Tips on how to structure and write an ERA-Chair proposal

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Agenda

- What is the ERA-Chair call?

- How to register for the ERA-Chair call

- Essential documents

- How to structure an ERA-Chair proposal

- Ideas to consider for Section 1

- Ideas to consider for Section 2

- Ideas to consider for Section 3

- Other sources of information

What is the ERA-Chair call? (1 of 3): - Two example successful ERA-Chair proposals

- **MariCybERA**: ERA Chair in Maritime Cyber Security at Tallinn University of Technology.

- Widening country coordinator: TalTech (EE).

- **SanDAL**: ERA Chair in Mathematical Statistics and Data Science for the University of Luxembourg.

- Widening country coordinator: University of Luxembourg (LU).

1 of about 15 projects funded from Nov 2019 ERA-Chair call

1 of about 15 projects funded from Nov 2017 ERA-Chair call

What is the ERA-Chair call? (2 of 3)

1. **Research organisations located in widening countries interested in establishing an ERA Chair shall** (*Professorial position + Research Group*) submit a proposal **(Budget: 1.5-2.5 million euro, 5 year duration)** with the **prospective ERA Chair holder who should be an outstanding researcher and/or innovator in the chosen scientific domain**. The scientific field can be any domain of research and innovation addressed under the Treaty on the Functioning of the European Union.

2. The **institution in the Widening country shall be the coordinator** and can opt between a **joint application** with the legal entity currently employing the future ERA Chair or submitting a proposal as a **single applicant**. For the former, partner institutions can be located in any country (including countries outside the EU) except the country of the coordinator and ERA Chair holders can be citizens of any country in the world.

What is the ERA-Chair call? (3 of 3)

3. Proposals should include a **CV in Europass form of the future ERA Chair holder** and detail the scientific and technical support he/she will provide to the coordinator and how the proposed activities will upgrade from the current situation. If there is a **partner institution** proposals should **outline any additional support** to be provided by it to the coordinator.

4. Proposals should also **describe any relevant investments of the coordinator in research projects, facilities and infrastructures** and how those will be achieved and/or a better use of the installed research capacity (in particular of EU co-funded research infrastructures & facilities)

5. **ERA Chair holders** should be **excellent researchers and/or innovators** in the chosen field of research. They should **establish a research team fully integrated in the coordinator's institution** to significantly improve its research performance in the scientific domain of choice and to be more successful in obtaining competitive funding.

How to register for ERA-Chair call (1 of 2)

1. If not already done, you need to register a) yourself (email address and password) and b) your institute (PIC number – but check first to see if one already exists!) on the EC's Funding and Tender portal:

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

- If you need practical help, please contact David Hayrapetyan (david.hayrapetyan@rau.am) or Aram Manukyan (manukyan.ipr@gmail.com).

1. Search and register to the Twinning call in the EC's Funding and Tender portal.

   - Select "Search funding and tenders"

   - Set "Submission status" = Open for submission

   - Set "Programming period" = 2021-2027

   - Set "Filter by programme" = Horizon Europe

   - Set "Programme part" = Widening Participation and Spreading Excellence

   - Click on the hypertext link for the ERA-Chair call

Two Essential Documents

Horizon Europe - Work Programme 2023-2024
Widening participation and strengthening the European Research Area

EN

Annex 11

Horizon Europe

Work Programme 2023-2024

11. Widening participation and strengthening the European Research Area

DISCLAIMER

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Print out the relevant pages and read repeatedly!

Horizon Europe Programme

Standard Application Form (CSA)

Application form (Part A)
Project proposal – Technical description (Part B)

Version 2.0
22 April 2021

Widening work programme 2023-2024

Standard application form for CSA (Coordination and Support Action)

CSA proposal – Technical Description (Part B)

Total length: only 30 pages!

1. Excellence

    1.1 Objectives [EC recommended length: 2 pages]

    1.2 Coordination and/or support measures and methodology [EC recommended length: 6 pages]

2. Impact

    2.1 Project's pathways towards impact [EC recommended length: 4 pages]

    2.2 Measures to maximise impact - Dissemination, exploitation and communication

    2.3 Summary [EC recommended length: 5 pages for Sections 2.2 and 2.3]

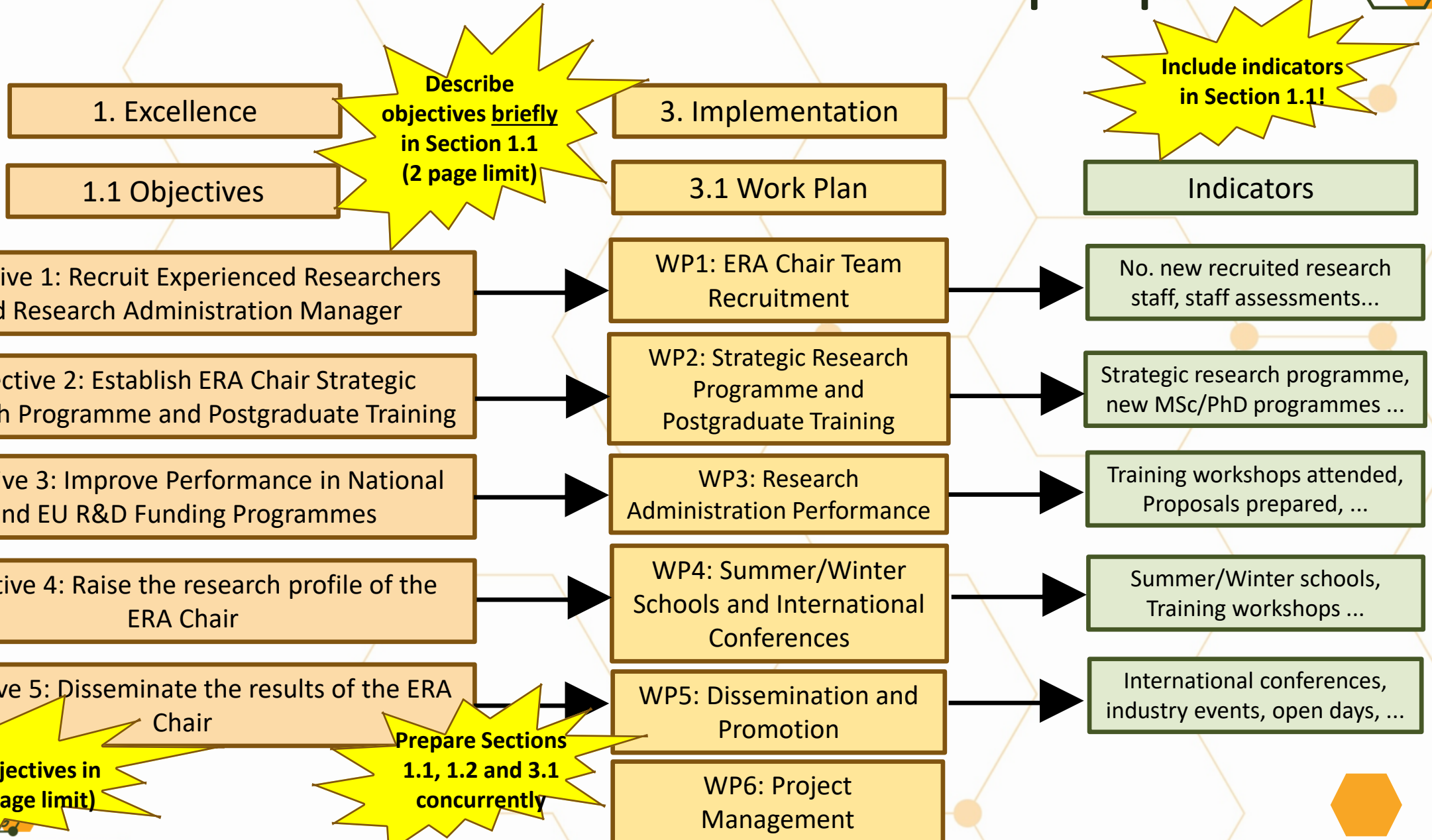3. Quality and efficiency of the implementation

    3.1 Work plan and resources [EC recommended length: 10 pages – including tables]

    3.2 Capacity of participants and consortium as a whole [EC recommended length: 3 pages]

- **Don't deviate more than ½-1 page from the recommended limits!**

- **Start Section 1.1 on the proposal cover page!**

How to structure an ERA-Chair proposal

1. Excellence	3. Implementation	Indicators
1.1 Objectives	3.1 Work Plan	

Describe objectives briefly in Section 1.1 (2 page limit)

Include indicators in Section 1.1!

Objective 1: Recruit Experienced Researchers and Research Administration Manager	→	WP1: ERA Chair Team Recruitment	→	No. new recruited research staff, staff assessments...
Objective 2: Establish ERA Chair Strategic Research Programme and Postgraduate Training	→	WP2: Strategic Research Programme and Postgraduate Training	→	Strategic research programme, new MSc/PhD programmes ...
Objective 3: Improve Performance in National and EU R&D Funding Programmes	→	WP3: Research Administration Performance	→	Training workshops attended, Proposals prepared, ...
Objective 4: Raise the research profile of the ERA Chair	→	WP4: Summer/Winter Schools and International Conferences	→	Summer/Winter schools, Training workshops ...
Objective 5: Disseminate the results of the ERA Chair	→	WP5: Dissemination and Promotion	→	International conferences, industry events, open days, ...
		WP6: Project Management		

Elaborate on objectives in Section 1.2 (6 page limit)

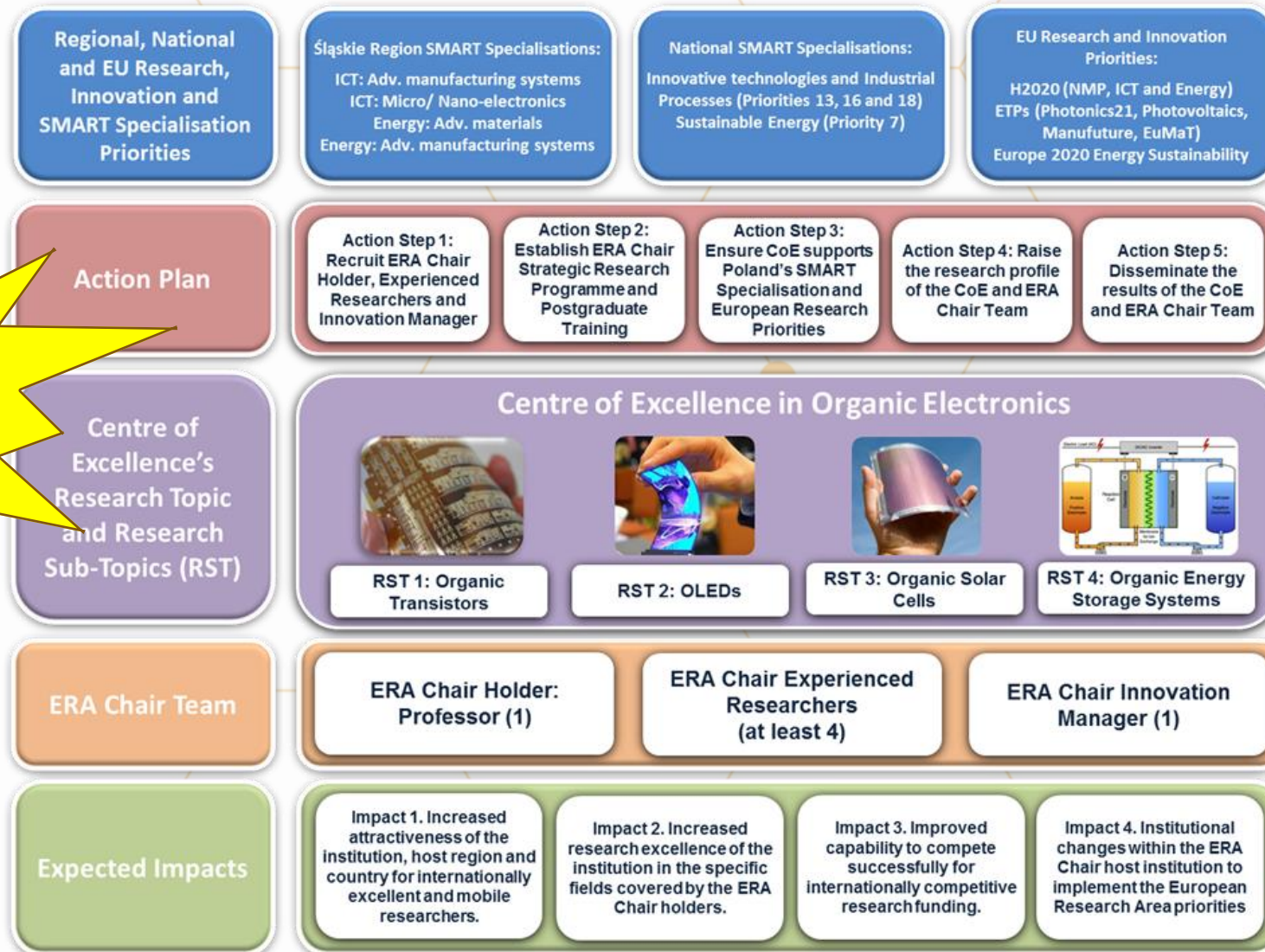**Prepare Sections 1.1, 1.2 and 3.1 concurrently**

Section 1: Excellence

- Section 1.1
  - Demonstrate proposal's pertinence to the work programme
- Section 1.2
  - Why the research is important from a national and EU perspective
  - SWOT analysis

Section 1: Excellence

Regional, National and EU Research, Innovation and SMART Specialisation Priorities	Śląskie Region SMART Specialisations: ICT: Adv. manufacturing systems ICT: Micro/ Nano-electronics Energy: Adv. materials Energy: Adv. manufacturing systems	National SMART Specialisations: Innovative technologies and Industrial Processes (Priorities 13, 16 and 18) Sustainable Energy (Priority 7)		EU Research and Innovation Priorities: H2020 (NMP, ICT and Energy) ETPs (Photonics21, Photovoltaics, Manufuture, EuMaT) Europe 2020 Energy Sustainability	
Action Plan	Action Step 1: Recruit ERA Chair Holder, Experienced Researchers and Innovation Manager	Action Step 2: Establish ERA Chair Strategic Research Programme and Postgraduate Training	Action Step 3: Ensure CoE supports Poland's SMART Specialisation and European Research Priorities	Action Step 4: Raise the research profile of the CoE and ERA Chair Team	Action Step 5: Disseminate the results of the CoE and ERA Chair Team
Centre of Excellence's Research Topic and Research Sub-Topics (RST)	Centre of Excellence in Organic Electronics — RST 1: Organic Transistors	RST 2: OLEDs	RST 3: Organic Solar Cells	RST 4: Organic Energy Storage Systems	
ERA Chair Team	ERA Chair Holder: Professor (1)	ERA Chair Experienced Researchers (at least 4)	ERA Chair Innovation Manager (1)		
Expected Impacts	Impact 1. Increased attractiveness of the institution, host region and country for internationally excellent and mobile researchers.	Impact 2. Increased research excellence of the institution in the specific fields covered by the ERA Chair holders.	Impact 3. Improved capability to compete successfully for internationally competitive research funding.	Impact 4. Institutional changes within the ERA Chair host institution to implement the European Research Area priorities	

If you have space, then it's nice to have an overview figure in Section 1 ... This one is from a H2020 ERA Chair proposal

Demonstrate proposal's relevance to the work programme (Section 1.1)

Scope of the ERA-Chair call	How/where this proposal addresses the scope of the call
Research organisations located in widening countries interested in establishing an ERA Chair shall submit a proposal with the prospective ERA Chair holder who should be an outstanding researcher and/or innovator in the chosen scientific domain. The scientific field can be any domain of research and innovation addressed under the Treaty on the Functioning of the European Union.	Coordinator: ?? (Widening country) ERA-Chair holder: Prof. ?? who is an outstanding researcher in the field of ?? (H-Index = ??, Other prestigious awards)
Proposals should include a CV in Europass form of the future ERA Chair holder and detail the scientific and technical support he/she will provide to the coordinator and how the proposed activities will upgrade from the current situation.	Europass CV can be found in Section ??
Extract other important requirements from the call text	*Indicate where the proposal address requirement e.g see Section 1.2*
Etc	*Etc*

Include such a table in Section 1.1

Why the research is important from a national and EU perspective (Section 1.2)

- Concisely describe why the research topic is important (1/2 – 1 page)

- National level

  – Reference SMART specialization strategy (S3) and/or

  – Reference national research and innovation strategy/policies

- EU level

  – Reference research and innovation priorities in Horizon Europe and/or

  – Reference European Partnership's research and innovation priorities e.g. Processes4Planet

SWOT Analysis (Section 1.2)

Be specific = More convincing!

Explain how your scientific strategy (objectives) addresses the SWOT

Strengths (S) and Weaknesses (W) of SUT	Opportunities (O) and Threats (T) faced by SUT from External Environment
Strengths S1. Expertise in development of new molecules for optoelectronics S2. Expertise in organic synthesis S3. Expertise in electrochemistry and spectro-electrochemistry. S4. Expertise in polymer chemistry S5. Expertise in the study of conjugated compounds S6. Expertise in investigation of charge carriers in organic compounds S7. The laboratory has access to unique self-built UV-Vis-NIR-EPR spectro-electrochemical to evaluate the formation of charge carriers. S8. Culture of communication, networking and forming research partnerships (national and international) S9. Strong communication infrastructure to disseminate information	**Opportunities** O1. Potential to win materials science, optoelectronics, nano- and light technologies projects funded by National Authority for Scientific Research O2. Potential to participate in H2020 programme (NMP, ICT, FET, MSCA, FET) O3. Potential to participate in EU cross-border cooperation programmes O4. Potential to improve in area of organic optoelectronics through collaborative research and technology transfer involving Twinning partners O5. Existence of a significant Organic Electronic scientific diaspora and potential of involving it in the national R&D and innovation activities O6. An existing network R&D and innovation organizations and qualified human resources O7. Growing market (regulations relating to data protection).
Weaknesses W1. Out-of-date facilities to investigate surface morphology. W2. Lack of direct access to equipment for device formation and characterization. W3. Lack of job opportunities for young researchers leads to decrease in capability to exploit recent developments in new materials for OLED and OSC. W4. Insufficient national investment in R&D equipment and training of researchers. W5. Insufficient international visibility. W6. Lack of R&D proposal writing skills. W7. Weak regulation environment and innovation infrastructure W8. Weak science-industry collaboration	**Threats** T1. Continued brain-drain of well qualified Polish researchers to multinational companies T2. Fluctuation in national R&D funding due to changing priorities of government budget formation T3. Lack of trained researchers and managers to fully exploit opportunities with H2020 projects T4. Continued domination of inorganic semiconductor devices producers in the field of electronics T5. Reduced private investment in organic electronics sector due to recent global economic crisis T6. Reduced employment opportunities in the sector of organic semiconductors due to global economic crisis

Section 2: Impact

- Section 2.1
  - Contribution to expected outcomes (qualitative and quantitative)
  - Potential barriers arising from factors beyond the scope and duration of the project
- Section 2.2
  - Dissemination and Communication Plan
  - Strategy for the management of intellectual property

At system level

- Outcome 1: Increase in number of R&I talents moving to host organisations in Widening countries.

- Outcome 2: Increase in international, interdisciplinary and intersectoral mobility of researchers and innovators.

- Outcome 3: Encouraging institutional reforms in research institutions and in the national R&I system in widening countries.

- Outcome 4: Strengthening of Widening countries' human capital base in R&I with more entrepreneurial and better trained researchers and innovators.

- Outcome 5: Better communication of R&I results to society.

- Outcome 6: Better quality and capacity of research and innovation contributing to Europe's competitiveness and growth.

- Outcome 7: Improved excellence capacity and resources in Widening countries and close the still apparent research and innovation gap within Europe

Qualitative contribution to expected outcomes (Section 2.1) (2 of 2)

At organisation level

- Outcome 1: Research excellence of the institution in the specific fields covered by the ERA Chair holder.

- Outcome 2: Increased attractiveness of the institution for internationally excellent and mobile researchers.

- Outcome 3: Creation of a permanent and excellent research group in the chosen scientific field with a spill-over effect on the institution.

- Outcome 4: Improved capability to succeed in competitive research funding in the EU and globally, at least, in the fields of choice.

- Outcome 5: Greater contribution to the knowledge-based economy and society.

Quantitative contribution to expected outcomes (Section 2.1)

Use the KPIs from Section 1.1

Expected Outcomes	WP	Performance Indicators	Target
Outcome 1: Research excellence of the institution in the specific fields covered by the ERA Chair holder.	1, 2, 3, 4 and 5	• Recruit Professor • Recruit Experienced Researchers • Average h-index of institution's project members involved in ERA-Chair • PhD Training Course in ??? • MSc Training Course in ??? • Papers published in international journals • Papers presented at international conferences	?? ?? ?? ?? ?? ?? ??
Outcome 2: Increased attractiveness of the institution for internationally excellent and mobile researchers.	??, ??, ??	• Etc. • Etc. • Etc.	?? ?? ??
Etc.	etc	• Etc	etc

Potential barriers arising from factors beyond the scope and duration of the project (Section 2.1)

- Scientific related barriers

  – Describe 3-4 challenges/barriers specific to the research topic and/or

  – Describe 3-4 challenges/barriers identified by relevant European Partnerships e.g. Made in Europe

- Country related

  – Describe 3-4 challenges/barriers faced by your country's research and innovation system

For each challenge/barrier, describe a mitigation measure the project will take!

Dissemination and Communication Plan (Section 2.2)

Dissemination and Communication Plan				
Project result	**Partners Concerned**	**Dissemination Activity**	**Target audience**	**Indicator & Target**
Project leaflet and poster	Coordinator and Twinning Partners	Distribute during international conferences (e.g. X, Y, Z, etc.), training workshops and outreach events	Scientists, engineers and general public	250+ leaflets distributed, 25+ posters displayed
Press conferences	Coordinator	Press conferences at the start and end of the project	Regional and national news media (radio, TV and print newspapers)	2 conferences, 5+ journalists
Project news	Coordinator and Twinning Partners	Publish project news releases and distribute through broader scientific news channels	Scientists, engineers and general public	2+ press releases
Project website	Coordinator and Twinning Partners	Publish project summary, regular news and event updates on website	Scientists, engineers and general public	2500+ visitors
etc	etc	etc	etc	etc

Strategy for the management of intellectual property (Section 2.2)

Include tables that capture ownership of background and foreground knowledge!

Research Sub-Topic	Existing Background Knowledge
Research Sub-Topic #1: Organic Transistors	Issues concerning high operational voltage for application and mobility overestimation for material analysis purposes.
Research Sub-Topic #2: Organic Light Emitting Diodes	Stability, efficiency and costs of OLEDs.
Research Sub-Topic #3: Organic Solar Cells	Stability, efficiency and costs of OPVs.
Research Sub-Topic #4: Organic energy storage systems	Issues concerning costs (per kWh), stability of storage energy, and stability during charging-discharging cycles. Poor stability of flexible batteries.

Research Sub-Topic	Possible Foreground Knowledge
Research Sub-Topic #1: Organic Transistors	New high electron mobility materials. Gradient source-drain electrode materials to reduce operational voltage. New impedance technique to analyse charge mobility properties.
Research Sub-Topic #2: Organic Light Emitting Diodes	Methods to reduce degradation pathways. New highly efficient TADF-RTP materials for white OLED lighting.
Research Sub-Topic #3: Organic Solar Cells	New non-fullerene acceptors. New structures and new transporting materials to increase charge extraction from the active part of OPVs.
Research Sub-Topic #4: Organic energy storage systems	New materials for flexible batteries for use in flexible devices. Use of carbon nanotubes and graphene in printed batteries. Environmental friendly high capacity flow batteries.

Section 3: Implementation

- Section 3.1
  - Work package (WP) descriptions
  - Gantt chart
  - Budget

Work package (WP) descriptions (Section 3.1)

See
MS Word file!

Gantt Chart (Section 3.1)

Deliverables ◆
Milestones ✦

		Year 1				Year 2				Year 3				Year 4				Year 5			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
WP1	**ERA Chair Team Recruitment**		MS3✦		MS5 MS6✦																
T1.1	Recruit the Holder of the ERA Chair																				
T1.2	Recruit Experienced Researchers																				
T1.3	Recruit Innovation Manager																				
T1.4	ERA Chair Team Assessment			D1.1◆				D1.2◆				D1.3◆									D1.4◆
WP2	**Strategic Research Programme and Postgraduate Training**			MS4✦					MS9✦	MS13✦											MS18✦
T2.1	Develop Strategic Research Programme		D2.1◆					D2.3◆													D2.6◆
T2.2	Develop PhD Training Programme			D2.2◆								D2.5◆									
T2.3	Develop Master's Training Programme							D2.4◆													D2.7◆
T2.4	Monitor and Assess Postgraduates																				
WP3	**SMART Specialisation and European Research Priorities**																				
T3.1	Organise workshops relevant to Poland's SMART Specialisation priorities							D3.2◆													D2.6◆
T3.2	Organise workshops relevant to EU R&D calls for proposals			D3.1◆								D3.3◆									
WP4	**Summer/Winter Schools and International Conferences**					MS8✦		MS10 MS11✦				MS14✦							MS16 MS17✦		
T4.1	Organise summer and winter schools			D4.1◆								D4.3◆									
T4.2	Organise international conferences							D4.2◆													D4.4◆
T4.3	Participate in international conferences																				
WP5	**Dissemination and Promotion**	MS2✦																			
T5.1	Produce a data management plan	D5.1◆							D5.5◆												D5.7◆
T5.2	Design, implement and maintain a project website	D5.2◆																			
T5.3	Produce promotional materials	D5.3◆							D5.4◆												D5.6◆
T5.4	Disseminate research papers																				
WP6	**Project Management**	✦ MS1		MS7✦				MS12✦				MS15✦							MS19✦		
T6.1	Project coordination			D6.1◆				D6.2◆				D6.3◆									D6.4◆
T6.2	Managing administrative matters																				

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Budget (Section 3.1)

Include some pie charts to illustrate how your budget and efforts (PMs) are allocated!

For WP for project management (i.e. WP6), keep it within 5-7% range.

Person-Month Efforts Distribution (%)

WP1 83%
WP6 5%
WP5 3%
WP4 3%
WP3 3%
WP2 3%

Budget Distribution (%)

Personnel Costs 85%
Other Costs 7.4%
Travel Costs 7%
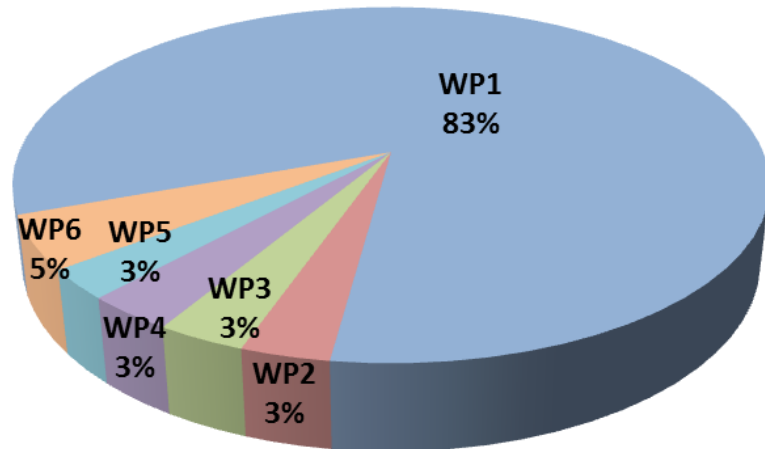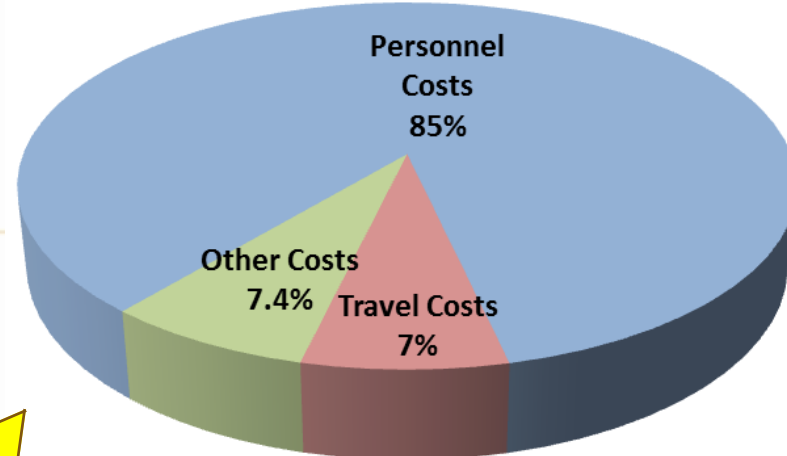
Write a few bullet points of "blah-blah" in the proposal justifying the allocation of efforts and budget

Other Sources of Information (1 of 4)

- Frequently asked questions (FAQs)

- Investigate proposals funded under previous calls

- Check to see if the EC published a Youtube video about the call

- Register for e-newsletters from NCP WIDE.NET (www.ncpwide.net)

Applicants – HORIZON-WIDERA-2022-TALENTS-01 (ERA Chairs)
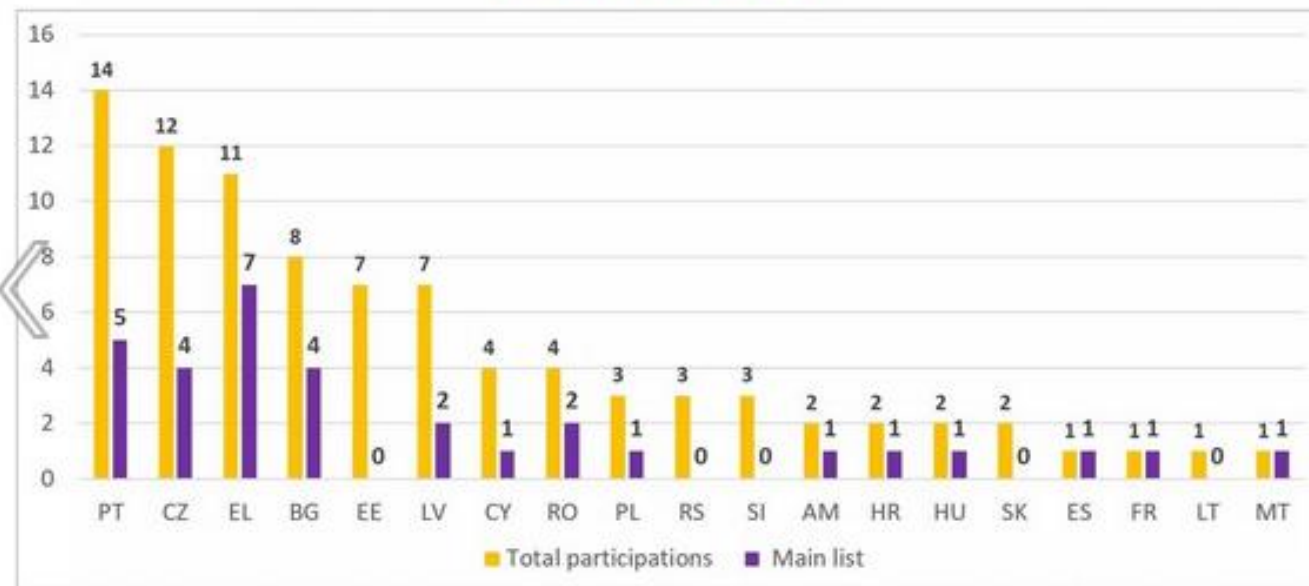
Total number of eligible proposals: **88**
Total number of retained: **32**   **Coordinators' Day: 6th December 2022**

Questions and Answers about ERA-Chair call (5-10 minutes)

Good luck with your ERA-Chair proposals!