

## Horizon 2020 Work Programme 2018-2020

### Nanotechnologies, Advanced Materials, Biotechnology and Advanced Manufacturing and Processing

ISJEČAK SADRŽAJA SA POZIVIMA ZA 2019. I 2020. GODINU

CJELOVITI DOKUMENT MOŽE SE PREUZETI NA:

[http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-leit-nmp\\_en.pdf](http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-leit-nmp_en.pdf)

Godina poziva	Datum otvaranja poziva	Datum zatvaranja poziva
2019	16. 10. 2018.	22. 01. 2019. (prva faza) 03. 09. 2019. (druga faza – za projekte koji prođu prvu fazu evaluacije)
2020	Biće definisan	Biće definisan

## **Call - FOUNDATIONS FOR TOMORROW'S INDUSTRY**

### **1.1 OPEN INNOVATION TEST BEDS**

#### **European Data Infrastructure: HPC, Big Data and Cloud technologies**

- DT-NMBP-03-2019: Open Innovation Test Beds for nano-enabled surfaces and membranes (IA)
- DT-NMBP-04-2020: Open Innovation Test Beds for bio-based nano-materials and solutions (IA)
- DT-NMBP-05-2020: Open Innovation Test Beds for functional materials for building envelopes (IA)
- DT-NMBP-06-2020: Open Innovation Test Beds for nano-pharmaceuticals production (IA)

### **1.2 MATERIALS CHARACTERISATION and COMPUTATIONAL MODELLING**

- DT-NMBP-08-2019: Real-time nano-characterisation technologies (RIA)
- DT-NMBP-10-2019: Adopting materials modelling to challenges in manufacturing processes (RIA)
- DT-NMBP-11-2020: Open Innovation Test Beds for Materials Modelling (IA)
- DT-NMBP-12-2019: Sustainable Nano-Fabrication (CSA)

### **1.3 GOVERNANCE, SCIENCE-BASED RISK ASSESSMENT AND REGULATORY ASPECTS**

- NMBP-15-2019: Safe by design, from science to regulation: metrics and main sectors (RIA)
- NMBP-16-2020: Safe by design, from science to regulation: behaviour of multicomponent nanomaterials (RIA)
- NMBP-17-2020: Regulatory science for medical technology products (RIA)
- NMBP-34-2019: In support of documentary standards (CSA)

## **Call - TRANSFORMING EUROPEAN INDUSTRY**

#### **Factories of the future**

- DT-FOF-05-2019: Open Innovation for collaborative production engineering (IA)
- DT-FOF-06-2019: Refurbishment and re-manufacturing of large industrial equipment (IA)
- DT-FOF-07-2020: Reliable and accurate assembly of micro parts (RIA)
- DT-FOF-08-2019: Pilot lines for modular factories (IA 50%)
- DT-FOF-09-2020: Holistic energy-efficient factory management (IA)
- DT-FOF-10-2020: Pilot lines for large-part high-precision manufacturing (IA 50%)
- DT-FOF-11-2020: Quality control in smart manufacturing (IA)

- DT-FOF-12-2019: Handling systems for flexible materials (RIA)
- DT-NMBP-18-2019: Materials, manufacturing processes and devices for organic and large area electronics (IA)
- DT-NMBP-19-2019: Advanced materials for additive manufacturing (IA)

### **Biotechnology**

- BIOTEC-02-2019: Boosting the efficiency of photosynthesis (RIA)
- CE-BIOTEC-05-2019: Microorganism communities for plastics bio-degradation (RIA)
- BIOTEC-06-2020: Reprogrammed microorganisms for biological sensors (IA)
- BIOTEC-07-2020: Multi-omics for the optimisation of genotype-phenotype associations (RIA)

### **Medical technology innovations**

- NMBP-21-2020: Custom-made biological scaffolds for specific tissue regeneration and repair (RIA)
- DT-NMBP-23-2020: Next generation organ-on-chip (RIA)

## **Call - INDUSTRIAL SUSTAINABILITY**

### **Sustainable process industry (SPIRE)**

- CE-SPIRE-01-2020: Industrial symbiosis (IA)
- CE-SPIRE-04-2019: Efficient integrated downstream processes (IA)
- CE-SPIRE-05-2019: Adaptation to variable feedstock through retrofitting (IA 50%)
- DT-SPIRE-06-2019: Digital technologies for improved performance in cognitive production plants (IA)
- CE-SPIRE-07-2020: Recovery of industrial water, thermal energy and substances contained therein (IA)
- CE-SPIRE-08-2020: Improved Industrial Processing using novel high-temperature resistant materials (RIA)
- CE-SPIRE-09-2020: Making the most of mineral waste, by-products and recycled material as feed for high volume production (IA)

### **Catalysing the circular economy**

- CE-NMBP-25-2019: Photocatalytic synthesis (RIA)

## **Clean energy through innovative materials**

- Topic Strengthening EU materials technologies for non-automotive battery storage (RIA) (previously LC-NMBP-27-2019)
- LC-NMBP-28-2020: Advanced materials for innovative multilayers for durable photovoltaics (IA)
- LC-NMBP-29-2019: Materials for non-battery based energy storage (RIA)
- LC-NMBP-31-2020: Materials for off shore energy (IA)
- LC-NMBP-32-2019: Smart materials, systems and structures for energy harvesting (RIA)

## **Energy-efficient buildings (EEB)**

- LC-EEB-01-2019: Integration of energy smart materials in non-residential buildings (IA)
- LC-EEB-03-2019: New developments in plus energy houses (IA)
- LC-EEB-04-2020: Industrialisation of building envelope for the renovation market (IA)
- LC-EEB-05-2019-20: Integrated storage systems for residential buildings (IA)

## **Indicative topics for 2020**

### **Call - FOUNDATIONS FOR TOMORROW'S INDUSTRY**

- DT-NMBP-04-2020: Open Innovation Test Beds for bio-based nano-materials and solutions (IA)
- DT-NMBP-05-2020: Open Innovation Test Beds for functional materials for building envelopes (IA)
- DT-NMBP-06-2020: Open Innovation Test Beds for nano-pharmaceuticals production (IA)
- DT-NMBP-11-2020: Open Innovation Test Beds for Materials Modelling (IA)
- NMBP-16-2020: Safe by design, from science to regulation: behaviour of multi-component nanomaterials (RIA)
- NMBP-17-2020: Regulatory science for medical technology products (RIA)

### **Call - TRANSFORMING EUROPEAN INDUSTRY**

- DT-FOF-07-2020: Reliable and accurate assembly of micro parts (RIA)
- DT-FOF-09-2020: Holistic energy-efficient factory management (IA)
- DT-FOF-10-2020: Pilot lines for large-part high-precision manufacturing (IA 50%)
- DT-FOF-11-2020: Quality control in smart manufacturing (IA)
- BIOTEC-06-2020: Reprogrammed microorganisms for biological sensors (IA)

- BIOTEC-07-2020: Multi-omics for the optimisation of genotype-phenotype associations (RIA)
- NMBP-21-2020: Custom-made biological scaffolds for specific tissue regeneration and repair (RIA)
- DT-NMBP-23-2020: Next generation organ-on-chip (RIA)

## Call - INDUSTRIAL SUSTAINABILITY

- CE-SPIRE-01-2020: Industrial symbiosis (IA)
- CE-SPIRE-07-2020: Recovery of industrial water, thermal energy and substances contained therein (IA)
- CE-SPIRE-08-2020: Improved Industrial Processing using novel high-temperature resistant materials (RIA)
- CE-SPIRE-09-2020: Making the most of mineral waste, by-products and recycled material as feed for high volume production (IA)
- LC-NMBP-28-2020: Advanced materials for innovative multilayers for durable photovoltaics (IA)
- LC-NMBP-31-2020: Materials for off shore energy (IA)
- LC-EEB-04-2020: Industrialisation of building envelope for the renovation market (IA)
- LC-EEB-05-2019-20: Integrated storage systems for residential buildings (IA)
- LC-EEB-06-2018-20: ICT enabled, sustainable and affordable residential building construction, design to end of life (IA 50%)

Originalna dokumentacija, pretraživanje zainteresovanih partnera i link za proces prijavljivanja može se pronaći [OVDJE](#)

Za podršku, možete se obratiti nacionalnoj kontakt osobi za ovaj segment programa: [milena.milonjic@mna.gov.me](mailto:milena.milonjic@mna.gov.me)

Stranica za promociju H2020 Ministarstva nauke: <http://www.mna.gov.me/ministarstvo/Horizont2020>