



# The Basics & Beyond of Europe's High-End Research Funding

*Yoram Bar-Zeev (ybz@beacontech.eu)*

*Sharon Alon (sharon.alon@beacontech.eu)*

*Yasmin Wachs (yasmin.wachs@beacontech.eu)*

**beacontech**  
Research & Innovation Management

## ➤ Context

- Horizon 2020
- ERC Basics

## ➤ ERC Workflow framework

## ➤ PI Selection

- Candidates' Profile
- Eligibility Criteria
- PI's Commitment
- Collaborators
- Training

## ➤ Scientific Excellence

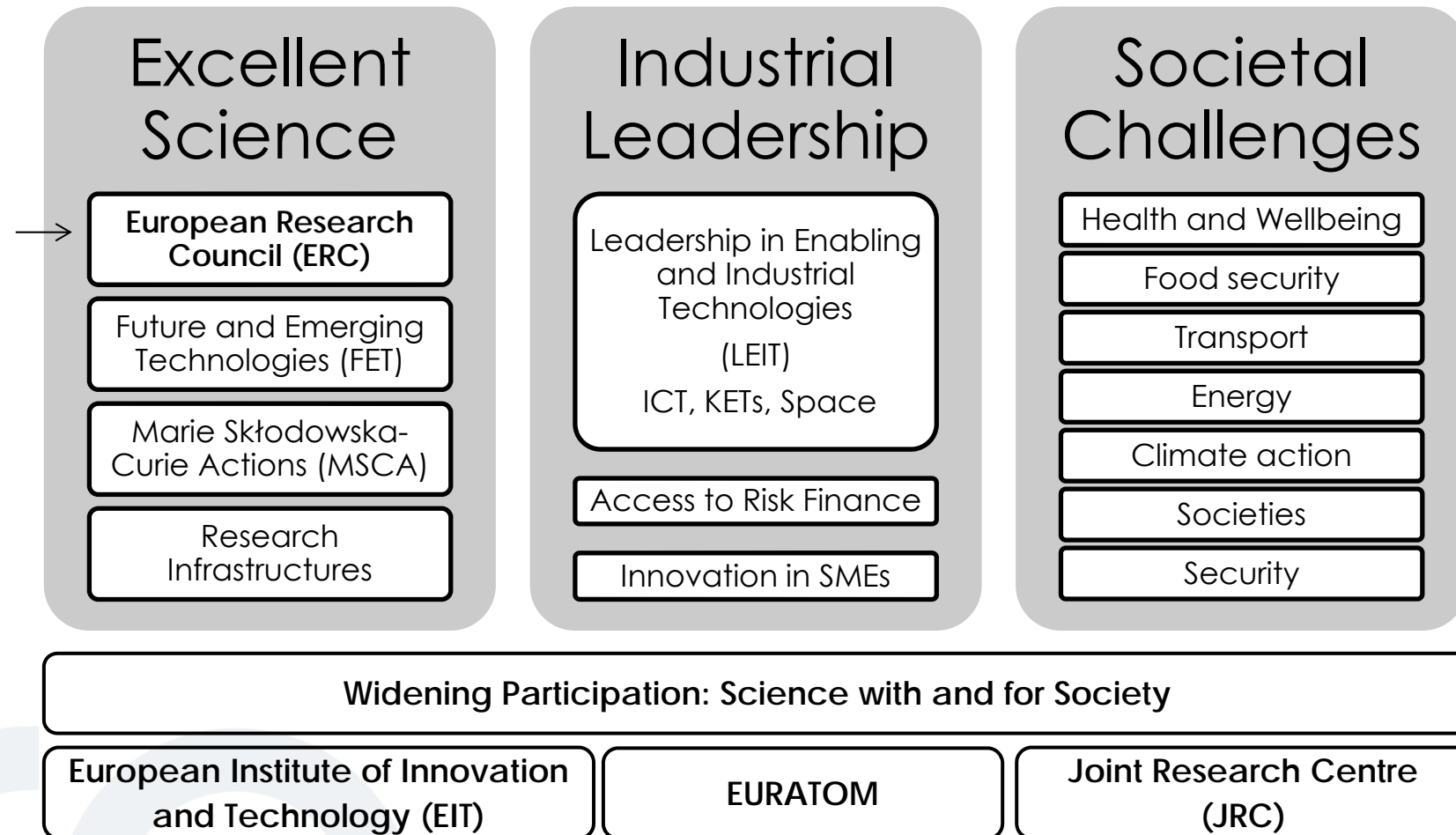
- What is Excellence?
- What is the nature of ERC project?
- Proposal writing
- Panel selection
- Training

## ➤ Technical and Administrative

- Application & submission processes
- Budget & Ethical Issues
- Common mistakes
- The evaluation 'black box'

## ➤ Interview preparation

# H2020 STRUCTURE



# H2020 FUNDING CHANNELS

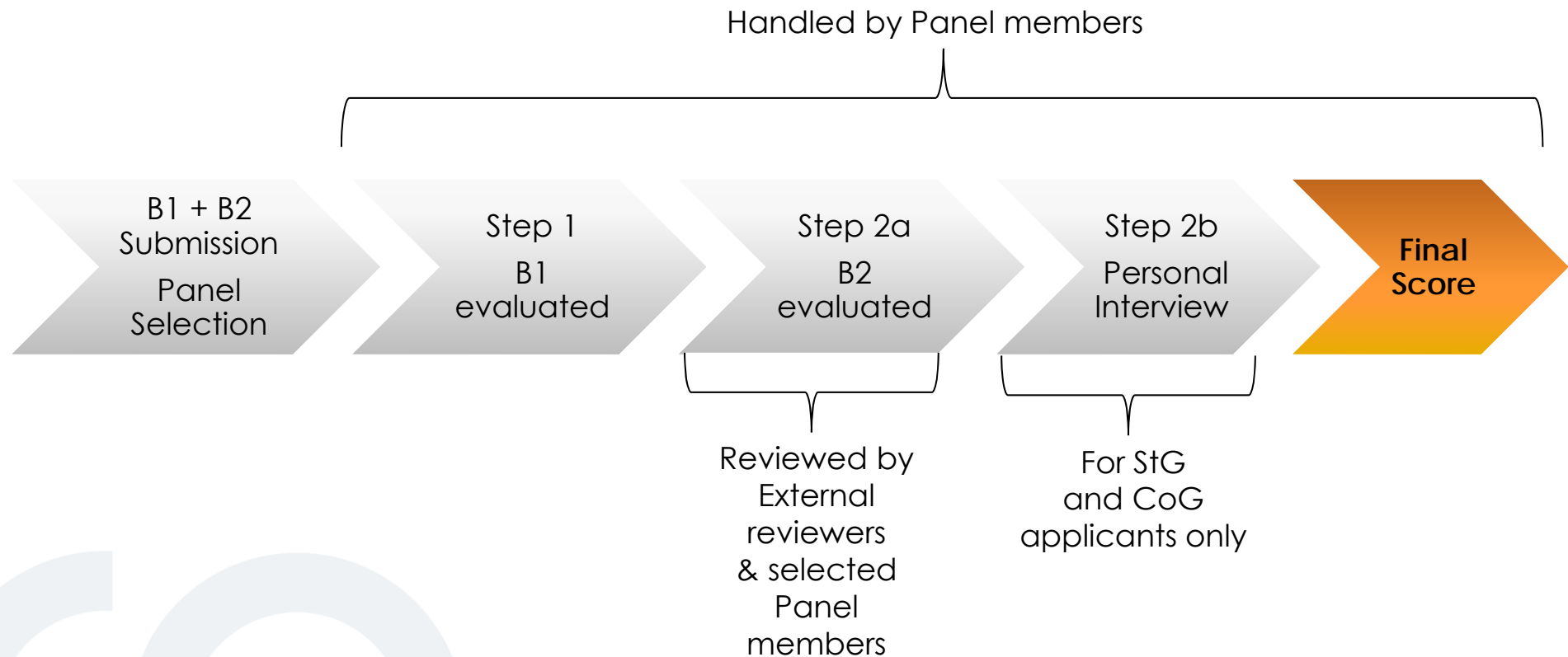


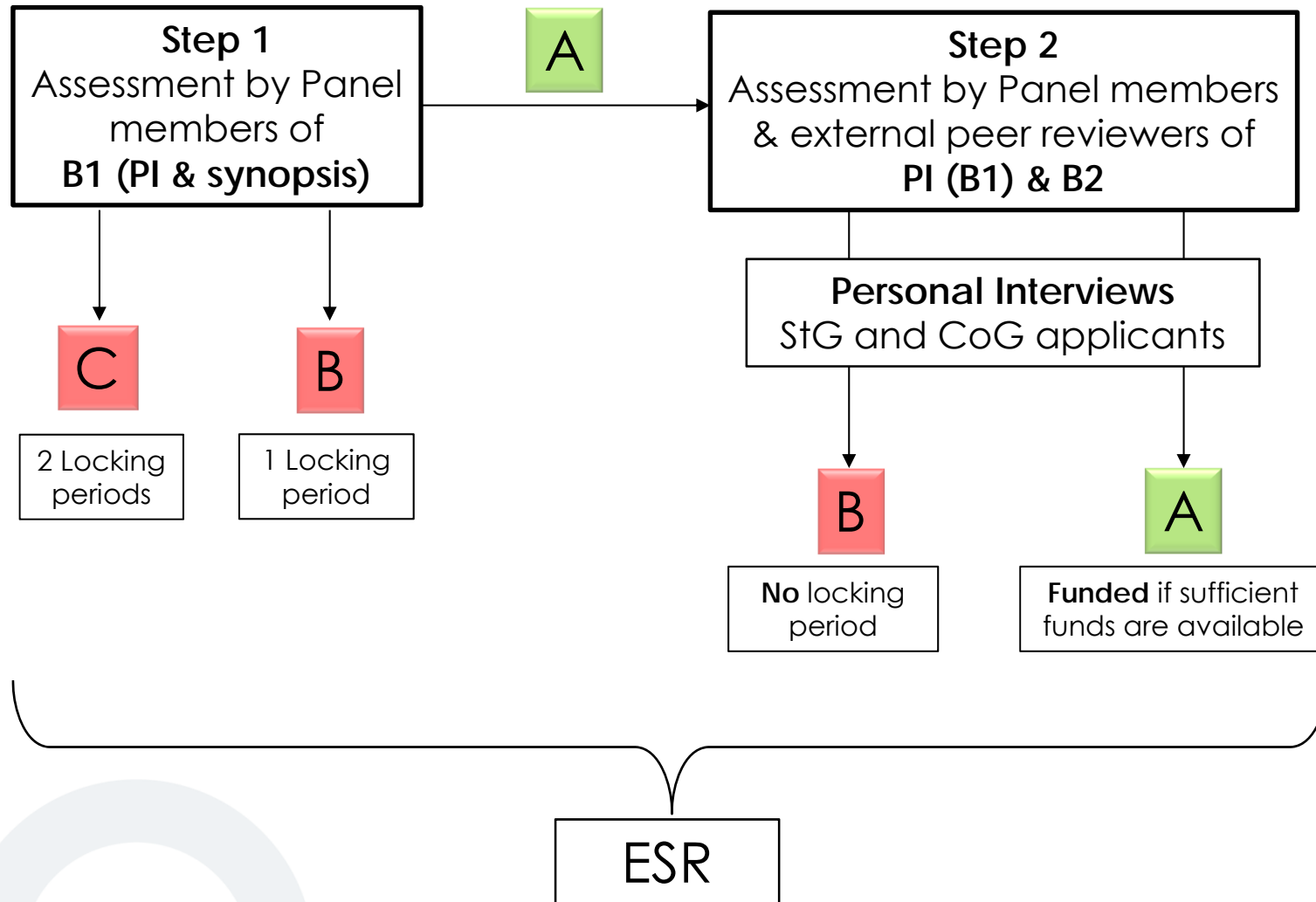
1	2	3	4	5	6	7	8	9
Basic principles	Technology concept	Experimental proof of concept	Technology validated in lab	Technology validated in relevant environment	Technology demonstrated	System prototype	System complete and qualified	Actual system proven in operational environment

Technology Readiness Level (TRL)

- A personal grant
- Investigator-driven – independent & creative PI
- Pioneering ideas – go beyond existing knowledge
- Basic research – High risk
- Impact – High gain – make EU research stronger and more visible
- No thematic priorities – anything goes
- Sole evaluation criteria - **Excellence**

## Single Submission – Two-step Evaluation

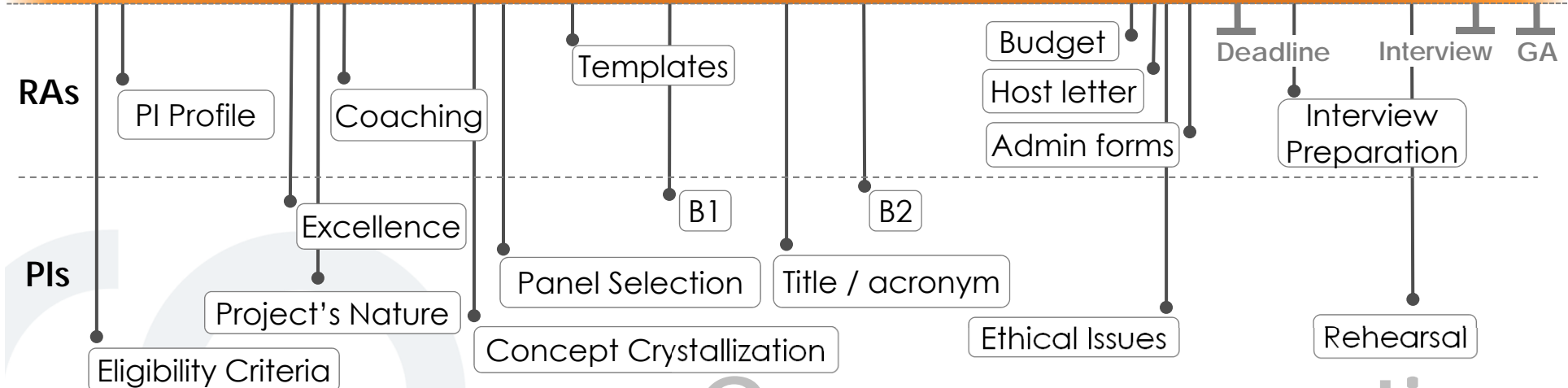
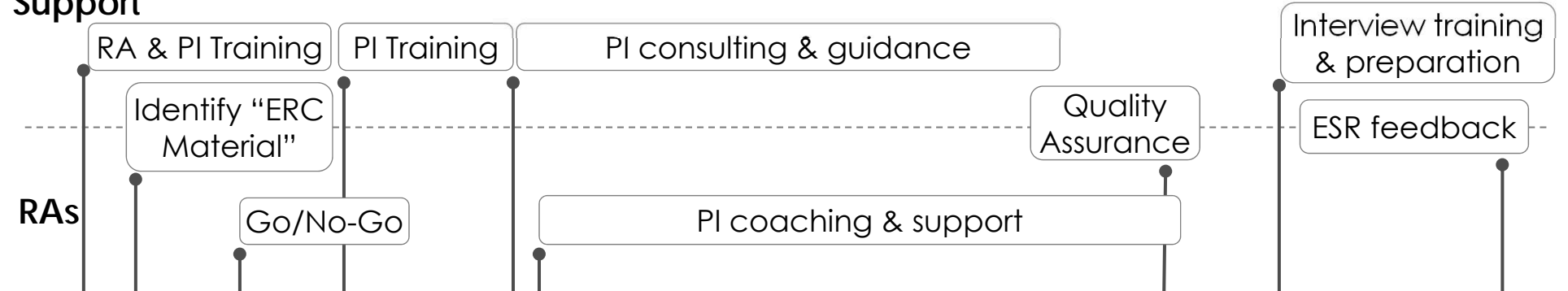




# ERC WORKFLOW

## Enhanced intervention

External Support



## Common practice



# ERC WORKFLOW



# ERC ELIGIBILITY CRITERIA

- Independent researchers from ALL nationalities can apply
- Host institution must be in an EU Member State / Associated Country
- Private for-profit research centers are eligible as Host institutions
- ERC grants are personal and portable within the EU

# ERC CATEGORIES

## STARTING (StG)

2 ≤ PhD ≤ 7 years (prior to 1/1/2017)

- Budget (€): 1.5M + 0.5M\*
- Duration: up to 5 years
- Commitment: min. 50%
- Deadline: 18-10-2016 (tentative)

Cut-off dates:  
PhD awarded from 1 January 2010  
to 1 January 2015 (inclusive)

## CONSOLIDATOR (CoG)

7 < PhD ≤ 12 years (prior to 1/1/2017)

- Budget (€): 2M + 0.75M\*
- Duration: up to 5 years
- Commitment: min. 40%
- Deadline: 9-2-2017 (tentative)

Cut-off dates:  
PhD awarded from 1 January 2005  
to 31 December 2009 (inclusive)

## ADVANCED (AdG)

Significant last 10 years track record

- Budget (€): 2.5M + 1M\*
- Duration: up to 5 years
- Commitment: min. 30%
- Deadline: 1-9-2016 (next round- 31/8/2017, tentative)

\*Justified purchase of major equipment / access to large-scale research infrastructures / relocation costs

## Career Breaks (extension of eligibility window)

- Maternity leave - 18 months / child
- Paternity leave - actual documented leave
- Long-term illness, clinical training or national service – as documented

## MD/PhD (unlike PhD/MD)

- Eligibility window – according to the earliest degree date
- StG → 4-9 years past MD degree
- CoG → 9-14 years past MD degree

- Calculate the eligibility *window correctly*
  - Check the diploma award date
  - Career breaks (maternity/parental leave, clinical training, etc.)
  
- Category margins - When to apply ?
  - Use career breaks to change categories? (AdG→CoG→StG)
  - Late StG – early CoG / Late CoG – early AdG
  - Don't misuse
  
- Blocking is personal
  - Restrictions on submission due to score B or C in Step 1 in previous submission
  - “Can I submit a different proposal this year instead?”

# PI TIME DEDICATION

	Min. % Time dedicated to ERC project	% Recommended	Min. % Presence in an EU Member State /Associated Country
StG	50%	>60%	50%
CoG	40%	>50%	50%
AdG	30%	30-45%	50%

- Creative thinkers – able to create paradigm shifts
- Outstanding CV & high-impact publications
- Proven leadership and independence
- Basic-research oriented
  - Rather than industry or teaching
  - Clinicians & Engineers – the “applicative thinkers” problem
- Timing (career-wise)

## Competitiveness in EU research arena

*StG*

At least 1 high-impact publication w/o PhD supervisor

*CoG*

Several high-impact publications, ascending trend of publications & citations

*AdG*

Active 10 years track record – Fresh high-impact publications

h-index “vulnerability”

## International visibility

*StG*

Post-doc/position in a different country

*CoG*

Recognized internationally

*AdG*

Recognized internationally



## Non-incremental work

*StG*

Proving independent thinking: Showing progress from PhD/ Postdoc

*CoG*

Critical

*AdG*

Critical  
Common issue

## Funding ID

*StG*

Not mandatory, dependent on time point

*CoG*

Critical

*AdG*

Critical

## Interdisciplinarity

Encouraged when well justified, not a must

# PI PROFILE

## Career/Discipline shift

*StG*

Possible if research benefits from the interdisciplinarity

*CoG*

If research benefits from the interdisciplinarity, and supported by publications

*AdG*

Less probable

## Leading a research team

*StG*

Not mandatory, could be an advantage

*CoG*

Critical

*AdG*

Critical

## Mentoring new scientists

*StG*

Not mandatory, could be an advantage

*CoG*

Critical

*AdG*

Critical

## Point in time, career-wise

*StG*

Is it too early? /  
Transition to CoG

*CoG*

Publication status  
Personal considerations  
Transition to AdG

*AdG*

Publication status  
Personal considerations

## Point in time, concept-wise

Strike the iron while it's hot

- Ahead of the competition?
- Will it be too late next year?
- Convincing preliminary findings
- Is it mature enough?
- Pending publications



# 'WHY ME, WHY NOW?'

- “The PI has not yet achieved a sufficiently strong publication record”
- “The PI has little experience in training and advancement of young scientists”
- “The PI’s achievements do not typically go beyond the state of the art”
- “It is not clear if the PI has enough experience to carry out this project”

## What to do...

- ✓ Clarify that you, as a PI, are in the best position to carry out this project
- ✓ Highlight your key achievements in the proposal text – publications, invited talks, conferences, young researcher supervision, etc.
- ✓ Use references to show your track record
- ✓ Describe relevant unpublished findings – preliminary research
- ✓ Provide evidence of international visibility in the field
- ✓ Consider waiting...

- Focus is on the PI - this is not a collaborative project
- No Co-PI
- Present your team members - expertise / multidisciplinary
- If collaborator/s are needed -
  - Specifically identified expertise with added value
  - Not core research
  - Identify by name
  - Internal or External – from anywhere in the world
  - Budgeted as needed

# ERC FOR SH RESEARCHERS? – YES!

*“I can’t compete with life / exact sciences”*

- You don’t. There is a dedicated budget for SH, and the application is evaluated by scholars from your research domain

*“What is considered ‘high risk’ research in SH disciplines?”*

- A first attempt at proving a novel hypothesis
  - Suggesting A new theoretical framework to an open/unsolved question in your research field
  - Challenging a common approach by suggesting a paradigm shift
- More feasibility is expected in SH compared to other domains

## What to do...

- Targeted identification of potential SH researchers, awareness-raising and coaching of promising SH researchers
- Concept crystallisation at an early stage
- Support SH researchers with rejected ERC grants to resubmit

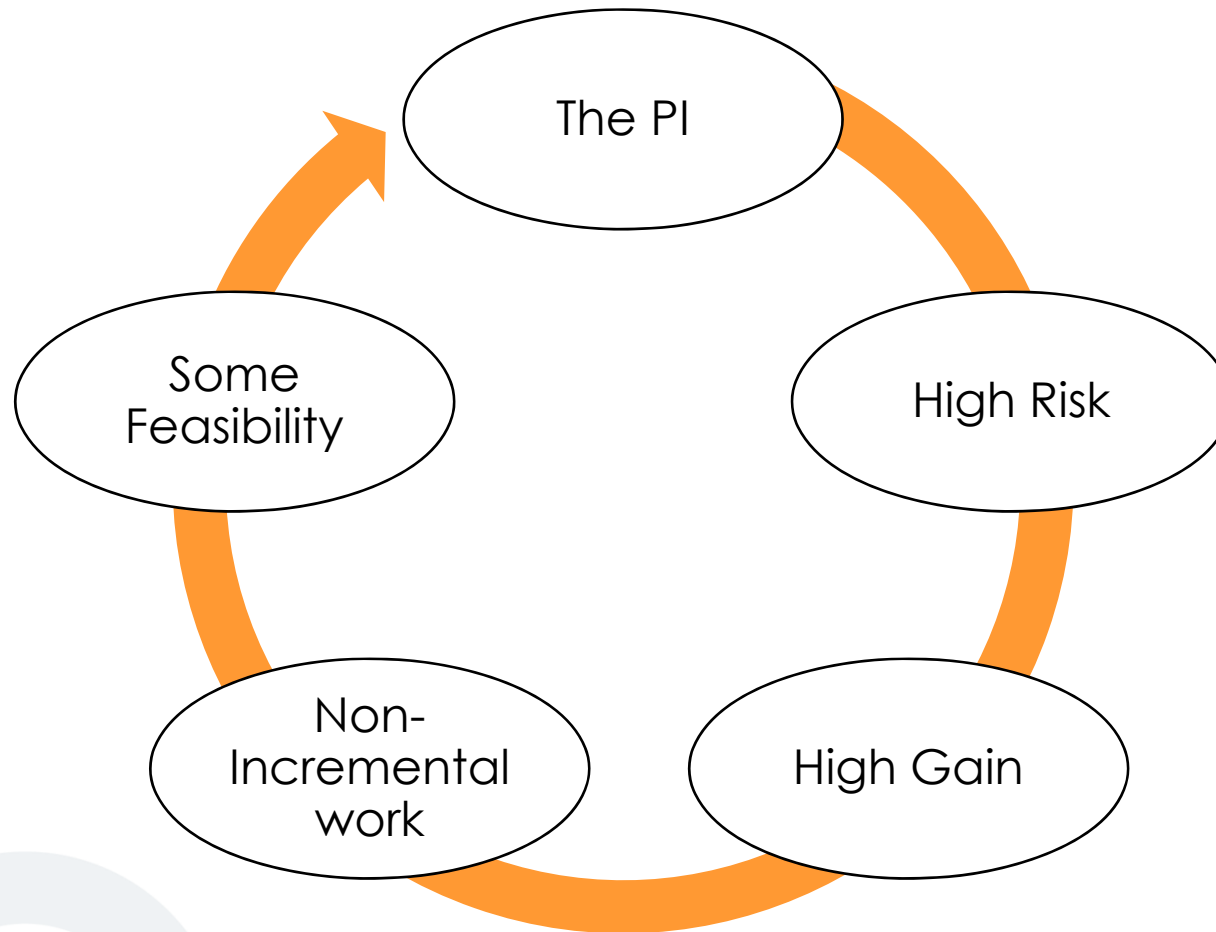
- Identify the right candidates - How to identify “ERC material”? How to decide on “Go/No-Go”?
- Understanding the uniqueness of ERC
- Awareness raising for researchers
  - ERC Info days
  - ERC Training
- Success stories
- Coaching
- Consulting (peers, NCPs, experts)
- The sooner the better

# ERC WORKFLOW

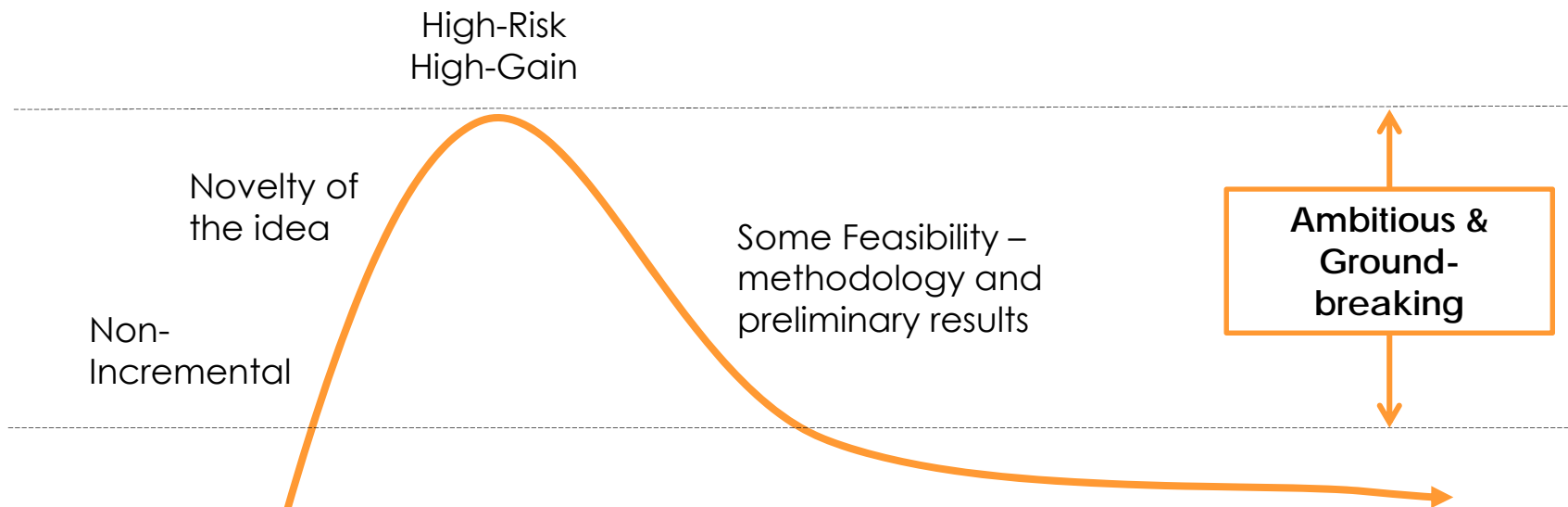




# THE ERC “POWER CYCLE”



# ERC CONCEPT NARRATIVE



Background

- Hypothesis-driven Research
- High-risk, high-gain
  - › Conceptual leap forward
  - › Non-incremental workflow, while presenting preliminary results
  - › Large scale vs. minimal impact – expanded scope over a niche research
  - › Opening the horizon for future research
- Do not underestimate the ‘high risk’
  - › Preferably uncharted waters
  - › The “Noble Prize paradox” / past breakthroughs
- Avoid ‘fishing expeditions’
  - › “Something will come up, no matter what”

# ESTABLISHING THE CONCEPT

- Avoid being 'too ambitious'
  - › 'Not able to carry out the work'
  - › Feasibility aspect – avoid 'hand waving', not bringing it down to earth
- Novel subject, novel methodology or both
  - › Avoid basing on integration and/or optimization of existing theories, technologies, methodologies or tools
- Does it hold a 5 year research plan ?
- Comprehensive but not fragmented
  - › Avoid stand-alone sub-projects/studies (both in concept and presentation)

# ESTABLISHING THE CONCEPT

- Is the concept within the core expertise of the PI?
  - › Will a dramatic change of infrastructure be needed? (e.g. computational biology to “wet” lab, theory to experimental)
- Some feasibility – Keep the fine balance
  - › Present preliminary results that do not diminish the high-risk
  - › Provide a *Limited* risk-assessment and contingency plan
- Present a macro-level work plan
  - › Overall timeline and research phases
  - › Avoid “WP structure” and deliverables
- Does it have an “open end”?
  - › “Closed end” vs. open the horizon for more research
  - › Too applicative: culminates into a PoC/demonstration (WPs) → Consider FET-Open / other H2020 opportunities

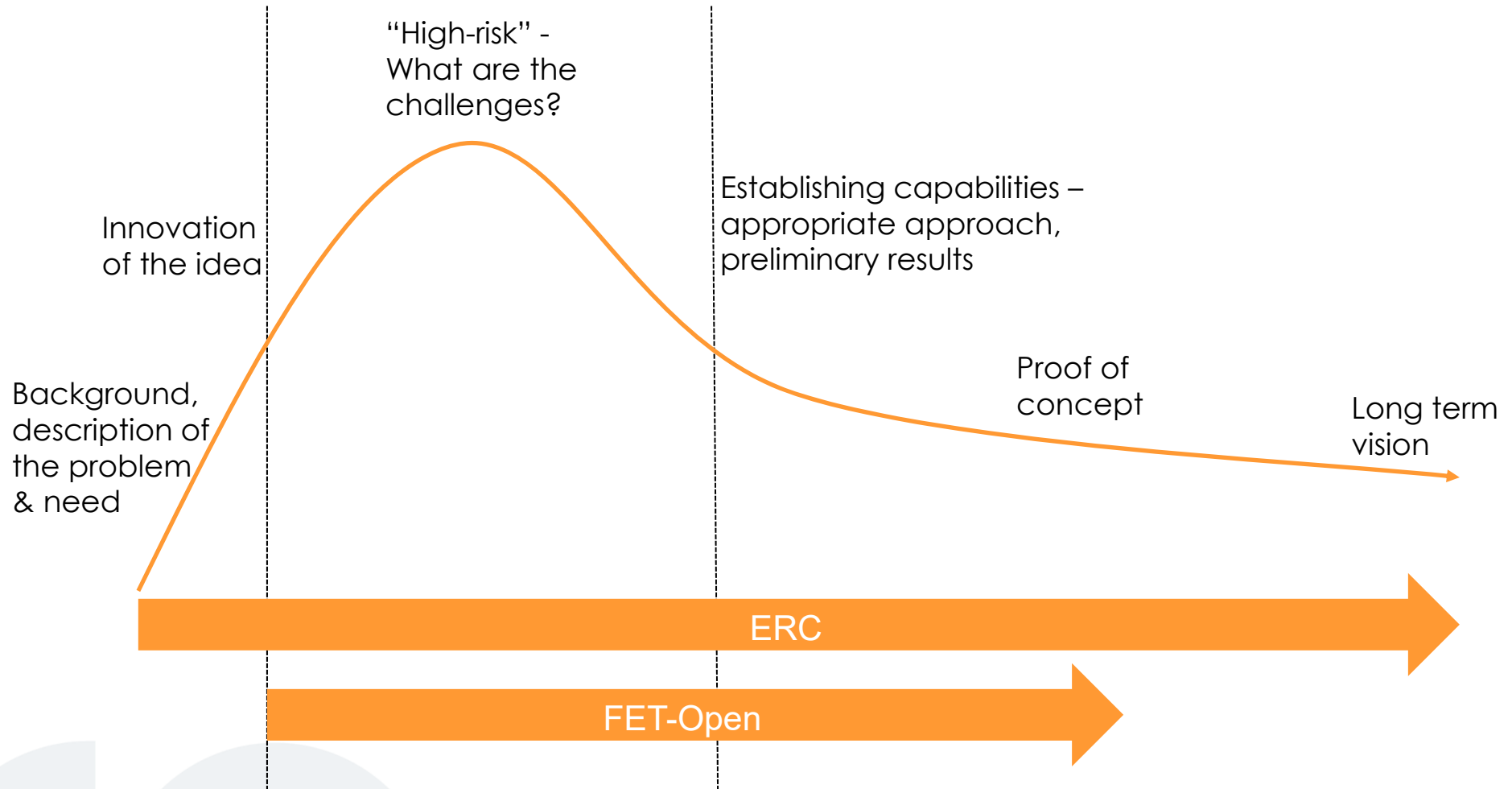
# THE ERC - FET-OPEN PATH



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Technology Readiness Level (TRL)

# THE ERC - FET-OPEN PATH



# ESR KEY CRITICISM - NOVELTY

- “The proposal fails to go beyond the SotA in the field”
- “The proposal presents incremental work rather than opening a new research path”
- “The risks involved seem moderate”
- “the theoretical formulation of the proposal was still insufficiently developed, remaining somewhat vague”
- “one cannot really see what the project might contribute that is ground-breaking or that will expand in a significant way what we already know”
- “The suggested impact seems rather low”
- “the reach of the project looks more like the sort of project that would better justify a book by the PI”

## What to do...

- Clarify the potential major breakthroughs, originality and creativity of the project
- Explain why the project is high-risk, high-gain
- Focus on the planned research rather than what you have done so far
- Emphasise the gap between the proposed project and the SotA



# ESR KEY CRITICISM - FEASIBILITY

- “The objectives appear to be too ambitious to be feasible”
- “The risks clearly outweigh any gains to be obtained from the project”
- “The scope of the project is unrealistic”
- “The proposal requires greater clarity and specification”
- “The potential challenges are not described in detail”
- “The proposal is feasible but does not seem high risk or high gain”
- “A more interdisciplinary approach may be warranted here”
- “The timescales and resources of the proposal seem unjustified”

## What to do...

- Provide preliminary findings/results in the text
- Include a risk-assessment and risk mitigation measures (~1/2 page)
- Prove that the ambition level is high, but not too high
- Focus on a manageable number of objectives (~3-6)
- Include a general outline of the workplan that matches the resources (~1/2 page + high-level Gantt chart)

*Lead the panel selection* – make sure to select the right panel/s to avoid bouncing the proposal to another panel

## How to choose the panel/s?

- Mandatory: 1 Review Panel with 1 corresponding Sub-panel (“ERC keyword”)
- Optional: 1 additional Review Panel, and up to 3 additional ERC keywords
- The primary review panel will probably manage the evaluation process
- The panelists have the mandate to bounce the proposal to another panel

## What to consider?

- Who will appreciate the PI (CV) and his/her novelty?
- Who understands the PI’s language/terminology?
- Will the PI feel comfortable to present to these people in the interview (StG/CoG)?
- Does the PI need more than one panel? How interdisciplinary is she/he?

## Primary Review Panel Structure

### Physical Sciences & Engineering

#### PE1 Mathematics

All areas of mathematics, pure and applied, plus mathematical for science, mathematical physics and statistics.

#### PE2 Fundamental Constituents of Matter

Particle, nuclear, plasma, atomic, molecular, gas, and optical physics.

#### PE3 Condensed Matter Physics

Structure, electronic properties, fluids, nanosciences, biophysics.

#### PE4 Physical and Analytical Chemical Sciences

Analytical chemistry, chemical theory, physical chemistry/chemical ph

#### PE5 Synthetic Chemistry and Materials

Materials synthesis, structure-properties relations, functional and molecular architecture, organic chemistry.

#### PE6 Computer Science and Informatics

Informatics and information systems, computer science, scientific systems.

#### PE7 Systems and Communication Engineering

Electrical, electronic, communication, optical and systems engineering

#### PE8 Products and Processes Engineering

Product design, process design and control, construction methods, c processes, material engineering.

#### PE9 Universe Sciences

Astro-physics/chemistry/biology; solar system; stellar, galactic and planetary systems, cosmology, space science, instrumentation.

#### PE10 Earth System Science

Physical geography, geology, geophysics, atmospheric sciences, oceanography, ecology, global environmental change, biogeochemical cycle management.

### Life Sciences

#### LS1 Molecular and Structural Biology and Biochemistry

Molecular synthesis, modification and interaction, biochemistry, biophysics, structural biology, metabolism, signal transduction.

#### LS2 Genetics, Genomics, Bioinformatics and Systems Biology

Molecular and population genetics, genomics, transcriptomics, proteomics, metabolomics, bioinformatics, computational biology, biostatistics, biological modelling and simulation, systems biology, genetic epidemiology.

#### LS3 Cellular and Developmental Biology

Cell biology, cell physiology, signal transduction, pattern formation in plants and animals, stem cell biology.

#### LS4 Physiology, Pathophysiology and Endocrinology

Organ physiology, pathophysiology, endocrinology, cardiovascular disease, metabolic syndrome

#### LS5 Neurosciences and Neural Disorders

Neurobiology, neuroanatomy, neurophysiology, neuroimaging, systems neuroscience, neurodegeneration.

#### LS6 Immunity and Infection

The immune system and related disorders, immunology, treatment of infection.

#### LS7 Diagnostic Tools, Therapies and Public Health

Aetiology, diagnosis and treatment of disease, clinical medicine, regenerative medicine, medical devices.

#### LS8 Evolutionary, Population and Environmental Biology

Evolution, ecology, animal behaviour, population biology, eco-toxicology, microbial ecology.

#### LS9 Applied Life Sciences and Non-Medical Biotechnology

Applied plant and animal sciences, food and agricultural biotechnologies, bioengineering, bioremediation.

### Social Sciences & Humanities

#### SH1 Individuals, Markets and Organisations

Economics, finance and management.

#### SH2 Institutions, Values, Environment and Space

Political science, law, sustainability science, geography, regional studies and planning.

#### SH3 The Social World, Diversity, Population

Sociology, social psychology, demography, education, communication.

#### SH4 The Human Mind and Its Complexity

Cognitive science, psychology, linguistics, philosophy of mind.

#### SH5 Cultures and Cultural Production

Literature, philology, cultural studies, anthropology, study of the arts, philosophy.

#### SH6 The Study of the Human Past

Archaeology and history.

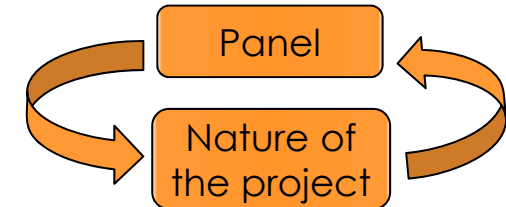
## Secondary Review Panels

<p>processing (e.g. speech, image, video)</p> <p>PE6_12 Scientific computing, simulation and modelling tools</p> <p>PE6_13 Bioinformatics, biocomputing, and DNA and molecular computation</p>		
<p><b>PE7 Systems and Communication Engineering:</b> Electrical, electronic and systems engineering</p> <p>PE7_1 Control engineering</p> <p>PE7_2 Electrical engineering: power components and/or system</p> <p>PE7_3 Simulation engineering and modelling</p> <p>PE7_4 (Micro and nano) systems engineering</p> <p>PE7_5 (Micro and nano) electronic, optoelectronic and photonics</p> <p>PE7_6 Communication technology, high-frequency technology</p> <p>PE7_7 Signal processing</p> <p>PE7_8 Networks (communication networks, sensor networks, networks)</p> <p>PE7_9 Man-machine-interfaces</p> <p>PE7_10 Robotics</p> <p>PE7_11 Components and systems for applications (in e.g. medicine)</p> <p>PE7_12 Electrical energy production, distribution, application</p>	<p><b>LS2 Genetics, Genomics, Bioinformatics and Systems Biology:</b> Molecular and population genetics, genomics, transcriptomics, proteomics, metabolomics, bioinformatics, computational biology, biostatistics, biological modelling and simulation, systems biology, genetic epidemiology</p> <p>LS2_1 Genomics, comparative genomics, functional genomics</p> <p>LS2_2 Transcriptomics</p> <p>LS2_3 Proteomics</p> <p>LS2_4 Metabolomics</p> <p>LS2_5 Glycomics</p> <p>LS2_6 Molecular genetics, reverse genetics and RNAi</p> <p>LS2_7 Quantitative genetics</p> <p>LS2_8 Epigenetics and gene regulation</p> <p>LS2_9 Genetic epidemiology</p> <p>LS2_10 Bioinformatics</p> <p>LS2_11 Computational biology</p> <p>LS2_12 Biostatistics</p> <p>LS2_13 Systems biology</p> <p>LS2_14 Biological systems analysis, modelling and simulation</p>	
<p><b>PE8 Products and Processes Engineering:</b> Product design, construction methods, civil engineering, energy processes, material engineering</p> <p>PE8_1 Aerospace engineering</p> <p>PE8_2 Chemical engineering, technical chemistry</p> <p>PE8_3 Civil engineering, architecture, maritime/hydraulic engineering treatment</p> <p>PE8_4 Computational engineering</p> <p>PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines</p> <p>PE8_6 Energy processes engineering</p> <p>PE8_7 Mechanical and manufacturing engineering (shaping, modelling)</p> <p>PE8_8 Materials engineering (metals, ceramics, polymers, composites)</p> <p>PE8_9 Production technology, process engineering</p> <p>PE8_10 Industrial design (product design, ergonomics, man-machine)</p> <p>PE8_11 Sustainable design (for recycling, for environment, eco-design)</p> <p>PE8_12 Lightweight construction, textile technology</p> <p>PE8_13 Industrial bioengineering</p>	<p><b>LS3 Cellular and Developmental Biology:</b> Cell biology, cell proliferation, organogenesis, developmental genetics, pattern formation in plants and animals</p> <p>LS3_1 Morphology and functional imaging of cells</p> <p>LS3_2 Cell biology and molecular transport mechanisms</p> <p>LS3_3 Cell cycle and division</p> <p>LS3_4 Apoptosis</p> <p>LS3_5 Cell differentiation, physiology and dynamics</p> <p>LS3_6 Organelle biology</p> <p>LS3_7 Cell signalling and cellular interactions</p> <p>LS3_8 Signal transduction</p> <p>LS3_9 Development, developmental genetics, pattern formation in animals</p> <p>LS3_10 Development, developmental genetics, pattern formation in plants</p> <p>LS3_11 Cell genetics</p> <p>LS3_12 Stem cell biology</p>	
<p><b>PE9 Universe Sciences:</b> Astro-physics/chemistry/biology; solar and extragalactic astronomy, planetary systems, cosmology, space science</p> <p>PE9_1 Solar and interplanetary physics</p> <p>PE9_2 Planetary systems sciences</p> <p>PE9_3 Interstellar medium</p> <p>PE9_4 Formation of stars and planets</p> <p>PE9_5 Astrobiology</p> <p>PE9_6 Stars and stellar systems</p> <p>PE9_7 The Galaxy</p> <p>PE9_8 Formation and evolution of galaxies</p> <p>PE9_9 Clusters of galaxies and large scale structures</p> <p>PE9_10 High energy and particles astronomy – X-rays, cosmic rays</p>	<p><b>LS4 Physiology, Pathophysiology and Endocrinology:</b> Organ physiology, endocrinology, metabolism, ageing, tumorigenesis, cardiovascular disease</p> <p>LS4_1 Organ physiology and pathophysiology</p> <p>LS4_2 Comparative physiology and pathophysiology</p> <p>LS4_3 Endocrinology</p> <p>LS4_4 Ageing</p> <p>LS4_5 Metabolism, biological basis of metabolism related disorders</p> <p>LS4_6 Cancer and its biological basis</p> <p>LS4_7 Cardiovascular diseases</p> <p>LS4_8 Non-communicable diseases (except for neural/psychiatric) metabolism-related disorders, cancer and cardiovascular disease</p>	<p><b>SH1 Individuals, Markets and Organisations:</b> Economics, finance and management</p> <p>SH1_1 Macroeconomics; monetary economics; economic growth</p> <p>SH1_2 International trade; international business; international management; spatial economics</p> <p>SH1_3 Development economics, health economics, education economics</p> <p>SH1_4 Financial economics; banking; corporate finance; international finance; accounting; auditing; insurance</p> <p>SH1_5 Labour and demographic economics; human resource management</p> <p>SH1_6 Econometrics; operations research</p> <p>SH1_7 Behavioural economics; experimental economics; neuro-economics</p> <p>SH1_8 Microeconomics; game theory</p> <p>SH1_9 Industrial organisation; strategy; entrepreneurship</p> <p>SH1_10 Management; marketing; organisational behaviour; operations management</p> <p>SH1_11 Technological change, innovation, research &amp; development</p> <p>SH1_12 Agricultural economics; energy economics; environmental economics</p> <p>SH1_13 Public economics; political economics; law and economics</p> <p>SH1_14 Quantitative economic history; institutional economics; economic systems</p>
		<p><b>SH2 Institutions, Values, Environment and Space:</b> Political science, law, sustainability science, geography, regional studies and planning</p> <p>SH2_1 Political systems, governance</p> <p>SH2_2 Democratisation and social movements</p> <p>SH2_3 Conflict resolution, war</p> <p>SH2_4 Legal studies, constitutions, human rights, comparative law</p> <p>SH2_5 International relations, global and transnational governance</p> <p>SH2_6 Sustainability sciences, environment and resources</p> <p>SH2_7 Environmental and climate change, societal impact and policy</p> <p>SH2_8 Energy, transportation and mobility</p> <p>SH2_9 Urban, regional and rural studies</p> <p>SH2_10 Land use and regional planning</p> <p>SH2_11 Human, economic and social geography</p> <p>SH2_12 GIS, spatial analysis; big data in political, geographical and legal studies</p>
		<p><b>SH3 The Social World, Diversity, Population:</b> Sociology, social psychology, demography, education, communication</p> <p>SH3_1 Social structure, social mobility</p> <p>SH3_2 Inequalities, discrimination, prejudice, aggression and violence, antisocial behaviour</p> <p>SH3_3 Social integration, exclusion, prosocial behaviour</p>

# PANEL SELECTION

## ➤ The reciprocal effect of the panel and proposal

- › The panels are a given
- › Outsmart the (panels') constraints
- › What leads what? the panel or the proposal?
- › It is highly case-specific



## ➤ Keep the reviewers' background in mind

- › Adjust terminology accordingly
- › Excite them
- › If needed, state the obvious
- › Explicitly write the high risk / high gain
- › Be consistent throughout the proposal (B1+B2)

# ADJUST THE APPLICATION

- Help the panel members to select the best reviewers - abstract and “ERC keywords” are key
- Add free keywords
- Clearly justify multiple review panel choices
  - › Dedicate time to clearly articulate this, phrase with care
  - › Do not leave this to last minute
  - › Do not exceed the 1,000 characters limit
  - › Explain shortcoming of one panel compared to the other

# TYPICAL PIT FALLS

- The feasibility 'catch 22'
- Writing ERC like other grants
- In ERC you cannot kill 2 birds with 1 stone
- (Not) being crystal clear
- "But is it an ERC??"

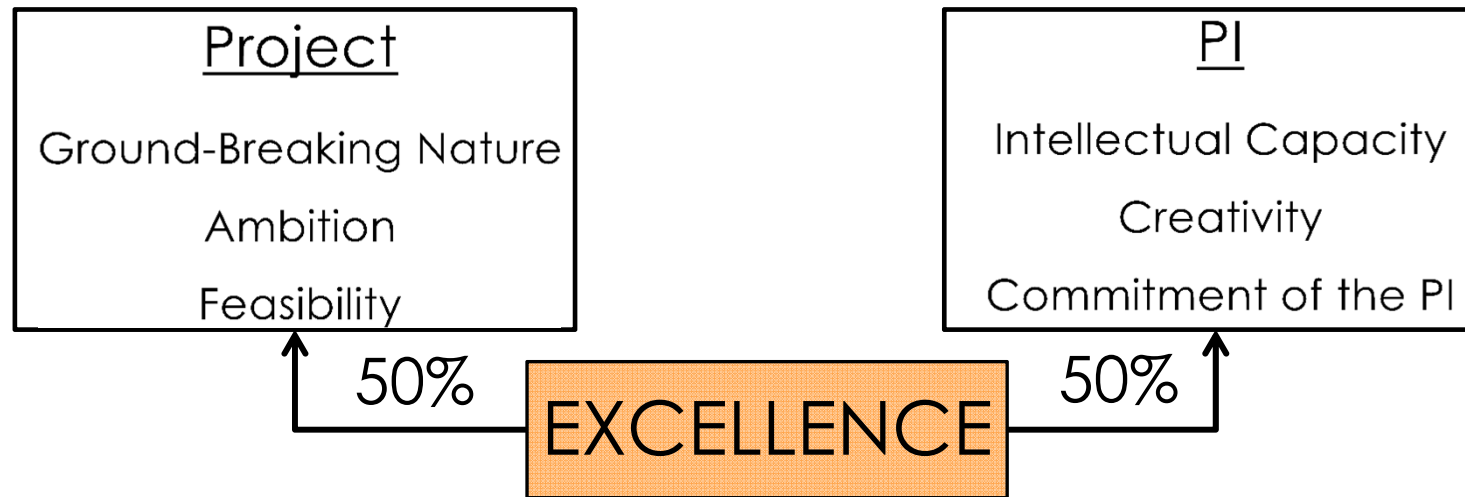
Training  
& Support  
are key!

# ERC WORKFLOW



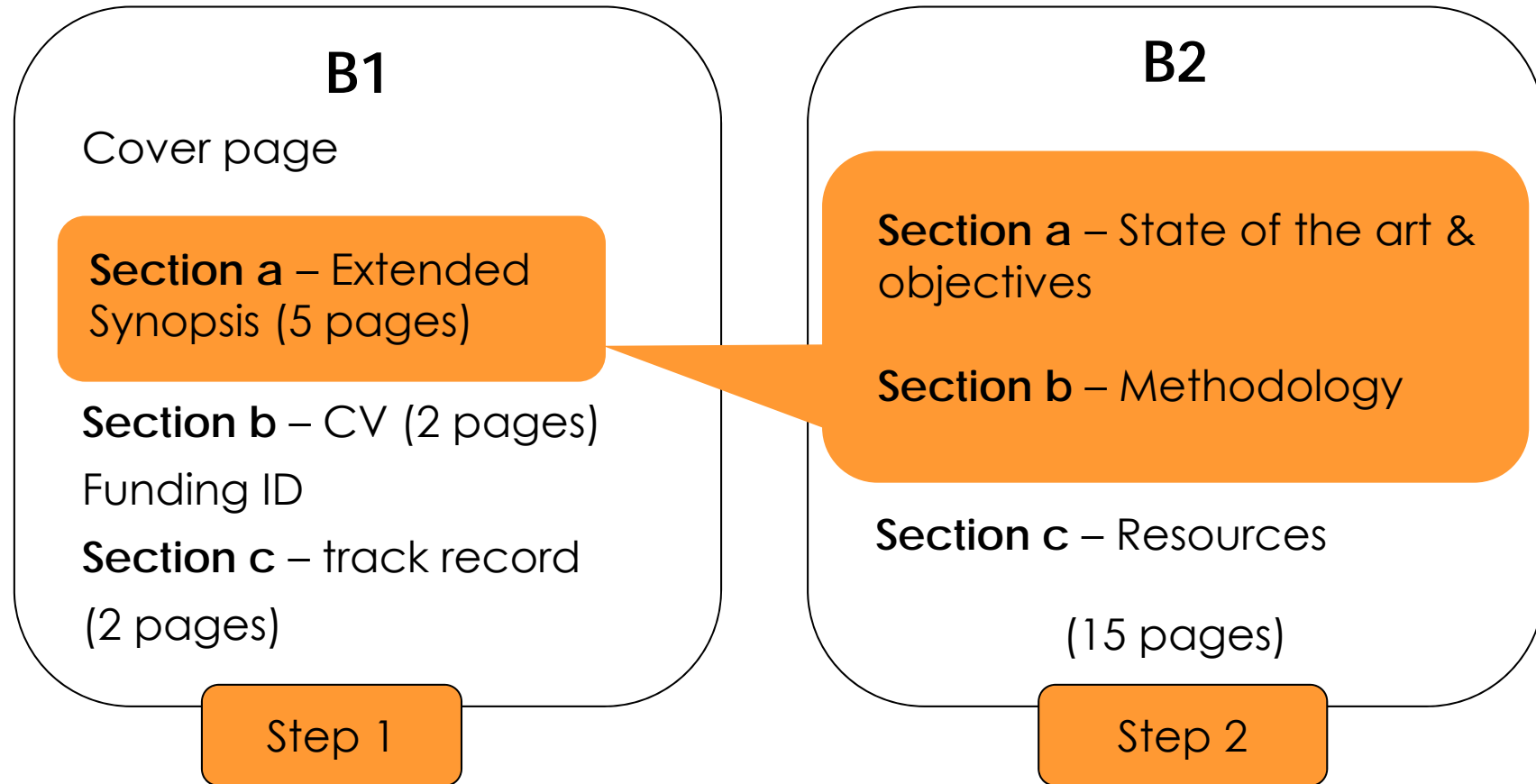


# EVALUATION CRITERIA



- Addresses important challenges
- Ambitious objectives beyond SotA, non-incremental work
- High risk / High gain
- Feasibility vs. High risk
- Methodology appropriate to achieve goals
- Novel methodology
- Timescales & resources - necessary & justified

- PI's ability to propose & conduct ground-breaking research
- PI's creative independent thinking
- PI's achievements typically go beyond SotA
- PI's leadership in training & advancement of young scientists
- PI's level of commitment (%)



- B1 should stand alone - all essential information must be covered in the synopsis
- Avoid cross-references between B1 and B2
- Identical text, figures or references in both B1 and B2?
- References are NOT included within the page limits

- On top of the typical grant writing training
- Understanding the uniqueness of ERC
- Concept forming & crystallization
- High risk – high gain
- Non-incremental research
- Do's & Don'ts
- Lessons learnt

# ERC WORKFLOW



## PART A

### 1- General information

- Title / acronym / duration
- Primary Review Panel / Secondary Panel
- Keywords
- Abstract

### 2- Administrative data

- PI & Host Institution

### 3- Budget

- Only bottom line

### 4- Ethics issues table

### 5- Call specific questions

- Extension of eligibility window
- Excluded reviewers

## General

- Avoid redundancies and repetitions in the text
- Conform to the templates
  - › Avoid outdated templates – slight changes may occur from deadline to deadline
  - › Do not exceed page limits, font size, margins
  - › Use template tables for Funding ID and budget
- PI's dedication to the project according to category
- Funding ID – ongoing and pending grants only
  - › Past grants - listed in track record / CV
- Keep copies of all application documents for backup, during the process

## ECAS

- Missing details
  - › PhD award date (AdG)
- Mistakes & mix-ups
  - › Abstract is different than in B1 (should be identical)
  - › Uploading a draft file with comments / tracked changes
  - › Uploading a file to the wrong category (e.g. B2 instead of B1)
  - › Page no. references in ethics issues table do not match pages in B2
- Missing documents
  - › Forgot ethics issues annex
  - › Forgot diploma scan (StG/CoG)
  - › Forgot supporting documents for eligibility window extension (children's birth certificates, etc.)

## Budget

- Justification is key
- Correlate PI dedication to PI labour cost
  - › Pre-Award: might generate a comment by the evaluators
  - › Post-Award: internal/external audit concerns
- Equipment
  - › Must be appropriate to the project's tasks
  - › This is not an infrastructure grant
  - › Do not exploit the 'extra' equipment budget before exhausting the 'regular' possible grant
- Subcontracting – generally not recommended, except for:
  - › Institutional regulations
  - › Well justified complementary marginal work
- The PI must be able to justify the budget during the interview (StG/CoG)



## Post-award budget flexibility

- Budget plan: high-level cost categories
- No one expects an accurate budget plan for 6 years ahead
- The challenge – inaccurate estimation of costs:
  - › Equipment, consumables and travel
  - › Collaborations
  - › Sub-contracting
- Justification enables flexibility
- Personnel cost is the best ‘safe harbour’, but not the only one

## Budget table

Cost Category			Total in Euro	
Direct Costs <sup>1</sup>	Personnel	PI <sup>2</sup>		
		Senior Staff		
		Postdocs		
		Students		
		Other		
	<i>i. Total Direct costs for Personnel (in Euro)</i>			
	Travel			
	Equipment			
	Other goods and services	Consumables		
		Publications (including Open Access fees), etc.		
		Other (please specify)		
	<i>ii. Total Other Direct Costs (in Euro)</i>			
<b>A – Total Direct Costs (i + ii) (in Euro)</b>				
<b>B – Indirect Costs (overheads) 25% of Direct Costs<sup>3</sup> (in Euro)</b>				
<b>C1 – Subcontracting Costs (no overheads) (in Euro)</b>				
<b>C2 – Other Direct Costs with no overheads<sup>4</sup> (in Euro)</b>				
<b>Total Estimated Eligible Costs (A + B + C) (in Euro)<sup>5</sup></b>				
<b>Total Requested EU Contribution (in Euro)<sup>5</sup></b>				

Request for additional funding above EUR 2 500 000 for	Justification
Keep only that category(ies) that apply to the project. (a) covering eligible 'start-up' costs for a PI moving from another country to the EU or an Associated Country as a consequence of receiving an ERC grant and/or, (b) the purchase of major equipment and/or, (c) access to large facilities.	

\* Presented only in B2

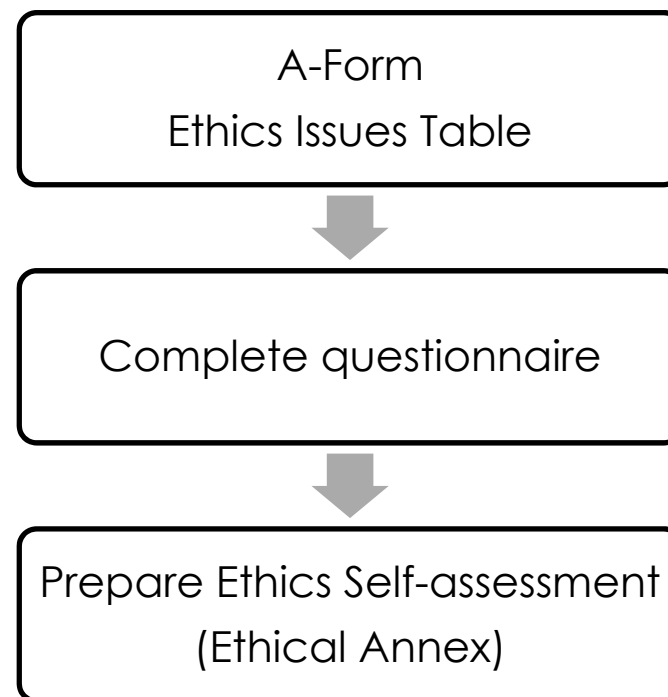
## Annexes

- Host support letter - originally signed, stamped and dated by the host institution's legal representative
- Scanned PhD diploma (StG & CoG)
- Ethical issues annex
- Other relevant documents:  
(e.g. Children's birth certificates)

\* All submitted docs should be in an EU official language – otherwise translation is required

# ETHICAL ISSUES

- Required in case of any ethical issue related to the project
- No ethical committee's approval necessary for submission
- Evaluated after the application passes the 2<sup>nd</sup> stage



## Ethical self-assessment – examples

### Humans

- Which humans are involved?
  - *vulnerable persons*
  - *persons unable to give consent*
  - *Children*
- Are some interventions on the body foreseen?
  - *invasive techniques (biopsy, EEG, fMRI)*
  - *Patients? Healthy volunteers?*
- Which are the procedures for recruitment and consent?
- Documents to provide
  - *ethics authorisations*
  - *information and consent forms*

### Data Protection

- Which data?
  - *genetic data*
  - *sensitive data (health, political or religious opinions, sexual orientation, etc.)*
- Which procedure?
  - *procedure for collection – how, by whom, information on rights, info and consent forms, anonymisation*
  - *procedure for protection of data – how it is protected, encrypted, where, for how long?*
- Documents to provide
  - *data protection officer/authority authorisations*
  - *information and consent forms*
  - *security measures*

## Ethical self-assessment – examples

### Cells and Tissues

- What type?
  - *hESCs*
  - *foetal cells/tissues*
  - *use or creation of cells/cells lines*
- What for?
  - *justification of use*
  - *origin: direct collection/ biobanks /secondary use*
- Documents to provide
  - *ethics authorisations*
  - *information and consent forms*
  - *justification of right for secondary use*

### Animals

- Which animals are involved?
  - *vertebrates*
  - *GMOs*
  - *Primates*
  - *wild / protected animals*
- For what use?
  - *Justification for choice of species*
  - *3Rs, precise evaluation of number*
  - *Description of procedure, husbandry, anaesthesia, euthanasia*
  - *applicable legislation*
- Documents to provide
  - *ethics authorisations / project license*
  - *personal and laboratory licenses*

## Ethical self-assessment – examples

### Non EU countries

- Which countries?
  - associated countries, low income, others?
  - to do what with? Whom with?
- Export/import of resources?
  - which sources (including data)?
  - export/import from/to EU
- Benefit sharing measures for low income countries
- Documents to provide
  - National and local ethics authorisations
  - Authorisations for import/export
  - Contact with local researchers/local authorities

*BUT, if politically sensitive research there can be exceptions*

### Misuse and Security

- Which threats?
  - health for team and/or society
  - misuse risks/ terrorist abuse
  - dual use
  - threats on human rights
- What for?
  - Justification
- Documents to provide
  - ethics authorisations
  - mitigation measures
  - balance of rights

## Ethical self-assessment – examples

### Environment Protection

- Is the project taking place in sensitive areas?
- Is the project using/collecting protected elements?
  - oceans – Directive on Oceans?
  - natural areas – Directive Habitat?
  - areas with endangered/protected species – Directive on birds, CITES convention?
- What for?
  - justification
  - measures to minimize impact
  - benefit of the research to the environment
- Documents to provide
  - ethics authorisations
  - specific zone authorisations



## Examples...

- Poorly scanned host support letter
- PI name / acronym / title do not match host support letter
- Different acronym / title throughout the proposal (in parts A and B)
- Budget inconsistencies in B2 and part A, missing justifications
- Formatting bugs in the Word document / template
- Low-resolution figures
- Bugs when converting to PDF (typically figures and formulas)
- Mac OS vs. PC Windows; Microsoft Word vs. Latex vs. Open Office
- Template instructions / track changes leftovers in B1 and B2
- Missing panel selection justification in B1 cover page

# THE EVALUATION BLACKBOX

- How close are the reviewers to my area? How can they evaluate my research?
  - › 2 groups of reviewers: perfect match (positive/negative) & non-perfect match
  - › Attend to both groups when writing the proposal
- Suitability of the host institution – not evaluated as in the past
- How many reviewers will evaluate my application?
- Shall I exclude reviewers?
- Relation to previously submitted applications – does the ‘system’ remember me?
- Shall I cut down the budget to be more competitive?
- Can I convey new information to the reviewers?

# ERC WORKFLOW



# PREPARING FOR THE INTERVIEW

- Who will be there? Panel selection – prepare accordingly
  - Mind the specific interview instructions
  - 2<sup>nd</sup> stage evaluation results are already set at the time of the interview
  - The interview is not like presenting in a conference / teaching
  - The challenge - to summarize the project into a 5-12 minutes presentation
  - Convey the message - ‘Why me? Why now?’
- 
- Prepare, Consult, Rehearse

## Unexpected scenarios...

- The 'waiting room' syndrome
- Delays in the interview agenda
- Power outage, interruptions
- Videos do not play
- The panelist that does not like you
- Questions you cannot answer
- Highly technical / marginal questions

- ESR comments
  - › Group 1: highly important
  - › Group 2: nice to have
  - › Group 3: irrelevant / unexplained / unjustified / personal
  
- Determine if there is a “show stopper”
  
- Resubmit does not mean “copy & paste”
  
- Re-visit:
  - › Scientific concept and presentation
  - › Eligibility window
  - › Publications and track record
  - › Templates

- ERC awareness and training are key for success
- The sooner, the better – let the proposal mature (~2-3 months before deadline) and avoid last minute issues
- No application is identical
- Encourage applicants to consult with experienced peers (i.e. ERC awardees or panel members) and ERC professionals

# TAKE HOME MESSAGE

ERC is not the typical national grant –  
it deserves a dedicated process  
and special attention



*Yoram Bar-Zeev* [ybz@beacontech.eu](mailto:ybz@beacontech.eu)

*Sharon Alon* [sharon.alon@beacontech.eu](mailto:sharon.alon@beacontech.eu)

*Yasmin Wachs* [yasmin.wachs@beacontech.eu](mailto:yasmin.wachs@beacontech.eu)





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For training and individual consulting services, please contact us at -  
[ybz@beacontech.eu](mailto:ybz@beacontech.eu)