### The Horizon Europe 2023-2024 Work Programme



### **•KET**Market

Dr. John Fahlteich 11<sup>th</sup> January 2023 – 3<sup>rd</sup> KETMarket Webinar

Part A – Overview about Horizon Europe

### Horizon Europe - Objectives



#### Scientific Impact:

- High Quality New Knowledge,
- Skilled Experts in R&I,
- Knowledge Diffusion and Open Science



#### Techno-Economical Impact:

- Creation and Growth of EU Company, esp. SME & Start-Ups
- Job Creation in whole EU
- Strengthen "moderate" and "low" innovator countries in EU
- Leverage Investments for R & I



#### Societal Impact:

- Address UN Sustainable Development Goals \*
- Uptake of Innovation in Society
- Improve People's Well-being
- Facilitate Collaborative Links in European R & I

### Horizon Europe - Structure

#### **HORIZON EUROPE**

#### **EURATOM**

#### SPECIFIC PROGRAMME: EUROPEAN DEFENCE FUND

Exclusive focus on defence research & development

Research actions

Development actions

#### SPECIFIC PROGRAMME IMPLEMENTING HORIZON EUROPE & EIT

Exclusive focus on civil applications



Pillar I EXCELLENT SCIENCE

European Research Council

Marie Skłodowska-Curie

Research Infrastructures



Pillar II
GLOBAL CHALLENGES &
EUROPEAN INDUSTRIAL

COMPETITIVENESS

- Health
- Culture, Creativity & Inclusive Society
- Civil Security for Society
- · Digital, Industry & Space
- · Climate, Energy & Mobility
- Food, Bioeconomy, Natural Resources, Agriculture & Environment

Joint Research Centre



European Innovation Council

European innovation ecosystems

European Institute of Innovation & Technology\* Fusion

Fission

Joint Research Center

WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation & spreading excellence

Reforming & Enhancing the European R&I system





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### What's new compared to Horizon 2020

- 1. European Innovation Council: to support breakthrough, disruptive innovations by Small and Medium Enterprises (SME)
- 2. Missions: jointly work towards reaching five big goals
- 3. Open Science Policy: Mandatory Open Access to publications
- 4. New approach to partnerships: Object driven and ambitious
- 5. Open Innovation Ecosystems: to support EU SME and strengthen "made in EU"
- 6. Updated Procedures: Blind Evaluation Pilot in 2-stage projects

### The EU Missions - Inspired by US "Moon Mission"



- Clear, specific objectives: e.g. "Support 150 EU Regions to become climate resilient by 2030"
- Dedicated application procedures and funding programmes for fulfilling missions
- Horizon Europe Projects should contribute to mission objectives where relevant and requested

### The 6 Horizon Europe Clusters



1. Health



4. Digital Technologies, Industry, Space



2. Culture, Creativity, Inclusive Society



5. Climate, Energy, Mobility



3. Civil Security for Society



6. Food, Bioeconomy, Resources, Agriculture, Environment

### Topics and Budget in 2023 – 2024 Work Programme



#### 1. Health — 1500 M€

- Strategies for screennig "noncommunicable" diseases
- Reduce disease burden (esp. infections)
- Better Integration and use of health data



# 2. Culture, Creativity, — 551 M€ Inclusive Society

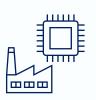
- Preserve the Cultural Heritage and New European Bauhaus
- Social and Economic Transformation (Industry 5.0)
- The future of Democracy in a digital world



#### 3. Civil Security for Society

— 332 M€

- Fight crime and terrorism
- Increased cybersecurity
- Disaster resilient societies



# 4. Digital Technologies, — 2790 M€ Industry, Space

- Key European value chains & manufacturing
- Digitalisation for Energy & CO<sub>2</sub> Efficient Industry
- Human-centric AI and data analytics, sharing, and IoT platforms



### 5. Climate, Energy, Mobility — 2767 M€

- Cross-sectoral solutions for climate transition
- Sustainable energy supply
- Efficient energy storage and use
- Safe, resilient, smart mobility



# 6. Food, Bioeconomy, Resources, Agriculture, Environment — 1960 M€

- Biodiversity protection and restoration
- Sustainable, healthy agriculture and farming
- Land, ocean and water for climate actions

Part B - Benefit from Horizon Europe Funding!

# When should you participate?

- As <u>RTO and University</u>, if
  - ✓ your idea + technology contributes to the programme's objective
  - ✓ you identified [potential] users for the technology
  - ✓ you have proven feasibility (Technology Readiness Level TRL ≥ 3)

- As <u>Small or Medium Enterprise</u>, if
  - ✓ your development roadmap fits the programme's objectives
  - ✓ you plan to realize your idea, technology within 3-5 years
  - ✓ you want to get support for a development you do anyway.

### Why should you participate?

### 1. Financial Support for your development

- ✓3 12 M€ per project; ≈ 300 k€ 1500 k€ per partner
- ✓ competitive funding rates: 60% 100% of project cost
- √ does not count against national state aid limits (e.g. De-Miminis in Germany)

### 2. International partner networks and value chains

- ✓ Project consortia along value chains → qualification of suppliers/customers
- ✓ Results presentation on conferences, trade-fairs, and with customers is eligible cost!

### 3. Visibility in Society & Influence on Standardisation

- ✓ Standardisation & Regulation is part of projects!
- ✓ Connect to Societal Networks and build reputation!

# Find Opportunities suited for you

- Work programmes segmented in funding calls listed in EU Funding & Tenders Portal \*\*
  - Example: "PV Integration in buildings and infrastructure"
  - fixed deadlines 1 or 2 stage application processes
- Call text defines application conditions:



- Results expected by EU
- Impacts EU wants to achieve



### Scope of Activities

- Activities to reach expected outcomes
- Specific conditions

### Project Types



Research and Innovation Action 100 % funding \*\*

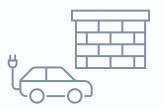
- TRL 3 5/6
- pre-competitive research
- scientific exploitation
- validation in lab



#### **Innovation Action**

70 % funding

- TRL 4 6/7
- Technology development & validation
- prepare commercial exploitation
- set-up pilot lines



#### **Innovation Action**

50 - 60 % funding

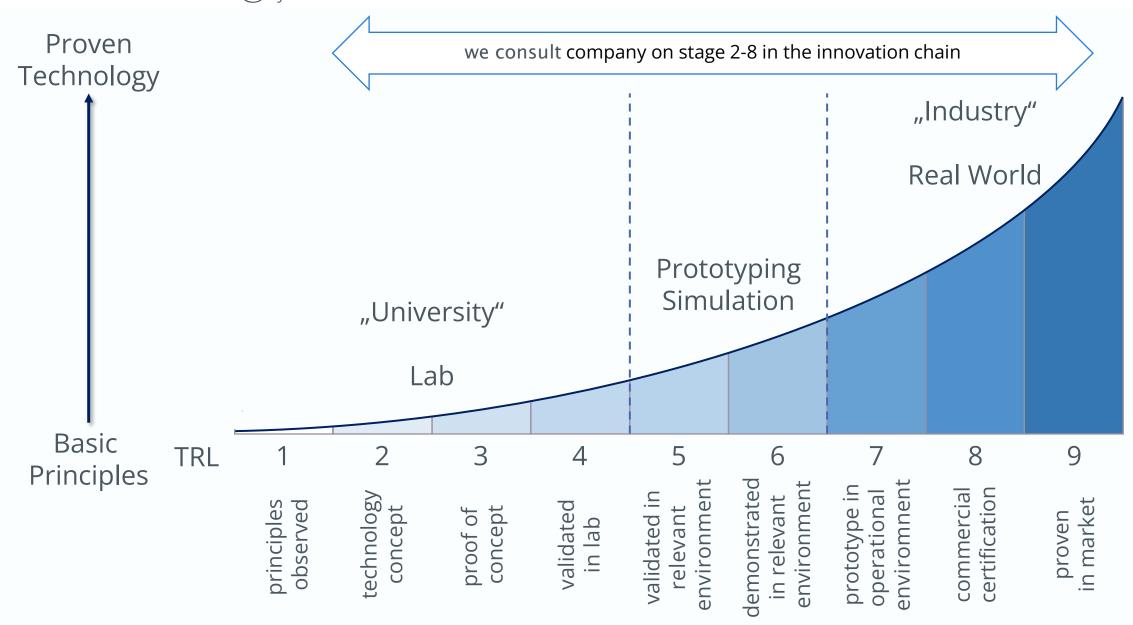
- TRL 5 7/8
- Technology demonstration in operation
- product-near prototypes



# Coordination and Support Action 100 % funding

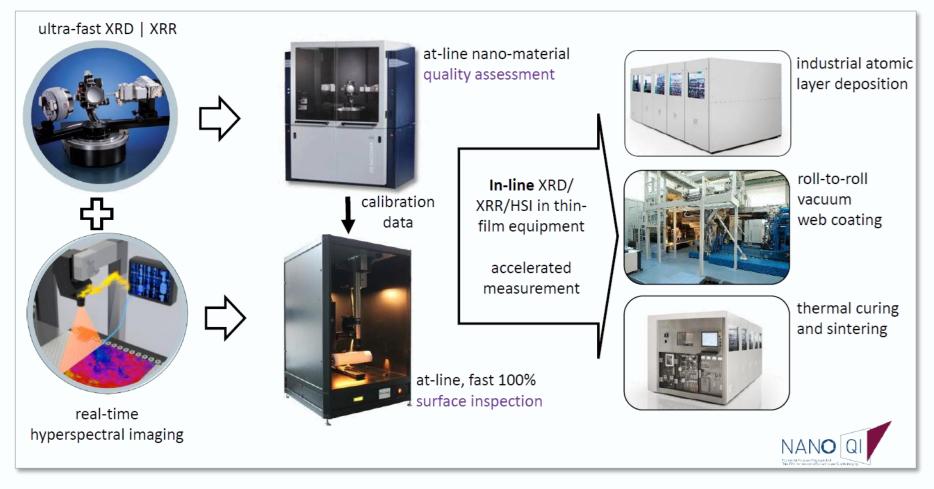
- innovation networks
- cross-border collaboration
- events & conferences
- standardisation
- inter-cultural coordination

### Technology Readiness Levels



### An example project - NanoQI

- Budget: 4,95 M€3 years duration
- TRL  $4 \rightarrow 6$
- Research and Innovation Action
- 8 Partners from 5 countries



Objective: develop industry suited real-time (< 12 s cycle time) inline metrology for thin film processing</li>

Part C - From an Idea to a Project!

# 7 Steps from an idea to a project



### Basics about Project Proposals for HE

- each project at least 3 partners from 3 eligible countries
- Proposals have two parts
  - 1. Part A: administrative forms, budget, partner descriptions
  - 2. Part B: technical project description
- One proposal per project (not per partner)

1 stage proposals

- 45 70 pages
- Excellence, Impact, Work-Plan
- evaluation "as it is"
- project starts after positive evaluation

2 stage proposals

- 1st stage: 10 pages → pre-selection
  - Excellence and Impact
- 2<sup>nd</sup> stage: 45 70 pages full proposal
- Invitation for 2<sup>nd</sup> stage does not guarantee success

### Content of a proposal (Part B)

### Excellence

- Why? Vision/Mission → Motivation → SMART Objectives → Concept
- Who & what? Methodology → relation to EU and call objectives
- "Where?" Ambition → Progress beyond SoA

#### **Impact**

- What results? → Pathway to expected outcomes
- Value Proposition ? → Benefits for Science, Industry, EU, Society ("Wider Impacts")
- Business Plan! → how to exploit the results *scientifically* and *commercially* in EU + IP Strategy
- "Sales"? → Dissemination and Communication Strategy

#### Implementation

- How? Work plan, timeline, tools, resources, quantified milestones and deliverables
- How? Management structure, collaboration model
- Who? Competencies of the consortium

### Evaluation procedure

- Independent experts with at least:
  - 1 with background in the field
  - 1 generalist
  - 1 business affine expert
  - remote evaluation and consensus meeting in Brussels
- Evaluation results
  - 5 points for Excellence
  - 5 points for Impact
  - 5 points for Implementation
- Project is eligible if threshold is reached (≈ 10 12 out of 15 points)
  - → no guarantee for funding → only 2-3 top ranked projects are successful

# Get support for proposal writing

- Specialized consultants for proposal preparation
  - AMIRES + KETMarket; Inspiralia; ZAZVentures; Spinverse, Cambridge Nanomaterials, Eurogrant ....
- Consultants understand the EU objectives; strong network in industry, science and EU
- Price Range: 1% 7.5% of project budget (fixed prices or success fees)
- Fraunhofer ISC: "With using consultants, we have 50 80% success rate, without 0 20%."

#### Proposal management

- support with proposal preparation
- collect partner inputs and budgets
- concept, impact work plan advice
- support in partner search
- helpdesk and knowledgebase for admin- and budget planning

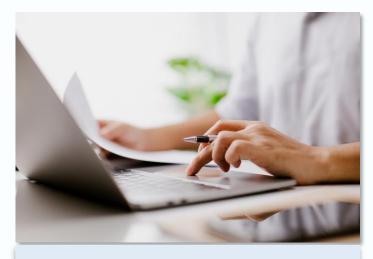
Proposal and Project Management

- proposal management
- administration of the project (meetings; deliverables; reports...)
- budget and progress tracking
- dissemination and exploitaiton
- helpdesk and support

Project Management

- participation in projects: administration & dissemination
- dissemination & exploitaiton
- lobbying activities

### KETMarket support your project



### 1. In proposal phase

- Market oriented project concept
- Find industrial and use case partners
- Exploitation and go to market strategy
- Access to knowledge from KETMarket<sup>®</sup> marketplace



### 2. During the project

- Distinct methodology for specification sheets
- Identify exploitable results and potential users
- Innovation & results management (ISO 56002)
- Disseminate results in KETMarket® marketplace



### 3. After the project

- Promote technologies and products in KETMarket® marketplace and shop
- Sell R&D services through KETMarket® SEP services
- Access to funding for next steps

