

# **HORIZON EUROPE**

## **EIC WORK PROGRAMME 2021**

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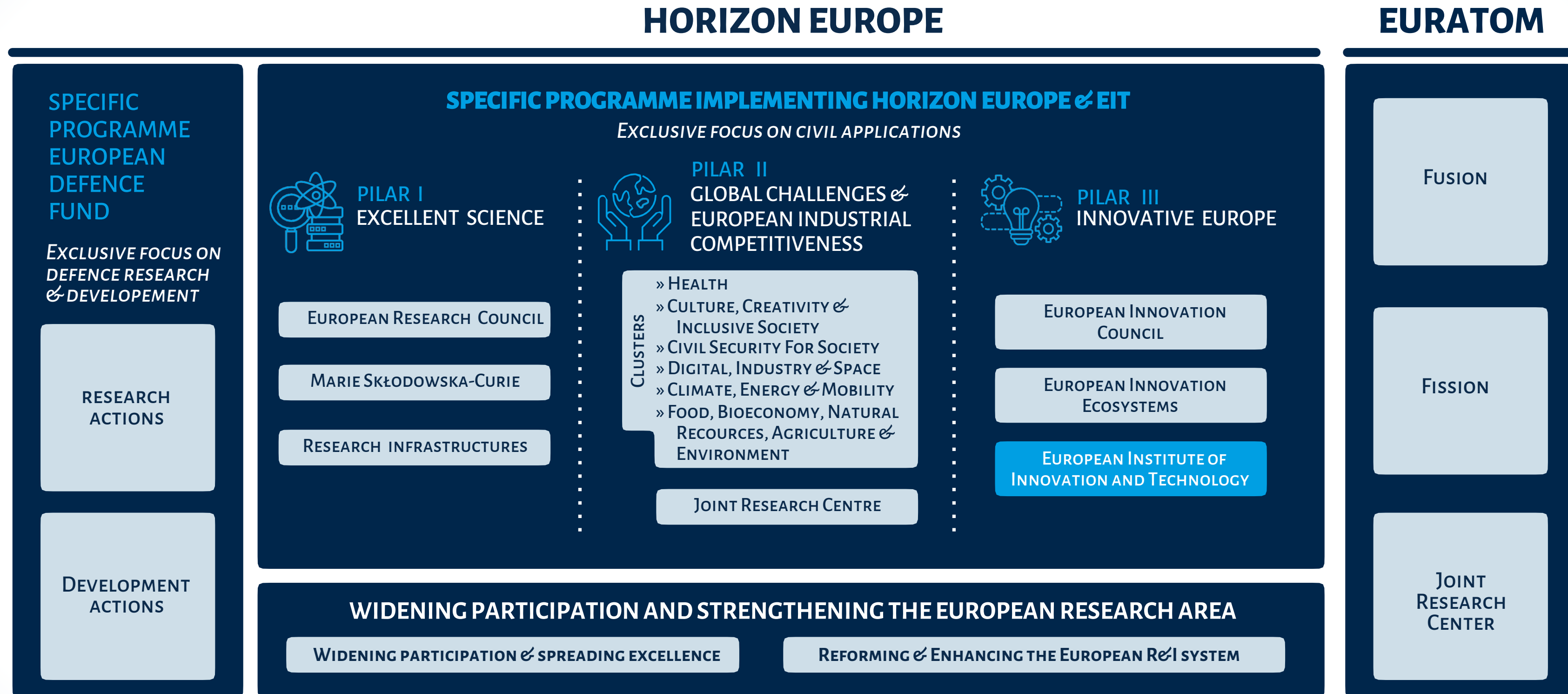
### **EUROPEAN INNOVATION COUNCIL (EIC)**

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**PROF. GORAN STOJANOVIĆ**

22/04/2021

# STRUCTURE OF THE PROGRAMME



THE EUROPEAN INSTITUTE FOR INNOVATION & TECHNOLOGY (EIT) IS NOT PART OF SPECIFIC PROGRAMME

HORIZON EUROPE SUPPORTS RESEARCH AND INNOVATION ESPECIALLY THROUGH WORK PROGRAMMES, WHICH SET OUT FUNDING OPPORTUNITIES FOR RESEARCH AND INNOVATION ACTIVITIES.

# EIC MAIN INSTRUMENTS

## **PATHFINDER**

- » EARLY STAGE RESEARCH ON BREAKTHROUGH TECHNOLOGIES
- » GRANTS UP TO €3/4 MILLION
- » SUCCESSOR OF FET OPEN & PROACTIVE)

## **TRANSITION**

- » TECHNOLOGY MATURATION FROM PROOF OF CONCEPT TO VALIDATION
- » BUSINESS & MARKET READINESS
- » GRANTS UP TO €2.5 MILLION

## **ACCELERATOR**

- » DEVELOPMENT & SCALE UP OF DEEP-TECH/ DISRUPTIVE INNOVATIONS BY STARTUPS/ SMES
- » BLENDED FINANCE (GRANTS UP TO €2.5 MILLION; EQUITY INVESTMENT UP TO €15 MILLION)
- » SUCCESSOR OF SME INSTRUMENT

- » MISSION TO IDENTIFY, DEVELOP AND DEPLOY HIGH RISK INNOVATIONS OF ALL KINDS
- » FOCUS ON BREAKTHROUGH, MARKET-CREATING, DEEP-TECH
- » STEERED BY EIC BOARD OF LEADING INNOVATORS (ENTREPRENEURS, INVESTORS, RESEARCHERS, ECOSYSTEM)
- » BUSINESS ACCELERATION SERVICES (COACHES / MENTORS, CORPORATES, INVESTORS ECOSYSTEM)
- » PRO-ACTIVE MANAGEMENT (ROADMAPS, REVIEWS, REORIENTATIONS, ETC) WITH EIC PROGRAMME MANAGERS
- » FOLLOW UP FUNDING FOR RESULTS FROM HORIZON (ERC, EIT, COLLABORATIVE) & NACIONAL PROGRAMMES

THE ROLE OF THE EIC IS NURTURING EUROPE'S INNOVATORS

# SUMMARY OF MAIN CALLS IN 2021

	WHO CAN APPLY	WHAT FOR	OPEN CALLS (SECTION II)		CHALLENGE DRIVEN CALLS (SECTION III)		
			CALL DEADLINE(S)	INDICATIVE BUDGET (EUR MILLION)	CHALLENGES	CALL DEADLINE(S)	INDICATIVE BUDGET (EUR MILLION)
EIC PATHFINDER	COSORTIA OF AT LEAST THREE DIFFERENT INDEPENDENT LEGAL ENTITIES (E.G. RESEARCH ORGANISATIONS, UNIVERSITIES, SMEs, INDUSTRY) ESTABLISHED IN AT LEAST 3 DIFFERENT ELIGIBLE COUNTRIES. SINGLE APPLICANTS OR SMALL CONSORTIA (TWO PARTNERS) MAY BE ABLE TO APPLY FOR PATHFINDER CHALLENGE ACCORDING TO THE CALL SPECIFICATIONS.	GRANTS UP TO EUR 3 MILLION (OPEN) OR EUR 4 MILLION (CHALLENGE DRIVEN) (OR MORE IF PROPERLY JUSTIFIED) TO ACHIEVE THE PROOF OF PRINCIPLE AND VALIDATE THE SCIENTIFIC BASIS OF BREAKTHROUGH TECHNOLOGY (TRL1-4)	19 MAY 2021	168.00	<ol style="list-style-type: none"> <li>1. AWARENESS INSIDE</li> <li>2. TOOLS TO MEASURE &amp; SIMULATE ACTIVITY IN BRAIN TISSUE</li> <li>3. EMERGING TECHNOLOGIES IN CELL &amp; GENE THERAPY</li> <li>4. NOVEL ROUTES TO GREEN HYDROGEN PRODUCTION</li> <li>5. ENGINEERED LIVING MATERIALS</li> </ol>	27 OCTOBER 2021	132.00
EIC TRANSITION	SINGLE APPLICANTS (SMEs, SPIN-OFFS, START-UPS, RESEARCH ORGANISATIONS, UNIVERSITIES) OR SMALL CONSORTIA (TWO TO FIVE PARTNERS). APPLICATIONS MUST BUILD ON RESULTS FROM ELIGIBLE PATHFINDER, FET OR ERC PROOF OF CONCEPT PROJECTS.	GRANTS UP TO EUR 2.5 MILLION (OR MORE IF PROPERLY JUSTIFIED) TO VALIDATE AND DEMONSTRATE TECHNOLOGY IN APPLICATION -RELEVANT ENVIRONMENT (TRL 4 TO 5 /6) AND DEVELOP MARKET READINESS	22 SEPTEMBER 2021	59.60	<ol style="list-style-type: none"> <li>1. MEDICAL DEVICES</li> <li>2. ENERGY HARVESTING AND STORAGE TECHNOLOGIES</li> </ol>	22 SEPTEMBER 2021	40.50
EIC ACCELERATOR	SINGLE START-UPS, AND SMEs (INCLUDING SPIN-OUTS), INDIVIDUALS (INTENDING TO LAUNCH START-UP/SME) AND IN EXCEPTIONAL CASES SMALL TO MID-CAPS (FEWER THAN 500 EMPLOYEES)	BLENDED FINANCE: UP TO EUR 2.5 MILLION GRANT COMPONENT FOR TECHNOLOGY DEVELOPMENT AND VALIDATION (TRL5/6 TO 8); EUR 0.5 - 15 MILLION INVESTMENT COMPONENT FOR SCALING UP AND OTHER ACTIVITIES. GRANT ONLY/GRANT FIRST UNDER CERTAIN CONDITIONS. INVESTMENT COMPONENT ONLY FOR SMALL MID-CAPS OR AS FOLLOW UP TO GRANT ONLY (I.E. FOR SMEs, INCLUDING START-UPS)	ANY TIME (SHORT APPLICATIONS)  FULL APPLICATIONS BY 9 JUNE 2021 AND 6 OCTOBER 2021	592.50	<ol style="list-style-type: none"> <li>1. STRATEGIC HEALTH AND DIGITAL TECHNOLOGIES</li> <li>2. GREEN DEAL INNOVATIONS FOR THE ECONOMIC RECOVERY</li> </ol>	ANY TIME (SHORT APPLICATIONS) FULL APPLICATIONS BY 9 JUNE 2021 AND 6 OCTOBER 2021	495.10



# ***TECHNOLOGY READINESS LEVELS (TRLs)***

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**TECHNOLOGY READINESS LEVELS (TRLs) PROVIDE A GUIDE TO THE STAGE OF DEVELOPMENT.**

**TRLs ARE USED IN THE WORK PROGRAMME FOR GUIDANCE, BUT DO NOT PRECLUDE SUPPORT FOR NON-TECHNOLOGICAL INNOVATIONS. A STRONG DEGREE OF IMPORTANCE WILL ALSO BE GIVEN TO MARKET READINESS AND BUSINESS READINESS, AS DESCRIBED IN THE EVALUATION CRITERIA OF THE CALL TEXTS. THE FOLLOWING DEFINITIONS OF TRLs APPLY, RECOGNISING THAT THERE ARE IMPORTANT DIFFERENCES BETWEEN TECHNOLOGICAL FIELDS:**

**TRL1 - BASIC PRINCIPLES OBSERVED**

**TRL2 - TECHNOLOGY CONCEPT FORMULATED**

**TRL3 - EXPERIMENTAL PROOF OF CONCEPT**

**TRL4 - TECHNOLOGY VALIDATED IN LAB**

**TRL5 - TECHNOLOGY VALIDATED IN RELEVANT ENVIRONMENT**

**TRL6 - TECHNOLOGY DEMONSTRATED IN RELEVANT ENVIRONMENT**

**TRL7 - SYSTEM PROTOTYPE DEMONSTRATION IN OPERATIONAL ENVIRONMENT**

**TRL8 - SYSTEM COMPLETE AND QUALIFIED**

**TRL9 - ACTUAL SYSTEM PROVEN IN OPERATIONAL ENVIRONMENT**

# ***EIC PATHFINDER OPEN 2021***

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- » **TRL 1-4**
- » **AMBITIOUS VISION FOR THE RADICALLY NEW TECHNOLOGY**
- » **IDEAS ARE IMPORTANT, NOT PREVIOUS TRACK-RECORD (DIFFERENT THAN ERC GRANTS!)**
- » **LEAD TOWARDS (NEW PRODUCT, SERVICE OR BUSINESS MODEL, HIGH-IMPACT APPLIED RESULTS, GROWTH AND JOBS, TRANSFORMATIVE POSITIVE EFFECTS ON SOCIETY, ADDRESSING GLOBAL CHALLENGES)**
- » **EARLY STAGE DEVELOPMENT**
- » **BUDGET: UP TO 3 MILLION EUR**
- » **ADDITIONAL 50,000 EUR TO UNDERTAKE COMPLEMENTARY ACTIVITIES (COMMERCIALISATION)**
- » **MAXIMUM 17 A4 PAGES (1-3 PART B)**
- » **THE MINIMUM FONT SIZE ALLOWED IS 11 POINTS, THE PAGE SIZE IS A4, AND ALL MARGINS (TOP, BOTTOM, LEFT, RIGHT) SHOULD BE AT LEAST 1.5 CM**
- » **PILOTING REBUTTAL PHASE ON INDIVIDUAL COMMENTS FROM EVALUATORS (7 DAYS, 2 PAGES)**
- » **USUALLY 3-4 YEARS DURATION, 5-6 MEMBERS OF CONSORTIUM USUALLY (MINIMUM 3 PARTNERS, MIN. PARTNER FROM EU)**

# ***EXPECTED OUTCOMES OF EIC PATHFINDER OPEN PROJECT***

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- » **THE PROOF OF PRINCIPLE THAT THE MAIN IDEAS OF THE ENVISIONED FUTURE TECHNOLOGY ARE FEASIBLE, THUS VALIDATING ITS SCIENTIFIC AND TECHNOLOGICAL BASIS;**
- » **TO TAKE THE NECESSARY MEASURES TO ALLOW FUTURE UPTAKE TO TAKE PLACE, FOR INSTANCE THROUGH AN ADEQUATE FORMAL PROTECTION OF THE GENERATED INTELLECTUAL PROPERTY (IP);**
- » **TO INVOLVE AND EMPOWER IN THE TEAM KEY ACTORS THAT HAVE THE POTENTIAL TO BECOME FUTURE LEADERS IN THEIR FIELD SUCH AS EXCELLENT EARLY-CAREER RESEARCHERS OF PROMISING HIGH-TECH SMEs, INCLUDING START-UPS.**

**ALL THE ABOVE WILL STRENGTHEN EUROPE'S CAPACITY FOR EXPLOITING THE SCIENTIFIC DISCOVERIES MADE IN EUROPE THROUGHOUT THE STEPS TO MARKET SUCCESS FOR SOLVING GLOBAL CHALLENGES.**

# 1. **EXCELLENCE** (FROM TEMPLATE)

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## 1.1 **LONG-TERM VISION**

- DESCRIBE YOUR VISION OF THE RADICALLY NEW TECHNOLOGY, TOWARDS WHICH THE PROJECT WOULD CONTRIBUTE IN THE LONG TERM.
- DESCRIBE THE TRANSFORMATIVE POSITIVE EFFECT THAT THIS RADICALLY NEW TECHNOLOGY, IF ACHIEVED IN THE LONG TERM, WOULD HAVE ON OUR ECONOMY AND SOCIETY.
- *BE SPECIFIC, REFERRING TO THE EFFECTS OF YOUR PROJECT, AND NOT ~~ReI~~ IN GENERAL IN THIS FIELD.*

## 1.2 **SCIENCE-TOWARDS-TECHNOLOGY BREAKTHROUGH**

- DESCRIBE IN CONCRETE TERMS THE SCIENCE-TOWARDS-TECHNOLOGY BREAKTHROUGH OF THE PROJECT.
- PROVIDE DESCRIPTION OF THE RELEVANT STATE-OF-THE-ART AND DISCUSS THE NOVELTY AND AMBITION OF THE PROPOSED BREAKTHROUGH WITH RESPECT TO IT.
- DESCRIBE THE CONTRIBUTION OF THE SCIENCE-TOWARDS-TECHNOLOGY BREAKTHROUGH TO THE REALIZATION OF THE ENVISIONED TECHNOLOGY.



# **1. EXCELLENCE** (FROM TEMPLATE)

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## **1.3 OBJECTIVES**

- DESCRIBE THE OBJECTIVES OF THE PROJECT, WHICH SHOULD BE CLEAR, PLAUSIBLE, MEASURABLE, VERIFIABLE AND REALISTICALLY ACHIEVABLE WITHIN THE DURATION OF THE PROJECT.
- DESCRIBE AND EXPLAIN THE RESEARCH APPROACH AND METHODOLOGY INCLUDING THE CONCEPTS, MODELS AND ASSUMPTIONS THAT WILL ENABLE YOU TO DELIVER YOUR PROJECT'S OBJECTIVES. EXPLAIN WHY THEY ARE SUITABLE TO DEAL WITH THE CONSIDERABLE SCIENTIFIC AND TECHNOLOGICAL UNCERTAINTIES OF THE PROJECT'S OBJECTIVES AND HOW APPROPRIATE THEY ARE TO ENABLE ALTERNATIVE DIRECTIONS AND OPTIONS.

## **1.4 INTERDISCIPLINARITY**

- DESCRIBE THE PROPOSED INTERDISCIPLINARY APPROACH ENGAGING CONTRIBUTIONS FROM DIFFERENT SCIENTIFIC AND TECHNOLOGICAL DISCIPLINES.
- EXPLAIN TO WHAT EXTENT THE COMBINATION OF DISCIPLINES BRINGS NEW SCIENTIFIC COLLABORATIONS AND HOW IT CONTRIBUTES TO THE ACHIEVEMENT OF THE PROPOSED BREAKTHROUGH.

## **2. *IMPACT* (FROM TEMPLATE)**

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### **2.1 INNOVATION POTENTIAL**

- DESCRIBE THE EXPLOITATION MEASURES TO FACILITATE FUTURE TRANSLATION OF RESEARCH RESULTS INTO INNOVATIONS AND THE POTENTIAL SOCIETAL AND/OR ECONOMIC IMPACT OF SUCH INNOVATIONS
- SPECIFY THE STRATEGY FOR THE MANAGEMENT OF INTELLECTUAL PROPERTY, FORESEEN PROTECTION MEASURES, SUCH AS PATENTS, DESIGN RIGHTS, COPYRIGHT, TRADE SECRETS, ETC., AND HOW THESE WOULD BE USED TO SUPPORT EXPLOITATION.
- EXPLAIN THE MEASURES THE CONSORTIUM WILL IMPLEMENT FOR EMPOWERING KEY ACTORS (SUCH AS EXCELLENT EARLY-CAREER RESEARCHERS OR PROMISING HIGH-TECH SMEs, INCLUDING START-UPS) THAT HAVE THE POTENTIAL TO TAKE THE LEAD IN TRANSLATING RESEARCH INTO INNOVATIONS.

## **2. IMPACT (FROM TEMPLATE)**

### **2.2 COMMUNICATION AND DISSEMINATION**

- DESCRIBE THE FORESEEN MEASURES AND PLANS FOR STAKEHOLDER AND GENERAL PUBLIC ENGAGEMENT AND FOR RAISING AWARENESS ABOUT THE PROJECT'S OUTCOMES, INCLUDING THROUGH OPEN SCIENCE, WITH RESPECT TO THEIR POTENTIAL TO ESTABLISH NEW MARKETS AND/OR ADDRESS GLOBAL CHALLENGES.
  - *PROJECT RESULTS SHOULD INCLUDE TOP-LEVEL SCIENTIFIC PUBLICATIONS IN OPEN ACCESS.*
  - *COMMUNICATION MEASURES SHOULD PROMOTE THE PROJECT THROUGHOUT THE FULL LIFESPAN OF THE PROJECT. THE AIM IS TO INFORM AND REACH OUT TO SOCIETY AND SHOW THE ACTIVITIES PERFORMED, AND THE USE AND THE BENEFITS THE PROJECT WILL HAVE FOR CITIZENS. ACTIVITIES MUST BE STRATEGICALLY PLANNED, WITH CLEAR OBJECTIVES, START AT THE OUTSET AND CONTINUE THROUGH THE LIFETIME OF THE PROJECT. THE DESCRIPTION OF THE COMMUNICATION ACTIVITIES NEEDS TO STATE THE MAIN MESSAGES AS WELL AS THE TOOLS AND CHANNELS THAT WILL BE USED TO REACH OUT TO EACH OF THE CHOSEN TARGET GROUPS*
- EXPLAIN HOW THE CHOICE OF OPEN SCIENCE PRACTICES AND THEIR IMPLEMENTATION ARE ADAPTED TO THE NATURE OF YOUR WORK TO INCREASE THE CHANCES OF THE PROJECT DELIVERING ON ITS OBJECTIVES. IF YOU BELIEVE THAT NONE OF THESE PRACTICES ARE APPROPRIATE FOR YOUR PROJECT, PLEASE PROVIDE A JUSTIFICATION HERE
- RESEARCH DATA MANAGEMENT AND MANAGEMENT OF OTHER RESEARCH OUTPUTS: APPLICANTS GENERATING/COLLECTING DATA AND/OR OTHER RESEARCH OUTPUTS (EXCEPT FOR PUBLICATIONS) DURING THE PROJECT MUST PROVIDE A VERY SHORT DESCRIPTION ON HOW THE DATA/RESEARCH OUTPUTS WILL BE MANAGED



# **3. QUALITY AND EFFICIENCY OF THE IMPLEMENTATION** (FROM TEMPLATE)

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## **3.1 CONSORTIUM**

- **DESCRIBE THE EXPERTISE OF THE CONSORTIUM MEMBERS. EXPLAIN HOW IT PROVIDES ALL THE NECESSARY KNOWLEDGE, HOW IT SUPPORTS THE PROPOSED INTERDISCIPLINARY APPROACH, AND HOW IT MATCHES THE PROJECT'S OBJECTIVES AND TASKS. EXPLAIN THE ROLE OF EACH CONSORTIUM MEMBER AND ITS COMPLEMENTARY CONTRIBUTION. IF APPROPRIATE, SHOW HOW THIS INCLUDES EXPERTISE IN SOCIAL SCIENCES AND HUMANITIES, OPEN SCIENCE PRACTICES, AND GENDER ASPECTS OF R&I.**
- **DEMONSTRATE THAT THE PARTNERS WILL HAVE ACCESS TO ESSENTIAL INFRASTRUCTURE NEEDED TO CARRY OUT THE PROJECT'S ACTIVITIES.**
- **OTHER COUNTRIES AND INTERNATIONAL ORGANISATIONS: IF ONE OR MORE OF THE PARTICIPANTS REQUESTING EU FUNDING IS BASED IN A COUNTRY OR IS AN INTERNATIONAL ORGANISATION THAT IS NOT AUTOMATICALLY ELIGIBLE FOR SUCH FUNDING (ENTITIES FROM MEMBER STATES OF THE EU, FROM ASSOCIATED COUNTRIES AND FROM ONE OF THE COUNTRIES IN THE EXHAUSTIVE LIST INCLUDED IN ANNEX 3 OF THE EIC WORK PROGRAMME ARE AUTOMATICALLY ELIGIBLE FOR EU FUNDING), EXPLAIN WHY THE PARTICIPATION OF THE ENTITY IN QUESTION IS ESSENTIAL TO SUCCESSFULLY CARRY OUT THE PROJECT.**



# 3. QUALITY AND EFFICIENCY OF THE IMPLEMENTATION (FROM TEMPLATE)

## 3.2 WORK PLAN AND RESOURCES

PLEASE PROVIDE THE FOLLOWING:

- » BRIEF PRESENTATION OF THE OVERALL STRUCTURE OF THE WORK PLAN;
- » TIMING OF THE DIFFERENT WORK PACKAGES AND THEIR COMPONENTS (GANTT CHART OR SIMILAR);
- » *PLEASE USE THE BELOW TABLE WHEN PLANNING REPORTING PERIODS FOR YOUR PROJECT:*

*EXCERPT FROM PROPOSAL TEMPLATE*

PROJECT DURATION	NUMBER OF PERIODS	RP 1 DURATION	RP 2 DURATION	RP 3 DURATION	RP 4 DURATION
12	1	12	-	-	-
18	1	18	-	-	-
24	2	12	12	-	-
30	2	12	18	-	-
36	2	12	24	-	-
42	3	12	12	18	-
48	3	12	18	18	-
60	4	12	16	16	16

# **3. QUALITY AND EFFICIENCY OF THE IMPLEMENTATION** (FROM TEMPLATE)

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## **3.2 WORK PLAN AND RESOURCES**

- » GRAPHICAL PRESENTATION OF THE COMPONENTS SHOWING HOW THEY INTER-RELATE (PERT CHAR OR SIMILAR).
- » DETAILED WORK DESCRIPTION, I.E.:
- » A LIST OF WORK PACKAGES (TABLE 3.2A);
- » A DESCRIPTION OF EACH WORK PACKAGE (TABLE 3.2B);
- » A LIST OF DELIVERABLES (TABLE 3.2C);
- » A LIST OF MILESTONES (TABLE 3.2D).
- » A LIST OF CRITICAL RISKS, RELATING TO PROJECT IMPLEMENTATION, THAT THE STATED PROJECT'S OBJECTIVES MAY NOT BE ACHIEVED. DETAIL ANY RISK MITIGATION MEASURES. YOU WILL BE ABLE TO UPDATE THE LIST OF CRITICAL RISKS AND MITIGATION MEASURES AS THE PROJECT PROGRESSES (TABLE 3.2E).
- » A TABLE SHOWING NUMBER OF PERSON MONTHS REQUIRED (TABLE 3.2F)
- » A TABLE SHOWING DESCRIPTION AND JUSTIFICATION OF SUBCONTRACTING COSTS FOR EACH PARTICIPANT (TABLE 3.2G)
- » A TABLE SHOWING JUSTIFICATIONS FOR 'PURCHASE COSTS' (TABLE 3.2H) FOR PARTICIPANTS WHERE THOSE COSTS EXCEED 15% OF THE PERSONNEL COSTS (ACCORDING TO THE BUDGET TABLE IN PROPOSAL PART A)
- » IF APPLICABLE, A TABLE SHOWING JUSTIFICATIONS FOR 'OTHER COSTS CATEGORIES' (TABLE 3.2I)

# ***PATHFINDER CHALLENGES FOR 2021 (1/2)***

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- 1. AWARENESS INSIDE:** TO DEVELOP NEW CONCEPTS OF AWARENESS THAT ARE APPLICABLE TO SYSTEMS OTHER THAN HUMAN, INCLUDING TECHNOLOGICAL ONES, WITH IMPLICATIONS OF HOW IT CAN BE RECOGNIZED OR MEASURED, TO DEMONSTRATE AND VALIDATE THE ROLE AND ADDED VALUE OF SUCH AN AWARENESS IN AN AWARE TECHNOLOGY, CLASS OR ARTEFACTS OR SERVICES, TO DEFINE AN INTEGRATIVE APPROACH FOR AWARENESS ENGINEERING, ITS TECHNOLOGICAL TOOLBOX, THE NEEDS AND IMPLICATIONS AND ITS LIMITS, INCLUDING ETHICAL AND REGULATORY REQUIREMENTS
- 2. TOOLS TO MEASURE & STIMULATE ACTIVITY IN BRAIN TISSUE:** TO DEVELOP NOVEL NEUROTECHNOLOGIES TO DIAGNOSE OR TREAT BRAIN, SPINAL CORD OR PERIPHERAL NERVE-RELATED DISORDERS AND WHICH CAN BE RAPIDLY ACCEPTED BY CLINICIANS AND PATIENTS.
- 3. EMERGING TECHNOLOGIES IN CELL & GENE THERAPY:** TO ADVANCE THE DOMAIN OF THE CELL AND GENE THERAPY BY FUNDING BREAKTHROUGH PROJECTS THAT PROPOSE NOVEL CONCEPT-BASED TECHNOLOGICAL SOLUTIONS OR TECHNOLOGICAL PLATFORMS FAR BEYOND THE CURRENT STATE-OF-THE-ART WITH AIM TO TACKLING CURRENT BOTTLENECKS FROM DISCOVERY TO THE MANUFACTURING STEP TOWARDS CLINICAL GRADE AND THUS, REINFORCE CRITICAL COMPONENTS OF THE EUROPEAN CELL AND GENE THERAPY INNOVATION-DRIVEN COMMUNITY

# ***PATHFINDER CHALLENGES FOR 2021 (2/2)***

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- 4. NOVEL ROUTES TO GREEN HYDROGEN PRODUCTION:** TO DEVELOP NOVEL PROCESSES AND TECHNOLOGIES TO PRODUCE GREEN H<sub>2</sub>, AT DIFFERENT SCALES (FROM SMALL TO LARGE) AND WITH HIGHER FLEXIBILITY, ENTIRELY BASED ON RENEWABLE SOURCES AND ON THE USE OF TOXIC FREE, NONCRITICAL RAW MATERIALS.
- 5. ENGINEERED LIVING MATERIALS:** TO POSITION STRATEGICALLY EUROPE AT FOREFRONT OF THE NEWLY EMERGING ENGINEERED LIVING MATERIALS FIELD AND TO OVERCOME THE TECHNOLOGICAL CHALLENGES TO HARNESS THE ENGINEERING POTENTIAL OF NATURE FOR PRODUCTION OF LIVING MATERIALS BY SUPPORTING THE DEVELOPMENT OF NEW TECHNOLOGIES AND THE NASCENT COMMUNITY IN THIS FIELD.



***THANK YOU FOR YOUR ATTENTION!***

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