Bundesministerium
für Bildung
und Forschung

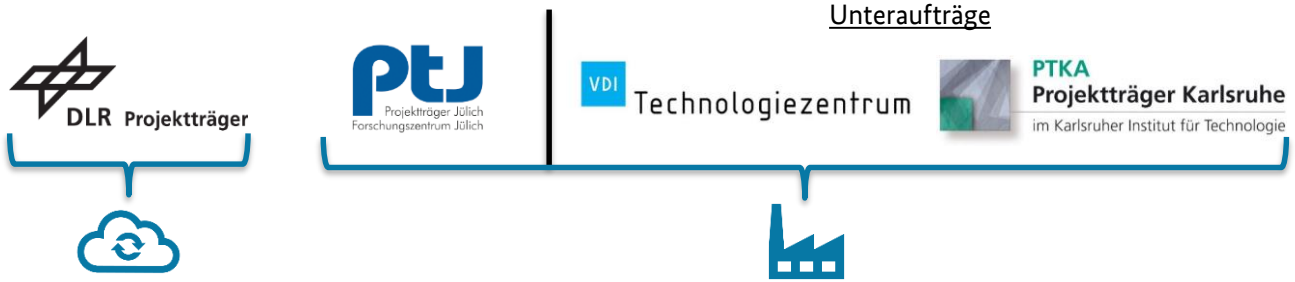
NKS Digitale und Industrielle Technologien
Nationale Kontaktstelle zum
EU-Programm Horizont Europa

Wie finde ich passende Ausschreibungen in Horizont Europa und wie lese ich sie richtig?

Online Seminar der NKS DIT, 01. Dezember 2022

Dr. Alrun Aline Hauke & Dr. Christof Haas
DLR Projektträger, Projektträger Jülich
Nationale Kontaktstelle Digitale und Industrielle Technologien

NKS DIT - Nationale Kontaktstelle Digitale und Industrielle Technologien



Beratung zu Cluster 4 “Digital, Industry and Space”

→ NKS Raumfahrt

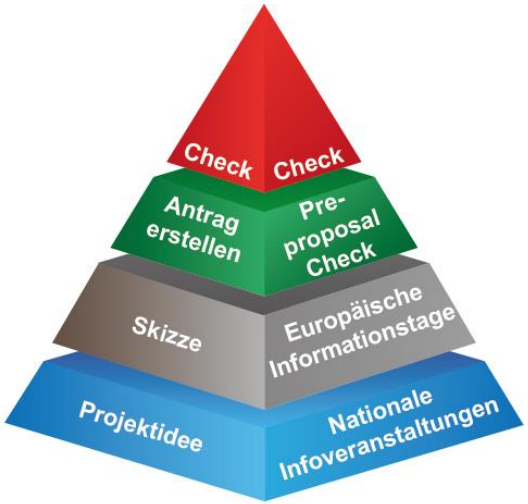
www.nks-dit.de

Bundesministerium
für Bildung
und Forschung

Proposal Check im Januar/Februar als „interne Deadline“!

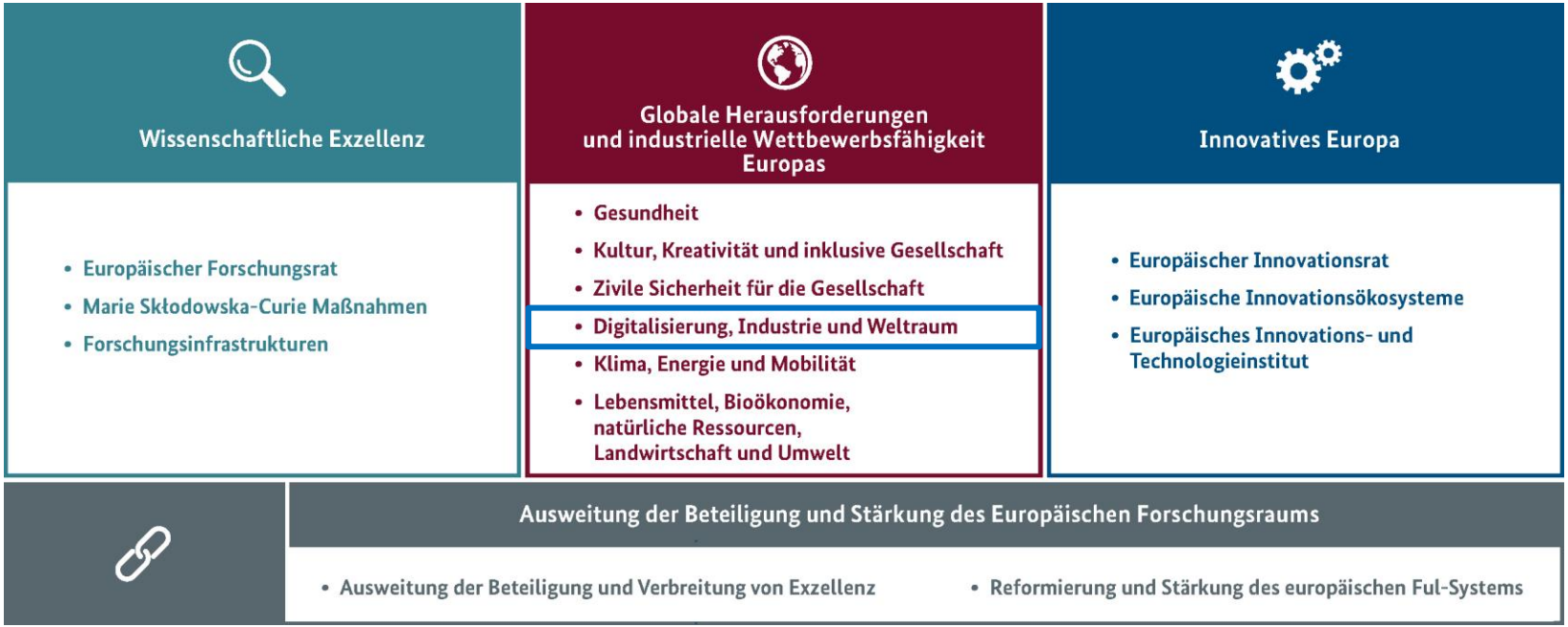
NKS Digitale und Industrielle Technologien
Nationale Kontaktstelle zum EU-Programm Horizont Europa

Antragsbegleitung durch NKS DIT



1. Am besten 6 Monate vor Call Deadline (August/September 22): Projektskizze an NKS DIT schicken (Template)
2. NKS-DIT Newsletter anmelden
3. VÖ Arbeitsprogramm (28. November 2022)
4. Brokerage Event (Unterstützung)
5. Pre-Screening/Proposal Check (4 bis 6 Wochen vor Call Deadline, Januar/Februar)
6. Einreichungsfrist (März/April 2023)

Struktur von Horizont Europa



Struktur des Cluster 4 Arbeitsprogramms 2023/2024

Industrielle Technologien

Digitale Technologien

6 Destinations	
Destination 1	Climate neutral, circular and digitised production
Destination 2	Increased autonomy in key strategic value chains for resilient industry
Destination 3	World leading data and computing technologies
Destination 4	Digital and emerging technologies for competitiveness and fit for the green deal
Destination 5	Open strategic autonomy in developing, deploying and using global space-based infrastructures, services, applications and data
Destination 6	A human-centred and ethical development of digital and industrial technologies

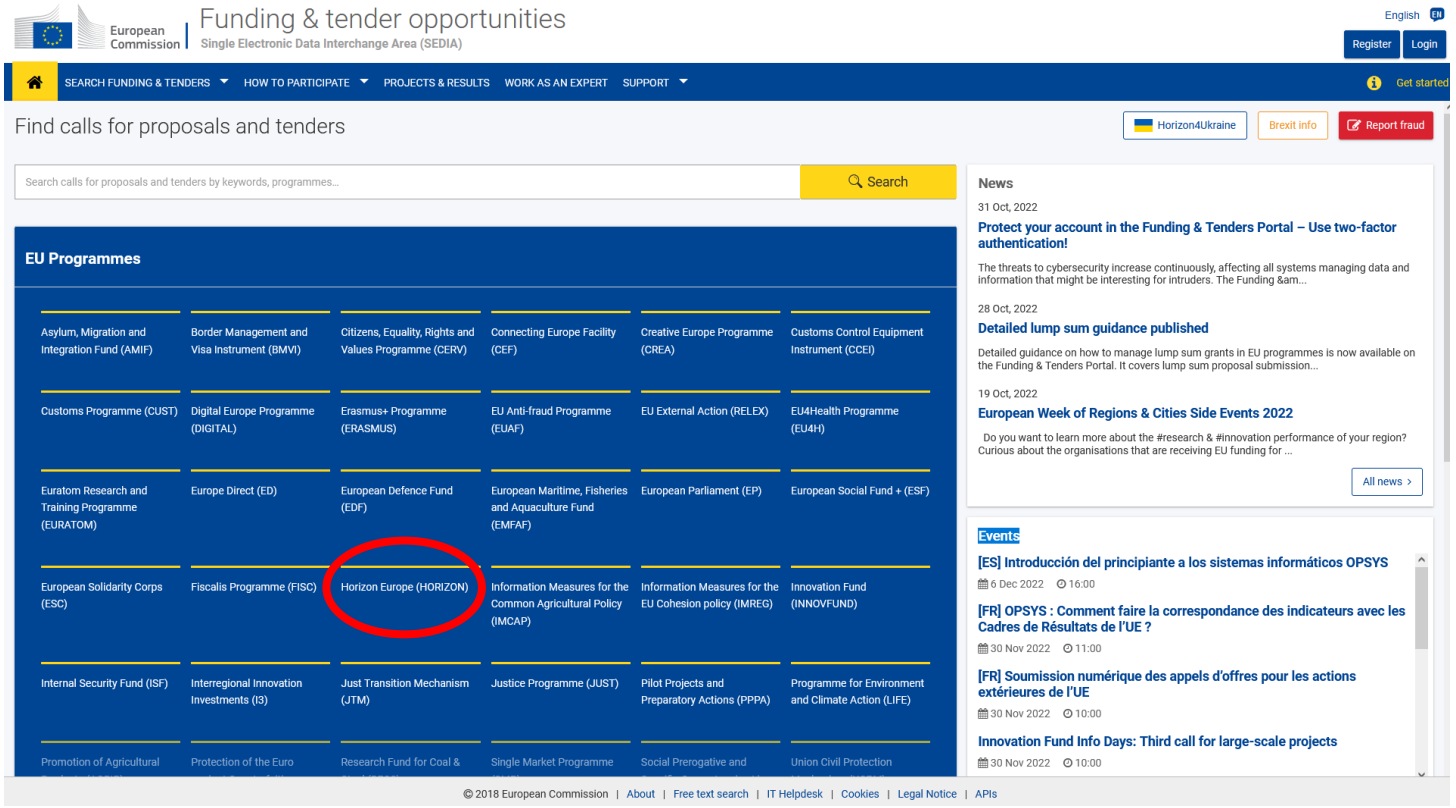
Wie finde ich (passende) Ausschreibungen in Horizont Europa?

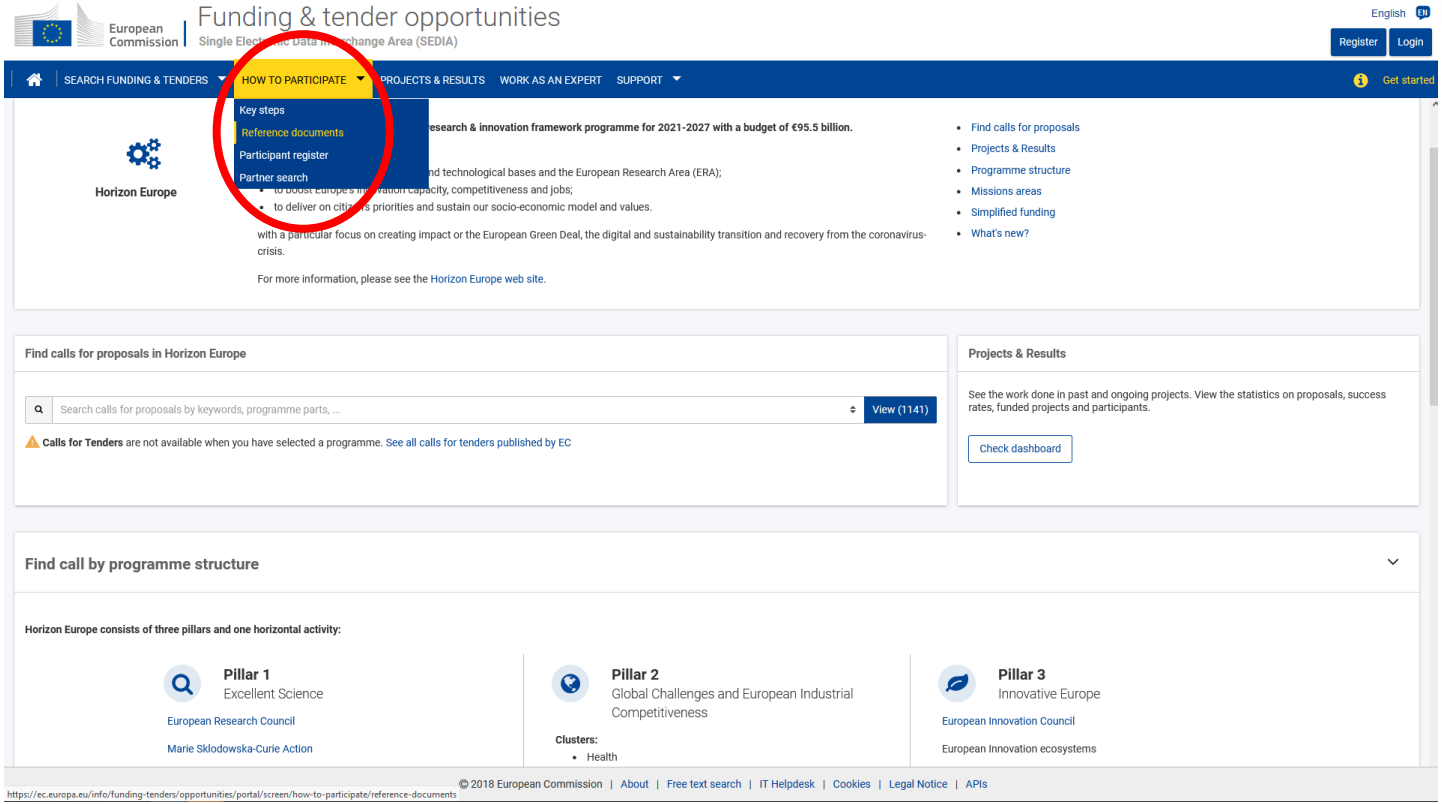
→ Research and innovation der EU-Kommission (live Vorstellung)

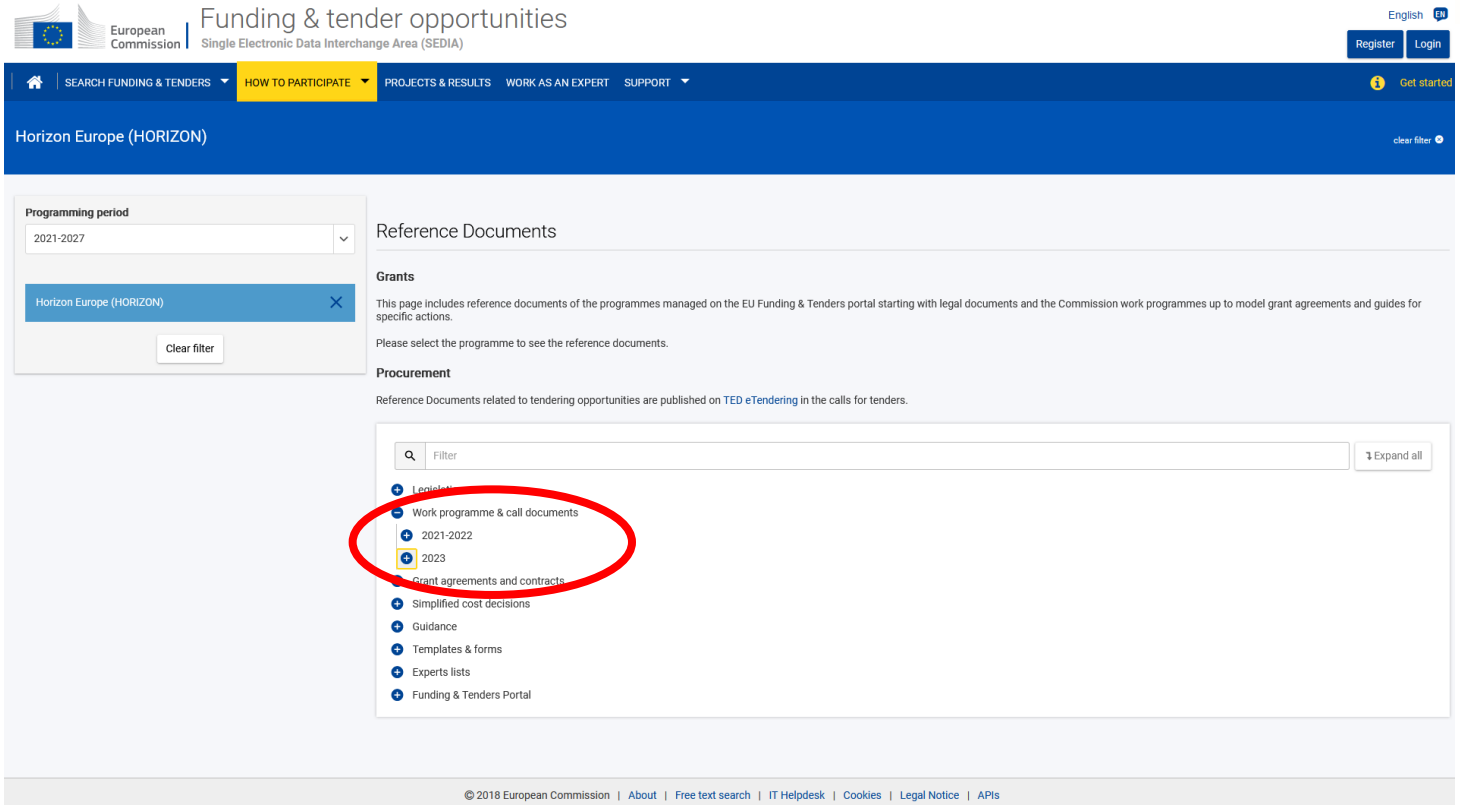
Bundesministerium für Bildung und Forschung

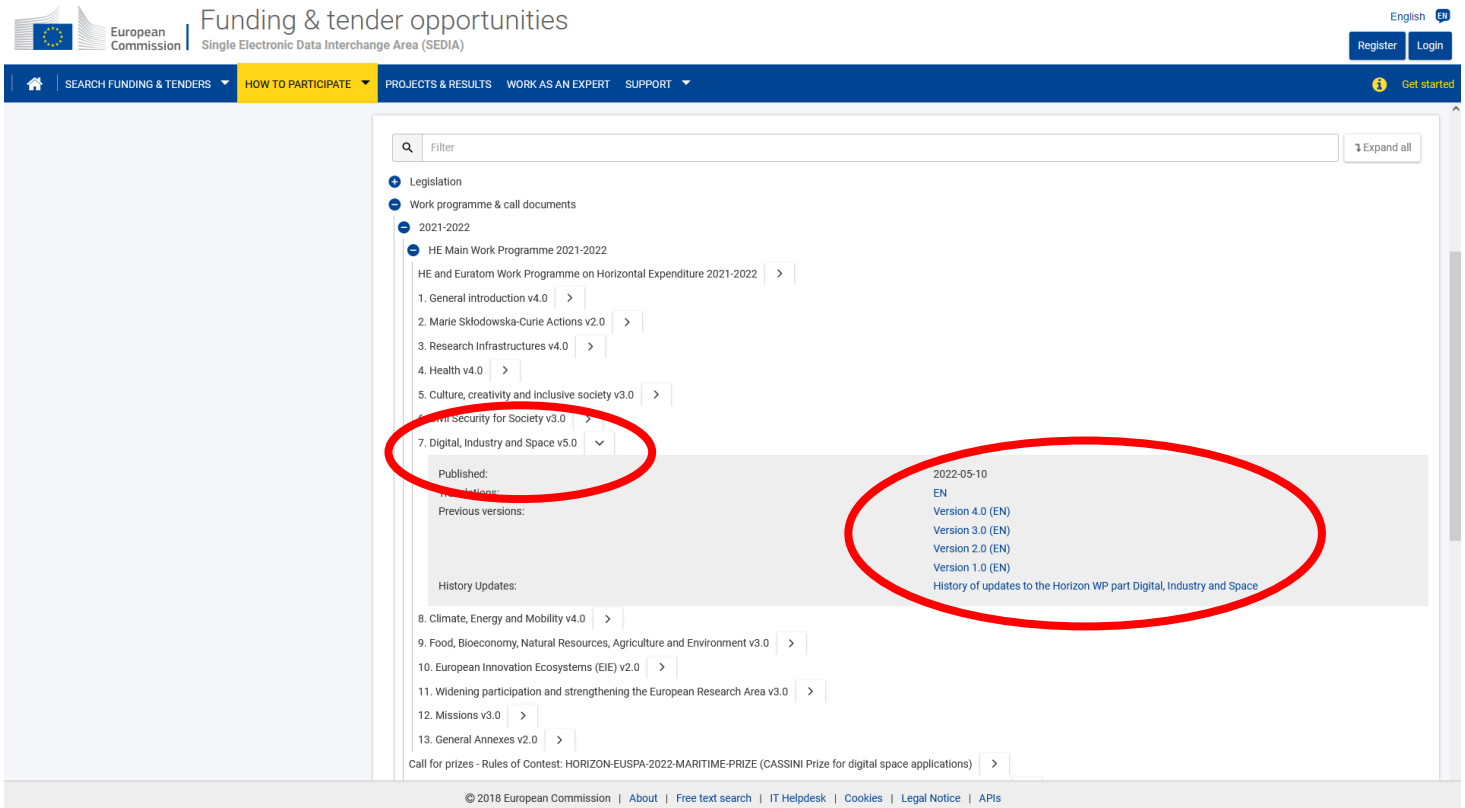
https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home

NKS Digitale und Industrielle Technologien
Nationale Kontaktstelle zum EU-Programm Horizont Europa



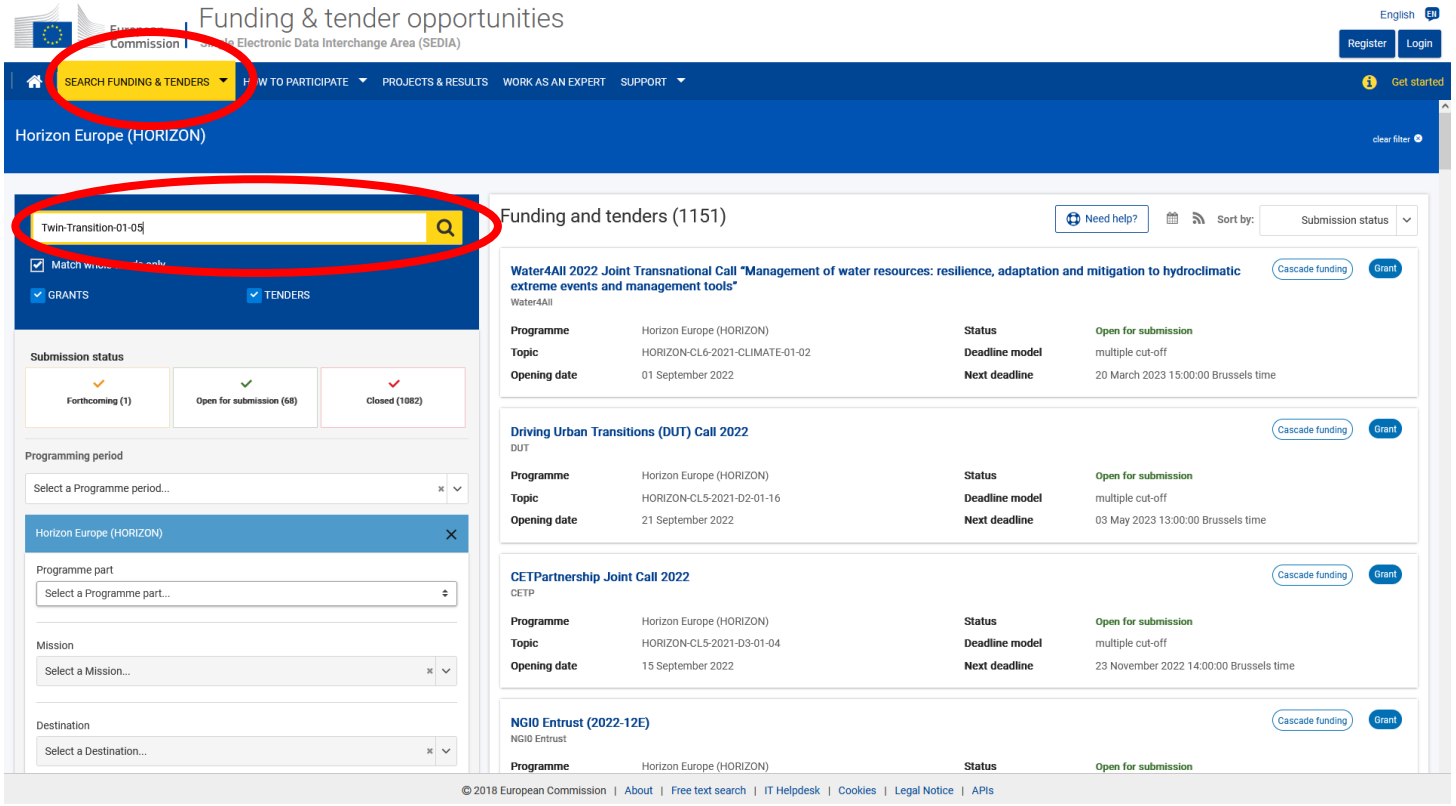

European Commission
Funding & tender opportunities
Single Electronic Data Interchange Area (SEDIA)
English EN
Register
Login
SEARCH FUNDING & TENDERS
HOW TO PARTICIPATE
PROJECTS & RESULTS
WORK AS AN EXPERT
SUPPORT
Get started
Key steps
Reference documents
Participant register
Partner search
Horizon Europe
esearch & innovation framework programme for 2021-2027 with a budget of €95.5 billion.
nd technological bases and the European Research Area (ERA);
to boost Europe's in vation capacity, competitiveness and jobs;
to deliver on citiz s priorities and sustain our socio-economic model and values.
with a particular focus on creating impact or the European Green Deal, the digital and sustainability transition and recovery from the coronavirus-crisis.
For more information, please see the Horizon Europe web site.
Find calls for proposals
Projects & Results
Programme structure
Missions areas
Simplified funding
What's new?
Find calls for proposals in Horizon Europe
Search calls for proposals by keywords, programme parts, ...
View (1141)
Calls for Tenders are not available when you have selected a programme. See all calls for tenders published by EC
Projects & Results
See the work done in past and ongoing projects. View the statistics on proposals, success rates, funded projects and participants.
Check dashboard
Find call by programme structure
Horizon Europe consists of three pillars and one horizontal activity:
Pillar 1
Excellent Science
European Research Council
Marie Sklodowska-Curie Action
Pillar 2
Global Challenges and European Industrial Competitiveness
Clusters:
Health
Pillar 3
Innovative Europe
European Innovation Council
European Innovation ecosystems
© 2018 European Commission | About | Free text search | IT Helpdesk | Cookies | Legal Notice | APIs
https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/how-to-participate/reference-documents

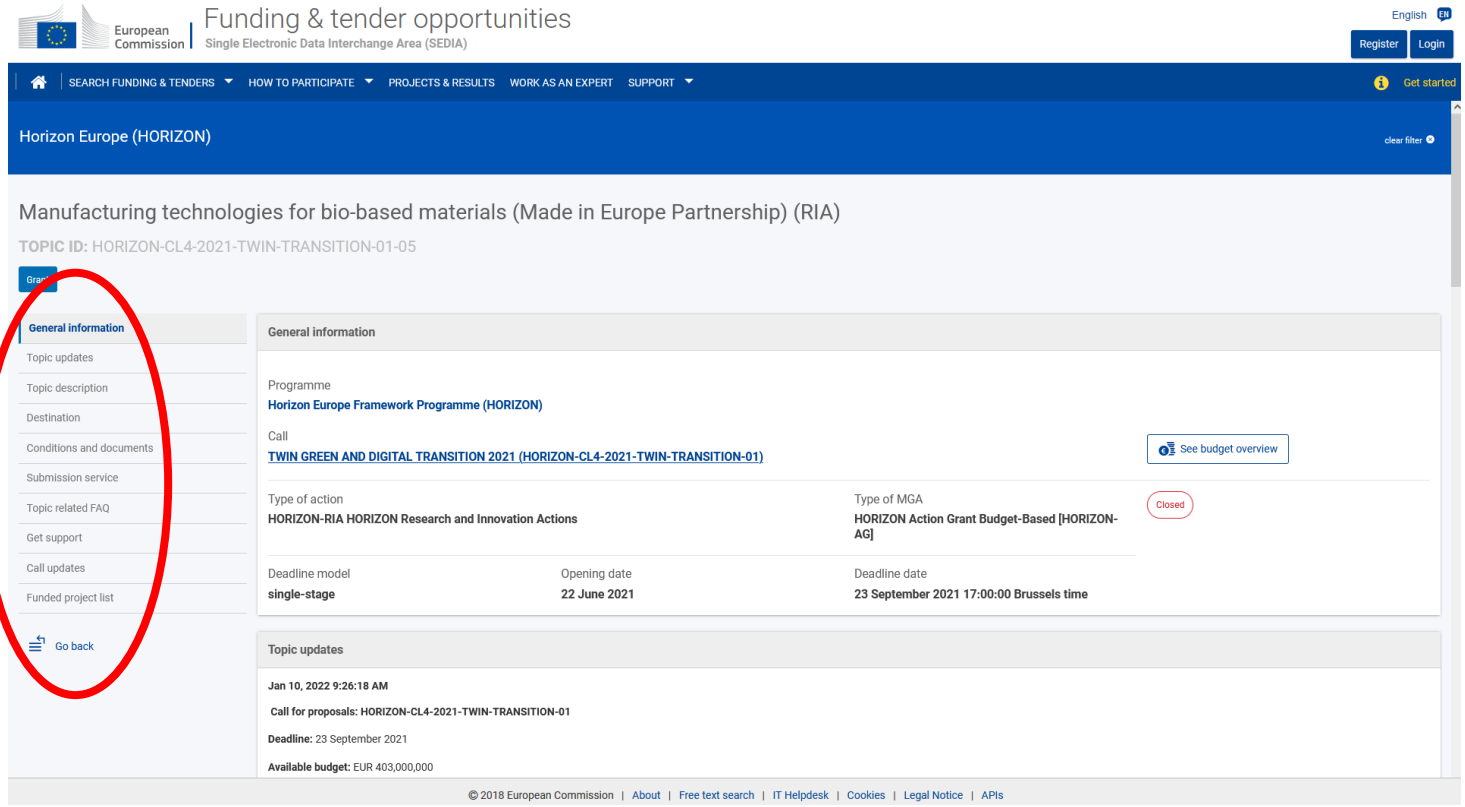

European Commission
Funding & tender opportunities
Single Electronic Data Interchange Area (SEDIA)
English
Register
Login
SEARCH FUNDING & TENDERS
HOW TO PARTICIPATE
PROJECTS & RESULTS
WORK AS AN EXPERT
SUPPORT
Get started
Horizon Europe (HORIZON)
clear filter
Programming period
2021-2027
Horizon Europe (HORIZON)
Clear filter
Reference Documents
Grants
This page includes reference documents of the programmes managed on the EU Funding & Tenders portal starting with legal documents and the Commission work programmes up to model grant agreements and guides for specific actions.
Please select the programme to see the reference documents.
Procurement
Reference Documents related to tendering opportunities are published on TED eTendering in the calls for tenders.
Filter
Expand all
Work programme & call documents
2021-2022
2023
Grant agreements and contracts
Simplified cost decisions
Guidance
Templates & forms
Experts lists
Funding & Tenders Portal
© 2018 European Commission | About | Free text search | IT Helpdesk | Cookies | Legal Notice | APIs


European Commission
Funding & tender opportunities
Single Electronic Data Interchange Area (SEDIA)
English EN
Register
Login
SEARCH FUNDING & TENDERS
HOW TO PARTICIPATE
PROJECTS & RESULTS
WORK AS AN EXPERT
SUPPORT
Get started
Filter
Expand all
Legislation
Work programme & call documents
2021-2022
HE Main Work Programme 2021-2022
HE and Euratom Work Programme on Horizontal Expenditure 2021-2022
1. General introduction v4.0
2. Marie Skłodowska-Curie Actions v2.0
3. Research Infrastructures v4.0
4. Health v4.0
5. Culture, creativity and inclusive society v3.0
7. Digital, Industry and Space v5.0
Published: 2022-05-10
EN
Previous versions: Version 4.0 (EN)
Version 3.0 (EN)
Version 2.0 (EN)
Version 1.0 (EN)
History Updates: History of updates to the Horizon WP part Digital, Industry and Space
8. Climate, Energy and Mobility v4.0
9. Food, Bioeconomy, Natural Resources, Agriculture and Environment v3.0
10. European Innovation Ecosystems (EIE) v2.0
11. Widening participation and strengthening the European Research Area v3.0
12. Missions v3.0
13. General Annexes v2.0
Call for prizes - Rules of Contest: HORIZON-EUSPA-2022-MARITIME-PRIZE (CASSINI Prize for digital space applications)
© 2018 European Commission | About | Free text search | IT Helpdesk | Cookies | Legal Notice | APIs

Bundesministerium
für Bildung
und Forschung

NKS Digitale und Industrielle Technologien
Nationale Kontaktstelle zum
EU-Programm Horizont Europa




European Commission
Funding & tender opportunities
Single Electronic Data Interchange Area (SEDIA)
English
Register
Login
SEARCH FUNDING & TENDERS
HOW TO PARTICIPATE
PROJECTS & RESULTS
WORK AS AN EXPERT
SUPPORT
Get started
Horizon Europe (HORIZON)
clear filter
Manufacturing technologies for bio-based materials (Made in Europe Partnership) (RIA)
TOPIC ID: HORIZON-CL4-2021-TWIN-TRANSITION-01-05
General information
Topic updates
Topic description
Destination
Conditions and documents
Submission service
Topic related FAQ
Get support
Call updates
Funded project list
Go back
General information
Programme
Horizon Europe Framework Programme (HORIZON)
Call
TWIN GREEN AND DIGITAL TRANSITION 2021 (HORIZON-CL4-2021-TWIN-TRANSITION-01)
See budget overview
Type of action
HORIZON-RIA HORIZON Research and Innovation Actions
Type of MGA
HORIZON Action Grant Budget-Based [HORIZON-AG]
Closed
Deadline model
single-stage
Opening date
22 June 2021
Deadline date
23 September 2021 17:00:00 Brussels time
Topic updates
Jan 10, 2022 9:26:18 AM
Call for proposals: HORIZON-CL4-2021-TWIN-TRANSITION-01
Deadline: 23 September 2021
Available budget: EUR 403,000,000
© 2018 European Commission | About | Free text search | IT Helpdesk | Cookies | Legal Notice | APIs

Welche Texte muss ich lesen…

Gründlich lesen muss ich…

1. Den Text der jeweiligen Ausschreibung (= Topic) **inkl. Fußnoten**

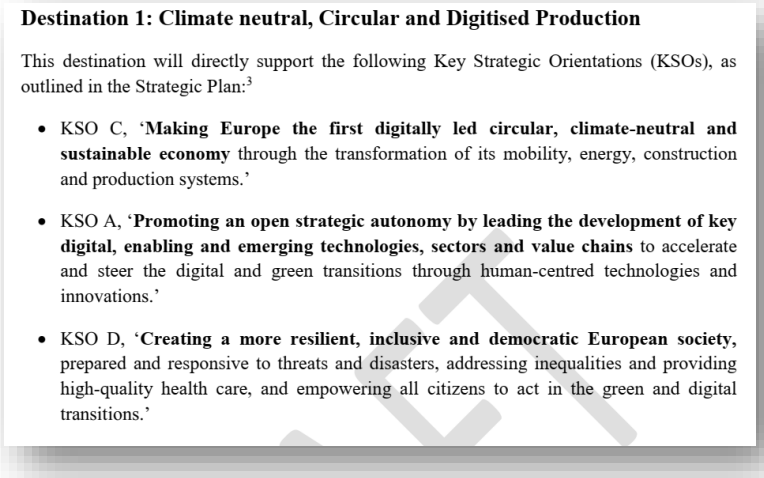
siehe Beispiele im Folgenden

Welche Texte muss ich lesen…

Gründlich lesen muss ich…

2. Den Einleitungstext zur jeweiligen Destination im Arbeitsprogramm

- Key Strategic Orientations
- Expected Impacts
- Relevant Policies



Destination 1: Climate neutral, Circular and Digitised Production

This destination will directly support the following Key Strategic Orientations (KSOs), as outlined in the Strategic Plan:[3]

- KSO C, '**Making Europe the first digitally led circular, climate-neutral and sustainable economy** through the transformation of its mobility, energy, construction and production systems.'
- KSO A, '**Promoting an open strategic autonomy by leading the development of key digital, enabling and emerging technologies, sectors and value chains** to accelerate and steer the digital and green transitions through human-centred technologies and innovations.'
- KSO D, '**Creating a more resilient, inclusive and democratic European society,** prepared and responsive to threats and disasters, addressing inequalities and providing high-quality health care, and empowering all citizens to act in the green and digital transitions.'

Welche Texte muss ich lesen…

Gründlich lesen muss ich…

3. Die Beschreibung des jeweilgen Abschnitts (= Section) im Arbeitsprogramm

- **A new way to build**, accelerating disruptive change in construction

The construction industry needs to improve its productivity and competitiveness, and upskill its workforce. Its transition pathway depends on greater digitalisation, resilience and resource efficiency across the board. This need has been heightened by recent rising demand following the pandemic, pressure to maintain and repair works and to address hazardous substances.

Welche Texte muss ich lesen…

Wenigstens überfliegen sollte ich…

1. Bei Partnerschafts-Themen: Die Website der Partnerschaft und deren Strategic Research and Innovation Agenda (SRIA)

→ Hintergrundinformationen zu den Zielen der Partnerschaft

→ Inspiration für Kooperationen und Querschnittsthemen

→ Partnerschaften im Cluster 4

Welche Texte muss ich lesen…

Wenigstens überfliegen sollte ich…

2. In der Ausschreibung, der Destination oder dem Vortrag während der Info Days explizit erwähnte Hintergrund-Dokumente

→ Inspiration für Impact und Querschnittsthemen

The most relevant policies of the European Commission on this front are:

- The European Industrial Strategy of March 2020, and in particular the Update of May 2021: there is now a renewed momentum in the EU to tackle its strategic dependencies as well as to boost its resilience across key strategic areas. The Covid-19 crisis revealed the importance of improving production response and preparedness of EU industry, in support of its long-term competitiveness.
- The Digital Decade of March 2021, where the Commission presented a vision, targets and avenues for a successful digital transformation of Europe by 2030.
- The Circular Economy Action Plan of March 2020 announced initiatives along the entire life cycle of products. It targets how products are designed, promotes circular economy processes, encourages sustainable consumption, and aims to ensure that waste is prevented and the resources used are kept in the EU economy for as long as possible.
- The Fit for 55 Package of July 2021, delivering the EU's 2030 Climate Target on the way to climate neutrality, given the process industries' 20% share of global greenhouse gas emissions.
- The Zero Pollution Action Plan of May 2021 addresses both pollution and waste, where research needs could be tackled and is particularly relevant to advanced materials and the process industries, as well as to the manufacturing industry.

Welche Texte muss ich lesen…

Wenigstens überfliegen sollte ich…

3. In der Ausschreibung explizit erwähnte andere Ausschreibungen

> Links may be established with relevant cases emerging from the CSA project HORIZON-CL4-2023-RESILIENCE-01-39.

→ Inspiration für State of the art und Kooperationen

...und wie lese ich sie [die Ausschreibungen] richtig?

Beispiele

Destination 2: HORIZON-CL4-2023-RESILIENCE-01-23 Computational models for the development of safe and sustainable by design chemicals and materials (RIA)

Destination 4: HORIZON-CL4-2024-DIGITAL-EMERGING-01-04 Industrial Leadership in AI, Data and Robotics boosting competitiveness and the green transition (AI, Data and Robotics Partnership) (IA)

Struktur des Cluster 4 Arbeitsprogramms 2023/2024

Industrielle Technologien

Digitale Technologien

6 Destinations	
Destination 1	Climate neutral, circular and digitised production
Destination 2	Increased autonomy in key strategic value chains for resilient industry
Destination 3	World leading data and computing technologies
Destination 4	Digital and emerging technologies for competitiveness and fit for the green deal
Destination 5	Open strategic autonomy in developing, deploying and using global space-based infrastructures, services, applications and data
Destination 6	A human-centred and ethical development of digital and industrial technologies

HORIZON-CL4-2023-RESILIENCE-01-23

Destination 2: Increased Autonomy in Key Strategic Value Chains for Resilient Industry

- **Key Strategic Orientations (KSOs) A, C, D**
- **Topics should contribute to the expected impact of CL4:** Industrial leadership and increased autonomy in key strategic value chains with security of supply in raw materials,...

Relevante Strategien der EU-Kommission für Destination 2	
European Industrial Strategy	Circular Economy Action Plan
Chemicals Strategy for Sustainability	Zero Pollution Action Plan
Materials 2030 Roadmap	Digital Decade
Fit for 55 Package	

HORIZON-CL4-2023-RESILIENCE-01-23

Section (2) in Destination 2: Safe and Sustainable by Design (SSbD) chemicals and materials

- **Definition:** Safe and Sustainable by Design (SSbD) ist ein Ansatz für das Design, die Entwicklung und die Verwendung von Chemikalien und Materialien, der auf die Funktion (oder den Service) fokussiert ist und gleichzeitig den schädigenden Einfluss auf die menschliche Gesundheit und die Umwelt reduziert.
- **Hintergrund:** Im Jahr 2022 hat die EU-Kommission einen entsprechenden Rahmen und Kriterien für Safe and Sustainable Chemikalien und Materialien veröffentlicht.
- **Vorgängerprojekte:** Im Rahmen von Horizont 2020 wurden bereits eine Reihe von Projekten gefördert, die auf die Definition und Implementierung des Safe-by-Design-Konzeptes für Nanomaterialien abzielten. → **knowledge base as foundation**

HORIZON-CL4-2023-RESILIENCE-01-23

Section (2) in Destination 2: Safe and Sustainable by Design (SSbD) chemicals and materials

- **Anwendungsgebiet:** Das neue SSbD-Konzept umfasst Chemikalien und Materialien, inklusive der *advanced materials* und der Nanomaterialien.
- **Ziel:** Der Fokus liegt auf der Portfolioerweiterung von Methoden und Modellen, die für das SSbD-Konzept sowie für die Anwendung des Konzeptes für die Entwicklung von SSbD-Alternativen für gefährliche Substanzen angewendet werden können.
- **Erwartungen:** Die Projekte der SSbD-Topics sollen zur Erweiterung der verfügbaren wissenschaftlichen Wissensbasis für die Regulatorik und für die Politikgestaltung beitragen.

HORIZON-CL4-2023-RESILIENCE-01-23

Section (2) in Destination 2: Safe and Sustainable by Design (SSbD) chemicals and materials

SSbD-Synergien:

- **Cluster 6** 'Food, Bioeconomy, Natural Resources, Agriculture' in areas Bio-based Innovation Systems in the EU Bioeconomy and Circular Systems
- **Cluster 5** 'Climate, Energy and Mobility' in view of areas on lightweight materials
- **Cluster 1** 'Health', Destination 'Living and working in a health-promoting environment: research on impact of chemicals on human health'; and
- Horizon Europe **Partnership on the Assessment of Risks from Chemicals** (PARC): on exposure and hazard activities as well as the SSbD toolbox and case studies.

Call – RESILIENCE 2023
Call opening: 01.12.2022 – deadline: **20.04.2023**

HORIZON-CL4-2023-RESILIENCE-01-23

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between **EUR 6.00 and 7.00 million** would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
Indicative budget	The total indicative budget for the topic is **EUR 29.00 million**.
Type of Action	**Research and Innovation Actions**
Technology Readiness Level	Activities are expected **to achieve TRL 3-6** by the end of the project – see General Annex B.
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G. The following exceptions apply: Eligible costs will take the form of a **lump sum** as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025).[151].
Exceptional page limits to proposals/applications	In order **to include a business case and exploitation strategy**, the **page limit in part B** of the General Annexes is exceptionally **extended by 3 pages**.

HORIZON-CL4-2023-RESILIENCE-01-23

Expected Outcome: Projects are expected to contribute to the following outcomes:

Ethische Aspekte!

- The 'chemicals and materials' community will be provided with computational models supported by **artificial intelligence** for the design of new chemicals and materials integrating functionality and the **Safe and Sustainable by Design framework**[152];

Industrie im Konsortium!

- The **innovation capacity of SMEs and industry** will be boosted with cost effective tools to find safe and sustainable alternatives to **substances of concern**[153];
- **Industry** will **lower the environmental footprint of materials and chemicals** through improved production methods and optimised applications from the design phase on;
- **Industry** will be more agile to respond to external and internal influences, e.g. new market demands for chemicals and advanced materials, regulatory requirements or the potential **shortage of currently used raw materials**;
- The **EU climate ambitions**[154] will be supported by contributing to a **decrease of greenhouse gas emissions** through a more **sustainable production and use of chemicals and materials**;

HORIZON-CL4-2023-RESILIENCE-01-23

Ursprung von SSbD

Lösungs-anforder-ungen

Kontext

Ziel / wider impact

Scope: **The Commission initiative for Safe and Sustainable by Design**[155] sets a framework for assessing safety and sustainability of chemicals and materials, which should be considered as a **reference in the proposal**.

For an effective substitution of substances of concern[156] it is crucial that the **developed alternatives provide the functionality that is required of those that are replaced** (e.g., water or dirt repellent properties, insulation, etc.), **and have an improved safety and sustainability performance**. The **integration by computational modelling** of the chemicals and materials functionality with the Safe and Sustainable by Design framework will have a key role in the **green and digital transition of the European industry**. These tools will allow the exploration of which technical solutions are the most appropriate for respecting the **Safe and Sustainable by Design requirements in a cost- and policy-effective manner and thereby accelerate the innovation process for Safe and Sustainable by Design chemicals and materials**.

HORIZON-CL4-2023-RESILIENCE-01-23

Proposals should therefore:

- Produce innovative modelling software for the development of chemicals and materials (including advanced materials) **building on high-throughput chemicals and materials characterisation facilities and relevant models** and make it available and interlinked through **open platforms accessible to SMEs and industry**;
- Develop predictive computational models and software to forecast the sustainability performance and support the assessment of sustainability aspects for newly designed chemicals or materials, in a tiered approach, already in the early stages and along the innovation process;
- Enable the integration of materials modelling, safety and sustainability assessment tools and databases into a single workflow. **Apply AI techniques** for data search and missing data, including statistical analysis (sensitivity and uncertainty), in all the areas covered: modelling of the functionality, safety and sustainability assessment (including life cycle assessment);
- ...

HORIZON-CL4-2023-RESILIENCE-01-23

Proposals should therefore:

- …
- Address information exchange on chemicals and materials **along value chains** and throughout their life cycle and provide solutions for data accessibility in the different steps of the value chain for modelling/assessment purposes;
- Make developed models on chemicals, materials and their production process **FAIR**, and accompany them with a set of associated test data,
- Apply **FAIR[157] data principles**. The interoperability for data sharing should be addressed, **including synergies with other European projects addressing ontologies for data documentation**, for example projects resulting from topic **DT-NMBP-39-2020** [OntoCommons];
- Explore collaboration with existing **Open Innovation Test Beds (OITBs)[158]**, where relevant;
- …

HORIZON-CL4-2023-RESILIENCE-01-23

Proposals should therefore:

- …
- The tools should be validated against existing data. **Application of the tools by external users should be tested within the project** (**industry and SMEs outside the project consortium**, liaise eventually with projects resulting from the topic **HORIZON-CL4-2024-RESILIENCE-01-24** in this Work Programme).

HORIZON-CL4-2023-RESILIENCE-01-23

Proposals should **indicate to which chapters of the Strategic Research and Innovation Plan for chemicals and materials**[159] **they would contribute**.

Research should **build on existing standards**, where possible, and **contribute to standardisation**.

Proposals submitted under this topic should **include a business case and exploitation strategy**, as outlined in the introduction to this Destination.

A **strategy for skills development** should be presented, **associating social partners** when relevant, for developers of computational modelling and users of the models.

Projects should **build on or seek collaboration with existing projects and develop synergies** with other relevant European, national or regional initiatives, funding programmes and platforms, such as projects resulting from the topics HORIZON-CL4-2021-RESILIENCE-01-08 [IRISS], HORIZON-CL6-2023-ZEROPOLLUTION and/or HORIZON-CL4-2023-RESILIENCE-01-39. Proposals should **allocate the necessary resources for collaboration** with other relevant projects.

Synergies with Horizon Europe missions as relevant are encouraged.

D2: Increased Autonomy in Key Strategic Value Chains for Resilient Industry

budget:
2023: 337 mio.€
2024: 222.2 mio.€

Important dates

Call – RESILIENCE 2023
Call opening: 01.12.2022 – deadline: **20.04.2023**

Call – RESILIENCE 2023 TWO STAGE
Call opening: 01.12.2022 – deadline: stage 1: **07.03.2023**
stage 2: **05.10.2023**

Call – RESILIENCE 2024
Call opening: 19.09.2023 – deadline: **07.02.2024**

Call – RESILIENCE 2024 TWO STAGE
Call opening: 19.09.2023 – deadline: stage 1: **07.02.2024**
stage 2: **24.09.2024**

Struktur des Cluster 4 Arbeitsprogramms 2023/2024

Industrielle Technologien

Digitale Technologien

6 Destinations	
Destination 1	Climate neutral, circular and digitised production
Destination 2	Increased autonomy in key strategic value chains for resilient industry
Destination 3	World leading data and computing technologies
Destination 4	Digital and emerging technologies for competitiveness and fit for the green deal
Destination 5	Open strategic autonomy in developing, deploying and using global space-based infrastructures, services, applications and data
Destination 6	A human-centred and ethical development of digital and industrial technologies

HORIZON-CL4-2024-DIGITAL-EMERGING-01-04

Destination 4: Digital and Emerging Technologies for Competitiveness and Fit for the Green Deal

- **Key Strategic Orientations (KSOs) A, C**
- **Topics should contribute to the expected impact of CL4:** Open strategic autonomy in digital technologies and in future emerging enabling technologies,...

Relevante Strategien der EU-Kommission für Destination 4	
European AI Strategy	Digital Decade
EU Cybersecurity Strategy	Industrial Strategy
European Data Strategy	European Strategy on Quantum Technologies
Circular Economy Action Plan	SRIAs der relevanten Partnerschaften

HORIZON-CL4-2024-DIGITAL-EMERGING-01-04

Section (2) in Destination 4: AI, Data and Robotics

- **Partnerschaft:** Mehrere Ausschreibungen in diesem Abschnitt wurden gemeinsam mit der ko-programmierten Partnerschaft „AI, Data and Robotics“ entwickelt, die zwischen der Europäischen Kommision als „Public Partner“ und der AI, Data and Robotics Association (Adra) als „Private Partner“ zusammen setzt.
- **Hintergrund:** In 2021 hat die Europäische Kommission ihren Koordinierten Plan für Künstliche Intelligenz aktualisiert und den ersten Entwurf des „Artificial Intelligence Act“ präsentiert.
- **Vorgängerprojekte:** Im Rahmen von Horizont 2020 wurden im Programmbereich LEIT-ICT bereits eine Reihe von Projekten gefördert, die sich vor allem auf den Bereich Robotik konzentrierten, aber auch bereits erste KI-Ansätze enthielten.

HORIZON-CL4-2024-DIGITAL-EMERGING-01-04

Section (2) in Destination 4: AI, Data and Robotics

- **Anwendungsgebiete:** Fertigungsindustrie, Gesundheitssektor, öffentlicher Sektor, Versorgungsbetriebe, Finanz-/Versicherungssektor, Transport, Landwirtschaft, Energie, Kommunikation, Bausektor, Medien, Umweltschutz, Kunst & Kultur, Modesektor, Tourismus etc.
- **Ziel:** Autonomie für Europa im Bereich KI, Daten und Robotik durch die Entwicklung erstklassiger Technologien für die gesamte Bandbreite Europäischer Wirtschaftsbereiche
- **Erwartungen:** Effektivere Nutzung des führenden europäischen F&E-Potentials in den Bereichen KI und Robotik durch frühzeitige Einbindung von Endanwender:innen sowohl in Grundlagenforschung als auch die Entwicklung neuer Anwendungen

HORIZON-CL4-2024-DIGITAL-EMERGING-01-04

Section (2) in Destination 4: AI, Data and Robotics

Synergien:

- **Cluster 1** 'Healthcare', Destination 'Unlocking the full potential of new tools, technologies and digital solutions for a healthy society'
- **Cluster 2** 'Culture, Creativity and Inclusive Society', Destination 'Innovative Research on Social and Economic Transformations'
- **Cluster 3** 'Security for Society', Destination 'Increased Cybersecurity'
- **Cluster 5** 'Climate, Energy and Mobility', Bereiche Energie & Mobilität
- **Cluster 6** 'Food, Bioeconomy, Natural Resources, Agriculture'

- Digital Europe Programme

Call – DIGITAL EMERGING 2024
Call opening: 15.11.2023 – deadline: **19.03.2024**

HORIZON-CL4-2024-DIGITAL-EMERGING-01-04

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of around **EUR 10.00 million** would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
Indicative budget	The total indicative budget for the topic is **EUR 60.00 million**.
Type of Action	**Innovation Actions**
Eligibility conditions	The conditions are described in General Annex B. The following exceptions apply: If projects use satellite-based earth observation, positioning, navigation and/or related timing data and services, beneficiaries must make use of **Copernicus and/or Galileo/EGNOS** (other data and services may additionally be used).
Technology Readiness Level	Activities are expected to **start at TRL 3-5** and **achieve TRL 6-7** by the end of the project – see General Annex B.

Call – DIGITAL EMERGING 2024
Call opening: 15.11.2023 – deadline: **19.03.2024**

HORIZON-CL4-2024-DIGITAL-EMERGING-01-04

Specific conditions	
Procedure	The procedure is described in General Annex F. The following exceptions apply: To ensure a balanced portfolio coverage, grants will be awarded to applications not only in order of ranking but at least also to the **two highest ranked proposals for each of the two expected outcomes** (1. The creation of systems to address large scale challenges using combined robotics data and AI solutions, 2. The creation of systems to address large scale resource optimisation challenges using combined AI and Data solutions). Proposals should **clearly identify** the outcome it will focus on.
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G. The following exceptions apply: Beneficiaries may provide **financial support to third parties**. The support to third parties can only be provided in the form of **grants**. As third parties' grants may include robotics components, requiring high equipment investment and/or important effort to integrate in a use-case to address robotics challenges, the **maximum amount to be granted to each third party is EUR 200 000**. **40% budget for FSTP** in sub-area 'creation of systems to address large scale resource optimisation challenges using combined AI and Data solutions'

HORIZON-CL4-2024-DIGITAL-EMERGING-01-04

Expected Outcome: Projects are expected to contribute to **one of the two following** outcomes, **exclusively**:

KI + Daten + Robotik

- The **creation of systems to address large scale challenges** using **combined** robotics, data and AI solutions that have significant impact on the objectives of the **green deal**. For example; in improving domestic energy consumption or in the cleaning up of contaminated land and waterways or in accelerating the circular economy along the complete value chain through automated waste avoidance and waste processing or reuse of materials.

KI + Daten

- The **creation of systems to address large scale resource optimisation challenges** using **combined** AI and Data solutions, that have significant impact on the objectives of the **green deal**, such as optimisation of any kind of resources, from production to use along the complete value chain in order to minimise waste or foster the reuse of resources or in using AI and data solutions to maximize energy efficiency, ensuring energy security.

[...]

HORIZON-CL4-2024-DIGITAL-EMERGING-01-04

Expected Outcome: [...]

Which will contribute to

Erwartung / wider impact

- The validation of solutions at scale by **demonstrating the potential of integrating these technologies** to address challenges in industrial ecosystems and develop solutions that are **environmental friendly** and contribute to the green deal
- Making and exploiting major advances in science and technology, to maintain **Europe's scientific excellence** and ensure sovereignty of these key technologies expected to affect the **society** in contributing to addressing major societal challenges affecting the environment.
- Exploring deployment solutions that can ensure **efficient scale up**.
- Boosting the uptake of AI, Data and Robotics to exploit the major contribution expected to environmental sustainability.

Proposals should **clearly identify the outcome it will focus on**.

HORIZON-CL4-2024-DIGITAL-EMERGING-01-04

Scope: Proposals should demonstrate the added value of integrating either AI and Data, or AI, Data and Robotics technologies through **large-scale validation scenarios** reaching critical mass and mobilising the user industry, while demonstrating high potential impact contributing to the **European Green Deal** objectives. **For example** in the recycling of electric car batteries, cleaning and monitoring the oceans, decommissioning energy infrastructure, supporting the recycling of materials, the optimisation of energy usage, the minimisation of resource waste in value-chains, for example through the better adaption of production to demand, etc.

Vision

Focus should be given to **attracting new user industries**, and/or showing **new business opportunities** to boost the uptake of AI, Data and Robotics in major sectors and **stimulate the involvement where appropriate of end-users** to define the technological barriers to uptake and the use cases for deployment.

[...]

HORIZON-CL4-2024-DIGITAL-EMERGING-01-04

Scope: [...]

Proposals should address the **involvement of SMEs and/or start-ups** with significant potential to foster innovation through their engagement with large scale pilots. Focus will be on leveraging and nurturing emerging **collaborations between stakeholder communities** shaping an effective eco-system fit for the challenge of European AI, Data, Robotics, and on accelerating European R&I through structural involvement of innovative SME and deep-tech start-ups.

Proposals should target sectors and application domains with **wide-scale deployment potential** and maximum contribution to the green deal.

HORIZON-CL4-2024-DIGITAL-EMERGING-01-04

Scope: [...]

Multidisciplinary innovation activities should address **one of the following**:

- Large scale pilots bringing major industries from key application sectors in Europe – facilitating collaboration between small and large companies with the goal of **exploiting and integrating existing tools, sub-systems and solutions that are re-usable from other sectors** (thereby showing scalability/versatility, and enabling economies of scale) to have significant impact on the objectives of the green deal. The focus will be on the integration of tools, systems, sub-systems and solutions in the pilot by the grant beneficiaries. **In this case, proposals are not expected to involve the use of financial support to third parties.**
- The development of large-scale pilots addressing key applications with a significant and scalable impact on the objectives of the green deal by facilitating collaboration between small and large companies able address **key challenges in the deployment of AI, Data and Robotics**.

HORIZON-CL4-2024-DIGITAL-EMERGING-01-04

Financial Support to Third Parties: Projects should **use FSTP to leverage novel technical advantage** to address the operation of the pilot and to thereby support end users and service providers in addressing the challenges of the green deal. **Third parties are expected to use the pilots for developing, testing and validating innovative solutions** with significant impact on the green deal. Proposals should clearly delineate the expected contributions from the main beneficiaries as well as from the third parties, to ensure their coherence and impact. **40% of the EU funding** requested by the proposal should be allocated to the purpose of financial support to third parties.

Ethik, Gleih-stellung, etc.

Proposals should either involve directly, or indirectly, appropriate expertise in **other relevant disciplines** for example related to environmental science and, as necessary, Social Sciences and Humanities (SSH) disciplines, especially where this is relevant to validating the effectiveness of proposed systems and technologies with respect to the green deal objectives.

Proposals should include a **clear business case and exploitation strategy**.

[...]

HORIZON-CL4-2024-DIGITAL-EMERGING-01-04

Scope: [...]

All proposals are expected to embed mechanisms to assess and demonstrate progress (with qualitative and quantitative KPIs, benchmarking and progress monitoring, as well as illustrative application use-cases demonstrating well defined added value to end users), and share communicable results with the European R&D community, through the **AI-on-demand platform** and/or the **Digital Industrial Platform for Robotics**, public community resources, to maximise re-use of results, either by developers, or for uptake, and optimise efficiency of funding; enhancing the European AI, Data and Robotics ecosystem through the sharing of results and best practice.

This topic implements the **co-programmed European Partnership on AI, data and robotics**.

D4: Digital and Emerging Technologies for Competitiveness and Fit for the Green Deal

budget:
2023: 237 mio.€
2024: 224.5 mio.€

Important dates

Call – DIGITAL EMERGING 2023
Call opening: 01.12.2022 – deadline: **29.03.2023**

Call – DIGITAL EMERGING 2023 CNECT
Call opening: 01.12.2022 – deadline: **29.03.2023**

Call – DIGITAL EMERGING 2024
Call opening: 15.11.2023 – deadline: **19.03.2024**

Call – DIGITAL EMERGING 2024 CNECT
Call opening: 15.11.2023 – deadline: **19.03.2024**

Veranstaltungshinweise (Auswahl)

05.12.22	Live Stream zu den neuen Arbeitsprogrammen in Horizont Europa für 2023/2024 (Link)
06.12.22	"Clean Steel" in Horizont Europa: Wie verdeutliche ich den IMPACT bei der Antragstellung? (Link)
09.12.22	Online-Informationsveranstaltung zu Ausschreibungsthemen von Digitalisierung, Industrie und Gesundheit in Horizont Europa (Link)

12.-14.12.22	Informationstage Horizont Europa 2023 (Link), EU-Kommission
14.12.22	Brokerage Event für industrielle Technologien (Link), NCP4Industry
15.+16.12.22	Brokerage Event für digitale Technologien (Link), IDEAL-IST

→ **https://www.nks-dit.de/aktuelles/events**

Bundesministerium
für Bildung
und Forschung

NKS Digitale und Industrielle Technologien
Nationale Kontaktstelle zum EU-Programm Horizont Europa

Fragen?

Ihr Kontakt in die NKS DIT – Digitale Technologien

Programmkoordination / Erstanfragen

Dr. Manuel Spaeth	+49 228 3821 2235	manuel.spaeth@dlr.de
Dr. Alrun Aline Hauke	+49 228 3821 2505	alrun.hauke@dlr.de

Weitere Informationen

Newsletter

www.nks-dit.de (de) oder https://www.nks-dit.de/en/home (en)

Fragen?

Ihr Kontakt in die NKS DIT – Industrielle Technologien

Programmkoordination / Erstanfragen

Ingo Rey	+49 2461 61 2623	i.rey@fz-juelich.de
Dr. Christof Haas	+49 2461 61 4838	c.haas@fz-juelich.de

Weitere Informationen

Newsletter

www.nks-dit.de (de) oder https://www.nks-dit.de/en/home (en)

Bundesministerium
für Bildung
und Forschung

NKS Digitale und Industrielle Technologien
Nationale Kontaktstelle zum
EU-Programm Horizont Europa

Weitere nützliche Informationen

Umsetzungsstrategie zu Horizont Europa

Verordnung Rahmenprogramm Grundstruktur, grundsätzliche Forschungsmodalitäten, Maßnahmen / Instrumente	Gültigkeit 7 Jahre
Spezifisches Programm Detailliertere Angaben zu Forschungsprioritäten	
Strategischer Plan Strategie für die nächsten 4 Jahre	Gültigkeit 4 Jahre
Arbeitsprogramm Sammlung konkreter Themen, politischer Kontext	Gültigkeit 2 Jahre
Topics	Offen i.d.R. 1 Jahr

© NKS Bioökonomie

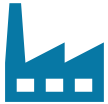
Nützliche Links

- Funding and Tenders Portal:
  https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home
- Suche laufender und abgeschlossener EU-Projekte:
  https://cordis.europa.eu/projects/en
- Gutachtertätigkeit in Horizon Europe:
  https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/work-as-an-expert
- Webseite zu Horizont Europa in Deutschland:
  https://www.horizont-europa.de/

Nützliche Links 2

- Beteiligung von Organisationen aus Drittstaaten: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/complementary-funding-mechanisms-in-third-countries_he_en.pdf
- Beteiligung von Organisationen aus dem UK: https://www.horizont-europa.de/de/Finanzierungsgarantie-fur-britische-Antragsteller-in-Horizont-Europa-verlangert-3193.html
- Kommentiertes Antrags-Template zu Horizont Europa RIAs und IAs: http://www3-cxxl.dlr.de/rd/PortalData/28/Resources/dokumente/rp6/newsletter/NKS_kommentiertes_Antragsformular_HE-RIA-IA_final.pdf

EU-Projekte der NKS-Stellen für Cluster 4



- Zusammenschluss der NKS-Stellen für die industriellen Themen (NCP4Industry): https://www.ncp4industry.eu/

- Zusammenschluss der NKS-Stellen für die digitalen Themen (Ideal-IST): https://www.ideal-ist.eu/

- Zusammenschluss der NKS-Stellen für die Raumfahrt (COSMOS): https://www.ncp-space.net/

Services für Antragstellende (in englischer Sprache): Informationssammlungen, Matchmaking Events, Proposal Checks etc.

Bundesministerium
für Bildung
und Forschung

NKS Digitale und Industrielle Technologien
Nationale Kontaktstelle zum
EU-Programm Horizont Europa

Anschubfinanzierung A-HEU

Anschubfinanzierung Horizont Europa: A-HEU

- Förderung des **Auf- und Ausbaus europ. Netzwerke** / der **Konsortialbildung**
  - Insb. exzellente Einrichtungen ohne bisherige Erfahrung in der Koordination von EU-Verbundprojekten und entsprechenden europäischen Netzwerken
  - Ausbau der Netzwerke deutscher Forschungsakteure / Förderung der Konsortialbildung und Entwicklung von Projektvorschlägen (Antragsvorbereitung) für **Verbundprojekte** (keine CSAs)
- Im **2. Pfeiler von Horizont Europa**, d.h. zu den thematischen Clustern im Bereich „Globale Herausforderungen und industrielle Wettbewerbsfähigkeit Europas“

Anschubfinanzierung Horizont Europa: A-HEU

Zuwendungsempfänger: Hochschulen, außeruniversitäre Forschungseinrichtungen, andere öffentliche Einrichtungen, die Forschungsbeiträge liefern sowie KMU
– **als geplanter Koordinator**

Förderdauer: bis maximal zwölf Monate
Fördervolumen: bis zu 50.000 Euro
Zuwendungsfähig sind Ausgaben u.a. für Netzwerktreffen und Workshops, für Personal zur Koordinierung sowie Reise- und Aufenthaltskosten für antragstellende und Partnerinstitutionen

Die reine Antragstellung kann mit dieser Förderrichtlinie nicht gefördert werden/kann nicht alleiniges Ziel der Vorhaben sein!

Anschubfinanzierung Horizont Europa: A-HEU

Veröffentlichung Förderbekanntmachung:	**April 2021**
Stichtage für die Antragstellung:	**31. Januar, 31. Mai, 30. September**
Informationen:	https://www.eubuero.de/era-foerderrichtlinie.htm
Beratung:	Dr. Susanne Liermann DLR Projektträger | EU-Büro des BMBF Telefon +49 228 3821-1152 susanne.liermann@dlr.de