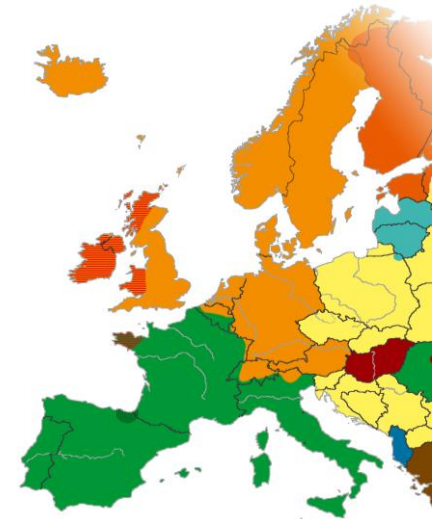
Consortium



One vision for Europe



Funding



Min. 2-3 EU countries or more



HORIZON 2020 – criteria for collaborative projects

- Consortia from **industry and research** proposing innovations with a European impact
- Minimum **3 partners from 3 countries**
(EU-28 / associated states / EU-candidates (CH, TR, ...))
- **International** countries may participate: funding for high-income countries (USA, JP, AUS, CAN, CH, ...) possible, if **explicitly** mentioned in the topic
- **BRIC**-states treated as high-income countries (new in H2020)
- **Participant = Organisation**: university, research institutes, company, etc.
- Common **proposal template** (special template, e.g. for Marie Curie actions)



HORIZON 2020 – cornerstones

▪ **Funding rates** for collaborative projects

- non-profit Partner
- Research and Innovation Actions:
- Innovation Actions:

max. 100% always

max. 100% for each partner

max. 70% for ‚profit‘ partners



▪ Plus **Overhead**: flat rate of 25% for each partner

▪ **1 stage vs. 2 stage calls**

- 1-stage call: single deadline; full proposal
- 2-stage call: **stage 1** – 15-page outline;
stage 2 – 70-page full proposal





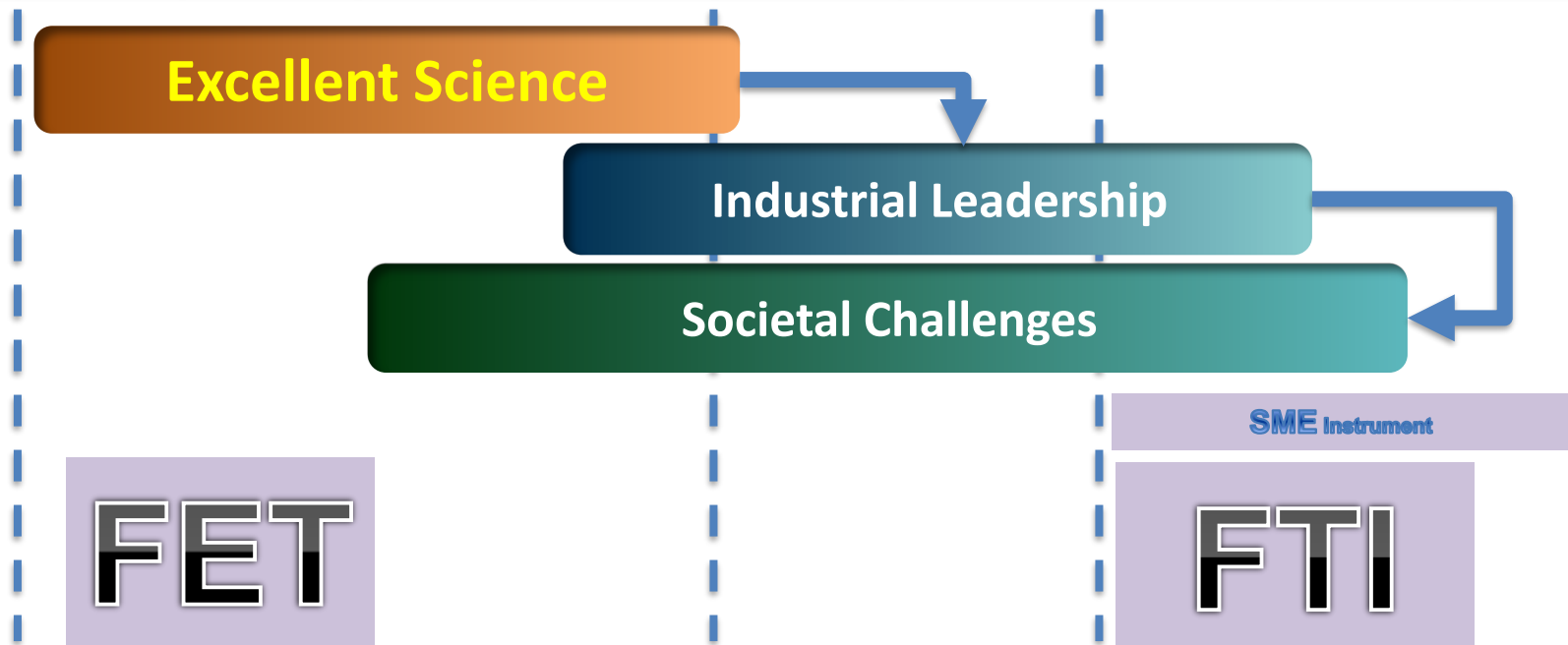
HORIZON 2020 – framework programme (reloaded)

Excellent Science	Industrial Leadership	Societal Challenges	Add. Programs
European Research Council	<p>Leadership in Enabling and Industrial Technologies:</p> <ul style="list-style-type: none"> ▪ Information- and Communication Technology ▪ Nanotechnology ▪ Biotechnology ▪ Advanced Materials ▪ Advanced Manufacturing and Processing ▪ Space Research 	<ul style="list-style-type: none"> ▪ Health, Demographic Change and Wellbeing ▪ Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research and the Bioeconomy ▪ Secure, Clean and Efficient Energy ▪ Smart, Green and Integrated Transport ▪ Climate Action, Environment, Resource Efficiency and Raw Materials ▪ Europe in a changing world - Inclusive, innovative and reflective societies ▪ Secure Society 	<p style="text-align: center;">EIC</p> <ul style="list-style-type: none"> ▪ SME Instrument ▪ Fast Track to Innovation (FTI) ▪ Future & Emerging Technologies (FET) ▪ Horizon Prizes <p style="text-align: center;">EIT</p> <p style="text-align: center;">JRC</p> <p style="text-align: center;">Spreading Excellence & widening Participation</p> <p style="text-align: center;">Science with and for Society</p>
<p>Marie Skłodowska-Curie actions</p> <ul style="list-style-type: none"> • ITN • ERC... 	<p>Access to risk finance</p>		
European Research Infrastructures, including e-Infrastructures			



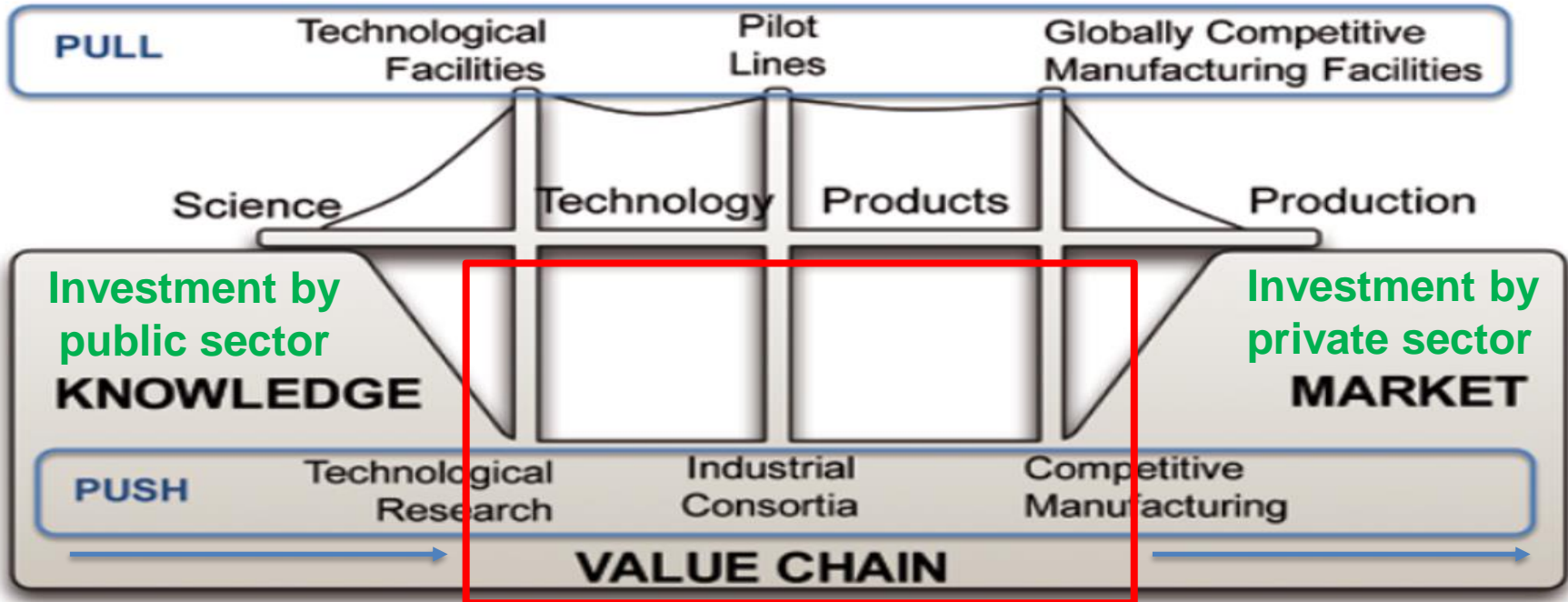
HORIZON 2020 – TRL: an approximation to the pillars

TRL	1	2	3	4	5	6	7	8	9
Definition	Basic principles observed	Technology concept formulated	Experiment. Proof of concept	Technology validated in lab	Technology validated in relevant environment	Technology demonstrated in relev. environment	Prototype demonstration	System complete and qualified	System proven in operational environment





HORIZON 2020: measures and target area



The valley of Death

Source: NANO*utures* roadmap

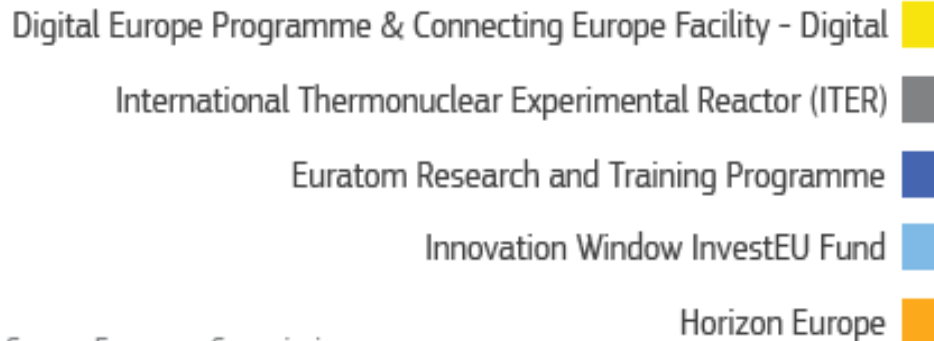
Technology Readiness Level





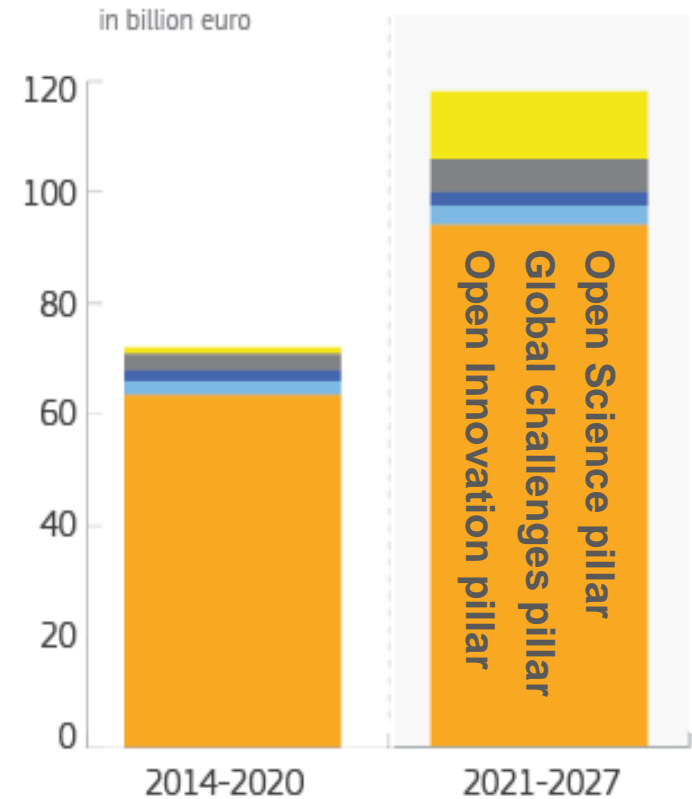
HORIZON Europe: forecast I

Building on the success of the EU's past flagship research and innovation programmes, the Commission proposes to increase investment in research and innovation by allocating **€114.8 billion** from the future long-term EU budget.



Source: European Commission

Note: Compared to the Multiannual Financial Framework 2014-2020 at EU-27 (estimate)





HORIZON Europe: forecast II



Pillar 1 Open Science

European Research Council

Marie Skłodowska-Curie Actions

Infrastructures



Pillar 2 Global Challenges and Industrial Competitiveness

Clusters

- Health
- Inclusive and Secure Society
- Digital and Industry
- Climate, Energy and Mobility
- Food and natural resources

Joint Research Centre



Pillar 3 Open Innovation

European Innovation Council

European innovation ecosystems

European Institute
of Innovation and Technology

Strengthening the European Research Area

Sharing excellence

Reforming and Enhancing the European R&I system



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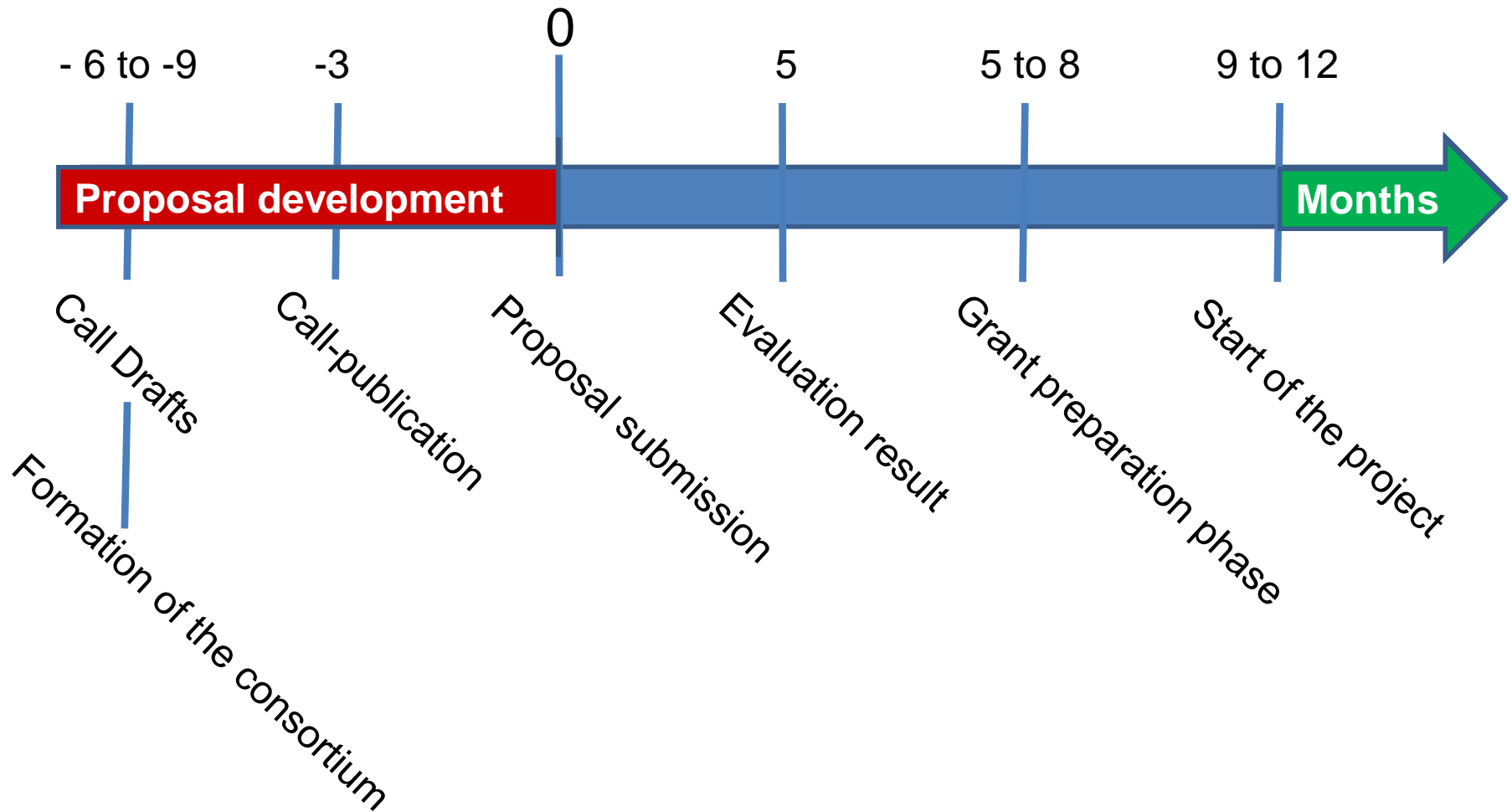
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Proposal – timeline





Proposal – to be prepared at the very beginning

- Work Programme: Topic Text
- Consortium – core partners
- Proposal Template
- First Draft of idea, work packages
- Stakeholder Networks:
 - European Technology Platform (ETP; e.g. Photonics)
 - National and regional cluster
 - Associations
- National and regional support:
 - National Contact Points, Enterprise Europe Network, **BayFOR (DE)**, ...
- Events: Brokerages, conferences, exhibitions, ...



Proposal – Template

- Stage 1
- 1. Excellence
 - 2. **Impact**
 - Expected impact in call text
 - Further impacts, Exploitation, Dissemination, Communication, Standardisation, IPR
- Stage 2
- 3. Management, Consortium/Budget, Work Packages
 - 4. Participants (no page limit)
 - 5. Ethics and Security

Stage 1: Outline

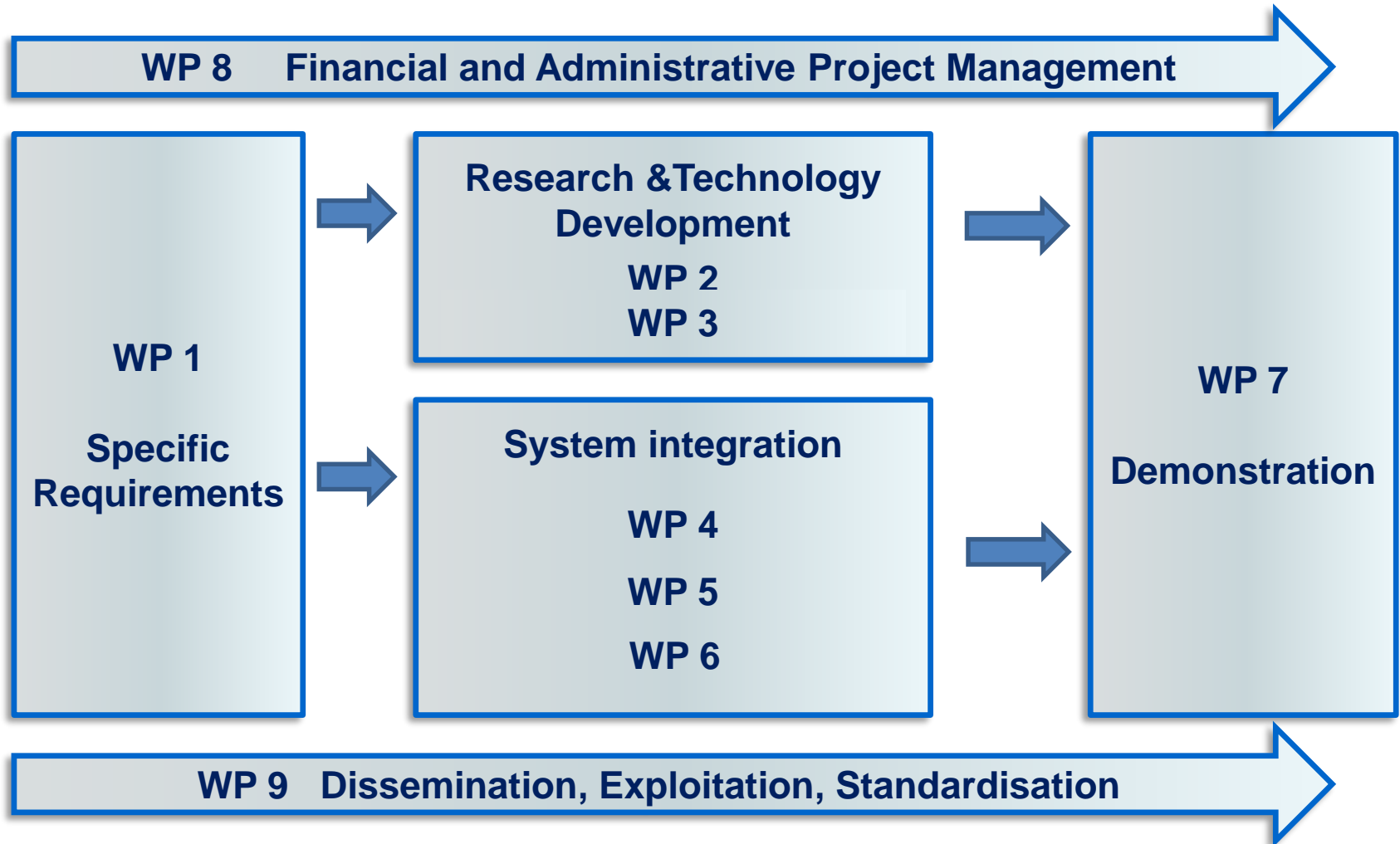
15 pages for section 1 – 2

Stage 2: Full proposal

70 pages for section 1 – 3



Proposal – Work Packages (WP) example





Evaluation of proposals

Proposal



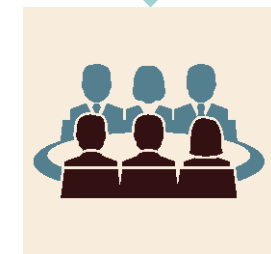
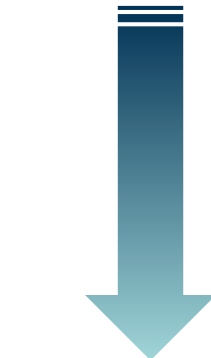
Online submission



Consortium



AAA ++



Evaluators



Evaluation – criteria

<u>Section 1.</u> Excellence 5 P	<u>Section 2.</u> Impact 5 P	<u>Section 3.</u> Implementation 5 P
<ul style="list-style-type: none">• Quantified objectives• Soundness of the concept• Beyond the state-of-the-art (e.g. ground-breaking, novel concepts and approaches)	<ul style="list-style-type: none">• Expected impacts listed in topic• Innovations, new knowledge• Growth of companies• Environmental and social impacts• Exploitation & Dissemination	<ul style="list-style-type: none">• Effectiveness of the work plan• Complementarity of the participants• Appropriate management structure• Risk and innovation management

- **15 Points in total: $5 + 5 + 5 = \Sigma 15$ Pts**
- EU Evaluators :
 - independent experts from industry, academia and associations
 - depending on the size of the project: 3 - 5 evaluators
- **Evaluators write better proposals**



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Experiences and Recommendations I

▪ The right topic

- Daily lecture of the topic (ask supporting institutions and partners)
- Topic has to fit to the proposed project (don't adjust !!)

▪ The proposal

- Start as early as possible
- No feedback by EU Commission to proposals
- Not technology-driven, but problem / ***solution-oriented***
- Standardisation / Regulations...
- Soft skills: Gender aspects, human behaviour, user feedback, ...
- Proportions of the consortium (consortium as a whole, budget distribution...)



Experiences and Recommendations II

▪ The proposal

- Sustainability-triangle: Human, Economics, Environment
- Industry: Large or SME or both?
- Dissemination vs. Communication

▪ Most critical issues

- State-of-the-art (TRL at the start)
- Innovation – breakthrough (TRL at the end)
- Objectives: Quantified? Verified?
- Risks
- Impact: Quantified?



Experiences and Recommendations III

▪ The consortium

- Core team
- Network of partners
- End users
- Non-technical partners (Societal Challenges !)
- International cooperation

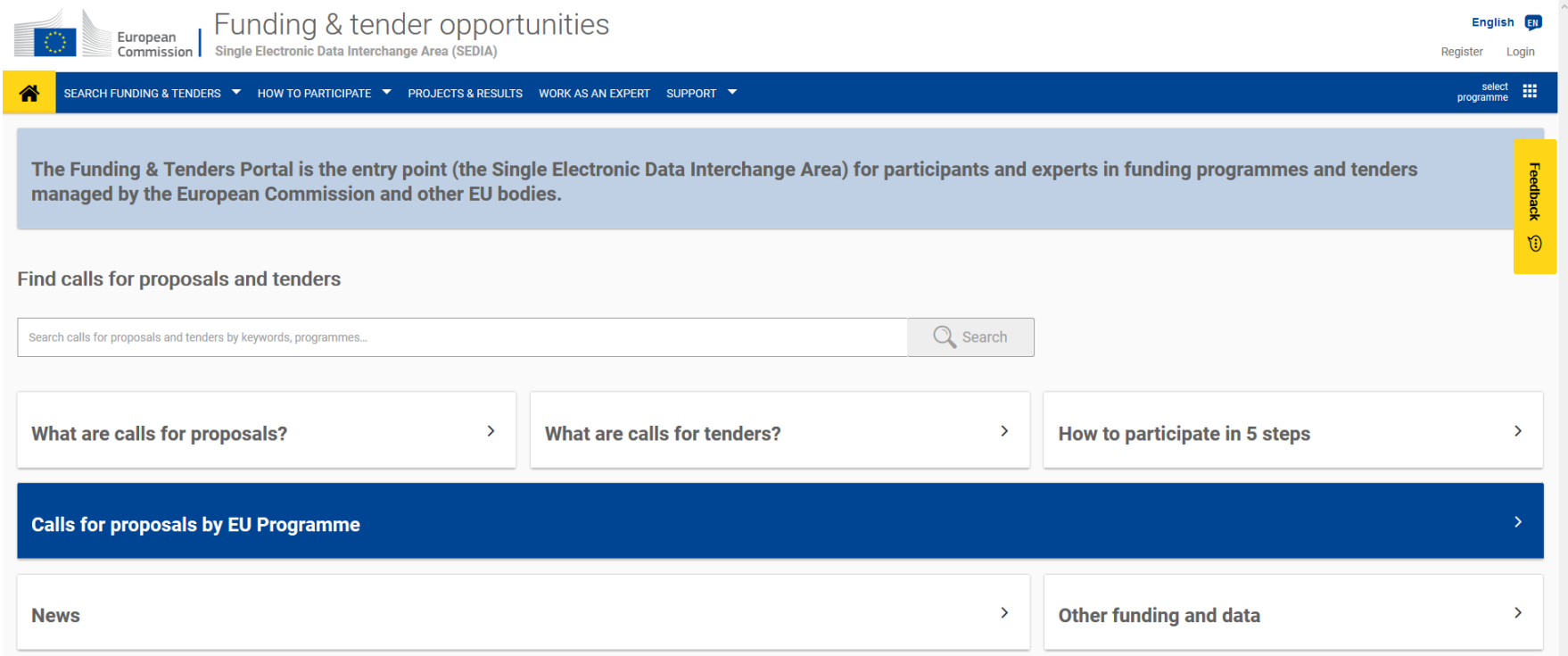
▪ Groups associated to consortium


- (Industrial) Advisory Board, Association....




HORIZON 2020 – Internet portal for (nearly) everything


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




 **Funding & tender opportunities**
Single Electronic Data Interchange Area (SEDIA)

English 
Register Login


SEARCH FUNDING & TENDERS ▾ HOW TO PARTICIPATE ▾ PROJECTS & RESULTS WORK AS AN EXPERT SUPPORT ▾

select programme 

The Funding & Tenders Portal is the entry point (the Single Electronic Data Interchange Area) for participants and experts in funding programmes and tenders managed by the European Commission and other EU bodies.

Feedback 

Find calls for proposals and tenders

Search calls for proposals and tenders by keywords, programmes...  Search

What are calls for proposals? > What are calls for tenders? > How to participate in 5 steps >

Calls for proposals by EU Programme >

News > Other funding and data >



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Proposal writing skills I

- Advantages of a well written proposal
 - ➔ **Writing is deciding** – Which way do you want to go?
Is your text going to be a direct one or as surprising one? You decide!
 - ➔ **Writing is thinking** – While writing, you have a clearer grasp on your context
 - ➔ **Writing is advertisement** – The main goal is how the text affects the reader, not the text itself
 - ➔ **Writing delivers your personal expression** – Writing gives you the freedom to show your personality, style and opinion
 - ➔ **Writing is always a process** – constantly improving the text



Proposal writing skills II

- Why EU funding?
 - For your own career, visibility
 - Widening your network, community, market....
 - **EU-projects have higher impact and citation rate**
 - Setting vision, standards, market/demand
 - Support of EU policies



Proposal writing skills III

- Conditions for the proposal content
 - Innovative and promising
 - Novel
 - Feasible
 - compliance with ethics issues
 - Based on the state-of-the-art
 - Comprehensible
 - Concise
 - Only a few abbreviations



Proposal writing skills IV

- Pitfalls 😞
 - ➔ Not asking enough questions
 - ➔ Too fast to offer the solution – what is the problem in detail?
 - ➔ Perfectionism and sloppiness – find a balance
 - ➔ Unconvincing description – stand in the shoes of the reader/ EU Commission
 - ➔ Forgot to sell – who is going to profit?
 - ➔ Where is the start? – from the problem over to the objectives and to the solution
 - ➔ Awkward structure – does your fellow understand the content?



Proposal writing skills V

- First steps to an excellent proposal: *write in short but complete sentences*
 1. Define your leitmotif, define your key words and the core of your idea
 2. State-of-the-art vs. progress beyond: innovation gap? Why is it better?
 3. Goals, derived from the problem: Vision, Mission, Objectives of the project
 - a. Time: using future for “analyse, investigate ...”
 - b. Using present for “goals, objectives ...”
 4. Questions, derived from the goals
 5. Concept and method
 6. Data: research and usage
 7. Expected results (define S.M.A.R.T.)
 8. Expected impact (**not only financial ones!!!**)



Proposal writing skills VI

- Table: **RESULTS** over **IMPACT** of your idea/project

RESULTS	Result 1	Result 2	Result 3
IMPACT			
Economic			
Technical			
Scientific			
Ecological			
Political			
Social			
Human			



Proposal writing skills VII

- Sections of the proposal

1. Excellence

2. Impact

3. Implementation

4. Appendix: partner descriptions, ethics....



Proposal writing skills VIII

- Sections of the proposal – **1. Excellence**
 - a) Introduction – 1 to 1 ½ pages; solution-oriented
 - b) Objectives – not the development itself
 - c) Relation to the work programme – table
 - d) Gender and biological issues – e.g. traffic light signal for visually impaired people
 - e) Concept – main ideas, different ways of approaching the goals
 - f) Methodology – activities for research, demonstration, piloting
 - g) Ambition potential – advance beyond the state-of-the-art; innovation



Proposal writing skills IX

- Sections of the proposal – **2. Impact**
 - a) Impact is the macroeconomic benefit for the European society
 - b) Impact occurs after the project
 - c) Impact compared to the topic text
 - d) Barriers to achieve the impact: user acceptance, regulations like fire protection
 - e) Any substantial impacts not mentioned in the work programme, enhancing innovation capacity, creating new markets, strengthening competitiveness, address issues related to climate change or the environment, bring other important benefits for society
 - f) Dissemination to appropriate audiences
 - g) Exploitation: products, services, processes, and research follow-ups
 - h) Communication activities
 - i) Data management plan



Proposal writing skills X

- Sections of the proposal – **3. Implementation**
 - a) Work Plan, Work Packages, Deliverables – daily work and basic results – go to EU COM
 - b) Management structure
 - c) Risk analysis in relation to the milestones – important,
if WPs build on each other
 - a) Consortium as a whole – all competences on board?
Covering the whole value chain of concept/topic
 - a) Choice of countries and international organisations



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Criteria of writing style

1. Indicators of credibility

- i. References
- ii. Not too general, not too abstract
- iii. Various words
- iv. Clear and logic structure – help the evaluator to find the important issues
- v. Sentences – no irrelevant details

2. Convince by being understandable

- i. Structure: distinguish between important and less important
- ii. Clear, short sentences – use verbs, passive voice only for problems
- iii. Skip modal verbs – can, shall, must, may, ... are too vague



Criteria of writing style

3. Structure of the text

- i. Chronological
- ii. Logical
- iii. Structural: cities, persons, branches, ...
- iv. Deductive

4. Convince with short paragraphs

- i. Topic sentence
- ii. Example 1 to N
- iii. Reason
- iv. Summary



Criteria of writing style

5. Connect sentences

- i. Each sentence continues the information from the previous
- ii. “This“ refers to the whole sentence before
- iii. Constantly mentioning the subject
- iv. Use participles and conjunctions at the beginning of the sentence:
 - i. “Continuing, originally”
 - ii. “When, were, though, in order to”
- v. Use questions and demands

6. Emphasize correctly

- i. Enumerations
- ii. Use colons and dashes, seldom **parenthesis** (to be voided)
- iii. Parenthesis only for less important information → better skip them!



Criteria of writing style

7. Smashing sentences

- i. Skip the unnecessary: linking words and phrases, punctuation marks
- ii. Don't separate words that belong together
- iii. Main arguments in main sentences
- iv. Insertions shouldn't take longer than 3 seconds
- v. Avoid multi-clause sentences
- vi. Short sentences, but complete
- vii. Train yourself: writing abstracts of 2000 characters
- viii. Avoid abstract words: area, field, case, characteristics, ...



THANK YOU FOR YOUR ATTENTION!

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