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Horizon Europe

Work Programme 2023-2025

5. Culture, Creativity and Inclusive Society

(European Commission Decision C(2024) 2371 of 17 April 2024)

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Introduction

Cluster 2, 'Culture, Creativity and Inclusive Society' aims to meet EU goals and priorities on enhancing democratic governance and citizens participation, on the safeguarding and promotion of cultural heritage, and to respond to and shape multifaceted social, economic, technological and cultural transformations. Cluster 2 mobilises multidisciplinary expertise of European social sciences and humanities (SSH) for understanding fundamental contemporary transformations of society, economy, politics and culture. It aims to provide evidence-based policy options for a socially just and inclusive European green and digital transition and recovery.

The EU is strongly committed to the UN Sustainable Development Goals (SDGs), many of which have an important impact on culture, creativity, and inclusive society, notably: SDG 1 (No poverty), SDG 3 (Good Health and Well-being), SDG 4 (Quality Education), SDG 5 (Gender Equality), SDG 8 (Decent Work and Economic Growth), SDG 10 (Reduced Inequalities), SDG 11 (Sustainable Cities and Communities), SDG 12 (Responsible Consumption and Production), SDG 16 (Peace, Justice, and Strong Institutions), with their specific targets to achieve a better and more sustainable future for all.

Proposals are invited against the following three (3) destinations:

Activities contributing to the **destination "Innovative Research on Democracy and Governance"**, will provide knowledge, data and scientifically robust recommendations to reinvigorate and defend democratic governance and improve trust in democratic institutions. In the long-term, this will contribute to help safeguard fundamental rights to empower active and inclusive citizenship. By doing so, they will also strengthen accountability, transparency, effectiveness and trustworthiness of rule of law-based institutions and policies. Activities will develop recommendations to protect liberties and the rule of law, and shield democracy from multidimensional threats. They will aim to expand political participation, social dialogue and social inclusion, civic engagement and gender equality. The destination will also mobilise social sciences and humanities expertise for analysing and responding to the consequences of Ukraine's invasion by Russia and the changing geopolitical context of European neighbourhood and enlargement policies.

Activities contributing to the **destination "Innovative Research on the European Cultural Heritage and the Cultural and Creative Industries"**, will promote better access and engagement with cultural heritage and improve its protection, enhancement and restoration. Research and innovation will support sustainable growth and job creation through the cultural and creative industries and contribute to integrate them into the European industrial policy as drivers for innovation and competitiveness. Two calls of the destination will support the establishment of a digital European cultural heritage collaborative space.¹

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See the calls "A European Collaborative Cloud for Cultural Heritage – 2023" and "A European Collaborative Cloud for Cultural Heritage – 2024" in this Work Programme part.

At the same time, through the **destination "Innovative Research on Social and Economic Transformations**", actions will help tackle social, economic and political inequalities, support human capital development and contribute to a comprehensive European strategy for inclusive growth. This also involves understanding and responding to the impacts of technological advancements and economic interconnectedness with a view to social resilience and reach the objectives set out by the Action Plan of the European Pillar of Social Rights. The destination will also support EU migration and mobility policies while promoting integration and fair digital and green transitions.

Horizon Europe is the research and innovation support programme in a system of European and national funding programmes that shares policy objectives. Through the programme, special attention will be given to ensuring cooperation between universities, scientific communities and industry, including small and medium enterprises, and citizens and their representatives, in order to bridge gaps between territories, generations and regional cultures, especially caring for the needs of the young in shaping Europe's future. Calls could be EU Synergies calls, meaning that projects that have been awarded a grant under the call could have the explicit possibility to also receive funding under other EU programmes, based on a strategic approach including relevant shared management funds. To enable synergies by design in this context, project proposers should consider and actively seek strategic combinations with, and where appropriate possibilities for further funding from, other R&I-relevant EU, national or regional programmes (such as ERDF, ESF+, JTF, EMFF, EAFRD and InvestEU), where appropriate, as well as private funds or financial instruments.

The EU's Recovery and Resilience Facility (RRF) aims at financing projects that directly tackle the economic and social impacts from the Coronavirus crisis and support the green and digital transition. For project ideas that directly contribute to these objectives and that have a strong focus in one Member State it is advisable to check access to the RRF for a fast and targeted support.

Complementarities and synergies with other relevant Union programmes will be sought, for Cluster 2 in particular with regard to the take-up of research results and innovative solutions developed under Horizon Europe via the following programmes:

- Creative Europe: it improves the safeguarding and valorisation of cultural heritage and further support the cultural and creative sector. Creative Europe can improve sectorial networking and cooperation of Member States and non-EU Participating Countries in the Creative Europe Programme² in order to apply the latest technologies, stimulate new scientific approaches and boost innovation potential stemming from Horizon Europe.
- Erasmus+: it supports efforts to efficiently use the potential of Europe's talent and social assets in a lifelong learning perspective throughout the education, training and youth fields. It promotes measures for the inclusion of people with fewer opportunities, including newly arrived migrants, and supports skills development and active citizenship, encouraging young people to engage and learn to participate in civic society

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^{2 &}lt;u>list-3rd-country-participation_crea_en.pdf (europa.eu)</u>

and democratic life, raising awareness about EU values, including via online platforms and tools for virtual cooperation. As regards Cluster 2, Erasmus+ projects could benefit for instance from the use of innovative practices for migrant integration in education, uptake of innovative methods for citizen engagement and education for fostering EU values and democracy stemming from Horizon Europe.

- Global Europe, the EU's Neighbourhood, Development and International Cooperation Instrument: it supports and consolidates democracy, rule of law and human rights, supports civil society organisations outside the EU, further stability and peace and addresses other global challenges including migration and mobility. The actions can benefit from drawing on the findings in H2020 and Horizon Europe projects regarding trust in governance, tackling disinformation and active citizenship.
- Digital Europe Programme (DEP): while Horizon Europe supports research and development of digital technologies, DEP supports the wide uptake and deployment of innovative digital solutions, areas of public interest (including public administration, justice and education), by setting up and making accessible Europe-wide data spaces and platforms and providing SMEs and public administrations access to the latest digital technologies, for example via Digital Innovation Hubs. Priority actions for the first two years of DEP include "Safer internet for kids", a "Platform for combating disinformation", support the EU language technology industry in developing and deploying latest AI-based technologies in all EU languages and the EU digital platform for cultural heritage, Europeana, supporting digital transformation of cultural heritage institutions.
- Reform Support Programme: when supporting the efforts of the national authorities in improving their administrative capacity to design, develop and implement reforms, the technical support instrument of the Reform Support Programme can benefit from the good practices, innovative processes and methodologies identified or developed in H2020 and Horizon Europe projects, and get access to the expertise in research bodies in H2020 and Horizon Europe projects.
- Justice, Rights and Values Fund: the Citizens, Equality, Rights and Values programme
 can, in its support to civil society organisations for encouraging and facilitating active
 participation in the construction of a more democratic Union and awareness rising of EU
 rights and values, draw on the results of H2020 and Horizon Europe projects in the field
 of citizens' engagement.
- European Social Fund Plus (ESF+) aims to promote social cohesion and equip people with the skills needed for the evolving demands of the labour market. Member States and regions can use the ESF+ to mainstream and upscale innovative technologies and solutions in the areas of employment, social inclusion, education and training, including successful models and practices developed under Horizon 2020 and Horizon Europe. In addition, the ESF+ can support operations and researchers granted a Seal of Excellence under Horizon Europe.

- European Regional Development Fund (ERDF) focuses amongst others on the development and strengthening of regional and local research and innovation ecosystems and smart economic transformation, in line with regional/national smart specialisation strategies. It can support investment in research infrastructure, activities for applied research and innovation, including industrial research, experimental development and feasibility studies, building research and innovation capacities and uptake of advanced technologies and roll-out of innovative solutions from the Framework Programmes for research and innovation through the ERDF. It helps governments reap the benefits of digitisation and also encourages investments in social and cultural infrastructure, the development of cultural services and the conservation of cultural heritage.
- European Agricultural Fund for Rural Development (EAFRD) can also benefit from the dissemination and take-up of R&I results in the field of cultural heritage, in particular in rural and remote areas.
- The InvestEU Programme could also fund the uptake of R&I results related to Cultural and Creative Industries (CCI) and cultural heritage.
- The Asylum, Migration and Integration Fund (AMIF) supports the EU migration policy to strengthen and develop all aspects of the common European asylum system, support legal migration to the Member States and effective integration policies. It contributes to countering irregular migration. Horizon Europe contributes to the implementation of the AMIF providing an evidence base for policies and projects, as regards asylum protection, legal and irregular migration management and migrant integration.

Complementarities and synergies with other parts of Horizon Europe will be ensured, in particular regarding cluster 1, 3, 4, 5 and 6. Cluster 1 will fund actions to promote and protect human health and well-being, decrease the burden of diseases and communities, and support the transformation of health care systems in their efforts towards better health promotion and disease prevention while ensuring fair access for everyone to innovative, sustainable and high-quality health care. Cluster 2 will focus on the impact of the COVID-19 pandemic such as mental health related issues, loneliness and their socio-economic impacts; effects of ageing on society including health care systems as well as focus on other factors impacting wellbeing. Cluster 3 will fund actions supporting security for society, including security for cultural heritage from the operational point of view and R&I to develop tools for enhanced criminal investigation capabilities for law enforcement agencies to prevent criminal acts and mitigate their impacts, including cybercrime and violent radicalisation. Cluster 2 will invest on the preventive aspect of protecting cultural heritage and in analyses of drivers behind violent political transformations, developing recommendations on how to address radicalisation from the angle of education and the functioning of and trust in democratic processes and institutions. Cluster 4 will fund actions focusing on developing and testing digital and industrial technologies, while Cluster 2 will focus on using existing digital technologies for R&I in areas supporting the expected impacts for Cluster 2 (reinvigorate democratic governance, help unfold the full potential of cultural heritage, arts and cultural and creative sectors, foster social and economic resilience and sustainability, and inclusive

growth). Cluster 5 aims at delivering a just transition to a climate-neutral, resource-efficient, fair and resilient society and economy based on advanced climate science, pathways and responses to climate change (both in terms of mitigation and adaptation) and behavioural transformations. Cluster 2 will also contribute evidence on how to reach these results, based on the study of societies and economies we live in, in terms of socio-economic transformations and related democratic processes and governance, education and training policies, social investment and welfare. Cluster 6, among others, will foster a sustainable, balanced and inclusive development of rural, coastal and urban areas, providing opportunities for synergies with Cluster 2 actions on cultural landscapes, cultural heritage protection, spatial inequalities, migration, demography and well-being.

The cross-cluster complementarities are set out in detail in the Strategic Plan of Horizon Europe for 2021-2024.

In line with the EU's Global Approach to Research and Innovation, and as for the Work Programme 2021-2022, the Work Programme 2023-2025 will remain almost completely open to the participation of non-associated third countries to all Research and Innovation Action (RIA) and Innovation Action (IA) topics. In support of the Global Gateway Strategy³, projects involving international partners should lead to increased scientific knowledge and transfer of technology among partner countries allowing to address global challenges across the world and create sustainable growth and jobs. Cooperation should take place in a value-based way, creating linkages, not dependencies".

The topics in this cluster require the effective contribution of SSH disciplines and the involvement of SSH experts, institutions as well as the inclusion of relevant SSH expertise, in order to produce meaningful and significant effects enhancing the societal impact of the related research activities.

https://ec.europa.eu/info/strategy/priorities-2019-2024/stronger-europe-world/global-gateway_en

DESTINATION: INNOVATIVE RESEARCH ON DEMOCRACY AND GOVERNANCE

The invasion of Ukraine by Russia, which unfolds ominously while this work programme is prepared, has deep and extraordinary consequences on European security, international relations, as well as trust in democratic systems and in the media. However, it cannot be seen as an isolated event. It is part of an accelerated and ever intensifying movement of rejection and challenge of democracy and of the liberal international order. Indexes and reports measuring the overall situation of democracies in the world confirm their increased fragility and vulnerability over the last years: a process labelled as a "long democratic recession", a shift in the nature of "autocratisation" or a "global expansion of authoritarian rule", which quantitatively translates into the increase of the number of countries moving towards authoritarianism and the overall decline of the quality of democracies. ⁴

Interdisciplinary research on the past and present challenges to and facilitators of democracy can help to understand them better, with a view to strengthen their resilience and stability. It will also help to counter the shift from governance based on expertise, rules-based multilateralism and consensual policymaking towards majoritarianism, unilateralism, nationalism, populism and polarisation. It will foster democracy's further development with a view to enhancing representation, participation, openness, pluralism, tolerance, the effectiveness of public policy, non-discrimination, civic engagement, the protection of fundamental rights and the rule of law. These reflect the European Union's values as defined in Article 2 of the EU Treaty⁵.

Expected impact:

Proposals for topics under this destination should set out a credible pathway to contributing to the following expected impacts of the Horizon Europe Strategic Plan:

• Democratic governance is reinvigorated by improving the accountability, transparency, effectiveness and trustworthiness of rule-of-law based institutions and policies and through the expansion of active and inclusive citizenship empowered by the safeguarding of fundamental rights.

The implementation of the research activities of the destination will assist in the reinvigoration and modernisation of democratic governance. The aim is to develop evidencebased innovations, policies and policy recommendations, as well as institutional frameworks

https://freedomhouse.org/report/freedom-world/2021/democracy-under-siege; https://freedomhouse.org/report/freedom-world/2022/global-expansion-authoritarian-rule http://www.v-dem.net/static/website/files/dr/dr_2021.pdf; https://v-dem.net/media/publications/dr_2022.pdf

Cfr. the latest reports from Freedom House or the V-Dem Institute:

Consolidated version of the Treaty on European Union, Title 1 "Common Provisions", Article 2: "The Union is founded on the values of respect for human dignity, freedom, democracy, equality, the rule of law and respect for human rights, including the rights of persons belonging to minorities. These values are common to the Member States in a society in which pluralism, non-discrimination, tolerance, justice, solidarity and equality between women and men prevail".

that expand political participation, social dialogue, civic engagement, gender equality and inclusiveness. Activities will also contribute to enhancing the transparency, effectiveness, accountability and legitimacy of public policymaking. They will help improving trust in democratic institutions, safeguarding liberties and the rule of law and protecting democracy from multidimensional threats. Rich historical, cultural and philosophical perspectives, including a comparative dimension, will set the frame for soundly understanding present developments and help to map future pathways. In the medium to long term, the knowledge, data, scientifically robust recommendations and innovations generated will enhance decision-making on all aspects relevant to democratic governance. As the Destination aims directly at citizen engagement and at producing lasting change, it is of particular importance that the research and innovation actions promote the highest standards of transparency and openness. When applicable, it is encouraged to open up the process, criteria, methodologies and data to civil society in the course of the research.

The following call(s) in this work programme contribute to this destination:

Call	Budgets (EUR million)		Deadline(s)
	2023	2024	
HORIZON-CL2-2023- DEMOCRACY-01	75.00		14 Mar 2023
HORIZON-CL2-2024- DEMOCRACY-01		95.00	07 Feb 2024
Overall indicative budget	75.00	95.00	

Call - Standing up for democracy

HORIZON-CL2-2023-DEMOCRACY-01

Conditions for the Call

Indicative budget(s)⁶

Topics	Type of Action	Budgets (EUR million) 2023	Expected EU contribution per project (EUR million) ⁷	Indicative number of projects expected to be funded
Opening: 14 Dec 2022				
Deadline(s):	14 Mar 2	2023		
HORIZON-CL2-2023-DEMOCRACY-01-01	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2023-DEMOCRACY-01-02	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2023-DEMOCRACY-01-03	RIA	12.00	5.00 to 6.00	2
HORIZON-CL2-2023-DEMOCRACY-01-04	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2023-DEMOCRACY-01-05	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2023-DEMOCRACY-01-06	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2023-DEMOCRACY-01-07	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2023-DEMOCRACY-01-08	RIA	9.00	2.00 to 3.00	3
Overall indicative budget		75.00		

General conditions relating to this call

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The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.

The Director-General responsible may delay the deadline(s) by up to two months.

All deadlines are at 17.00.00 Brussels local time.

The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for years 2023, 2024 and 2025.

Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.

Admissibility conditions	The conditions are described in General Annex A.
Eligibility conditions	The conditions are described in General Annex B.
Financial and operational capacity and exclusion	The criteria are described in General Annex C.
Award criteria	The criteria are described in General Annex D.
Documents	The documents are described in General Annex E.
Procedure	The procedure is described in General Annex F.
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G.

Proposals are invited against the following topic(s):

HORIZON-CL2-2023-DEMOCRACY-01-01: Detecting, analysing and countering foreign information manipulation and interference

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.
Type of Action	Research and Innovation Actions

Expected Outcome: Projects should contribute to all of the following expected outcomes:

• Protect democratic processes in the EU from Information Manipulation and Interference (FIMI) ⁸ by foreign actors while preserving the fundamental rights and freedoms underlying these processes.

Foreign Information Manipulation and Interference (FIMI) describes a mostly non-illegal pattern of behaviour in the information domain that threatens or has the potential to negatively impact values, procedures and political processes. Such activity is manipulative in character, conducted in an intentional and coordinated manner, often in relation to other hybrid activities. Actors of such activity can be state or non-state actors, including their proxies inside and outside of their own territory. FIMI is to be understood within the wider context of hybrid threats, of which it is one concrete modality. A

- Increase our ability to pro-actively detect, analyse and counter foreign attempts to harm the integrity of our democratic processes by creating a better understanding of the Tactics, Techniques, and Procedures (TTPs) involved in these attempts, with the aim to improve our ability to technically attribute them to specific foreign actors.
- Increase our understanding of the behavioural and societal effect both short- and long-term of those attempts.
- Develop and extend the solution-space for policymakers, private stakeholders, and civil
 society actors to counter FIMI and raise resilience to it. Also, improve our understanding
 of the efficiency and potential negative side-effects of such solutions and propose
 mitigating measures.
- Improve our normative and theoretical understanding of the tensions between the value/norm of a free, pluralistic, and democratic society, FIMI, and domestic antidemocratic forces.

<u>Scope</u>: Foreign Information Manipulation and Interference (FIMI) is a key global challenge and needs to be addressed in full respect of fundamental rights like the freedom of speech, freedom of expression and media freedom. A pre-condition for counter-acting efforts to undermine such democratic values is an understanding of the Tactics, Techniques, and Procedures (TTPs) used to manipulate information environments in an intentional, harmful and coordinated manner. Understanding these TTPs and having the means to share them with stakeholder and partners, allow democratic governments to impose costs and efficiently disrupt the 'supply chain' for manipulated information.

This research will therefore look at (1) how to create a common understanding of parameters needed to provide technical attribution, (2) how these TTPs can be identified and gathered and (3) how they can be stored and shared in an adequate privacy-compliant environment. While there are existing proposals (like the DISARM framework 10), more research is needed on the practicability and potential pitfalls of these frameworks. There are also ongoing efforts to create an interoperable Information Sharing and Analysis Centre (ISAC) 11 which would provide a means for the various stakeholders to systematically and efficiently exchange information of TTPs used by threat actors, to which this research could contribute.

As most of the activities qualified as FIMI are not defined as "illegal" under national and international law, another important research angle is to what extent FIMI is used in conjunction with illegal activity such as cyber-attacks or hate speech. More specifically, the research should look at the following specific contexts in which TTPs may appear: how

conceptual model of hybrid threats can be found in "The landscape of hybrid threats" (https://op.europa.eu/s/vUUk)

See the European Parliament resolution of 9 March 2022 on foreign interference in all democratic processes in the EU, including disinformation (2020/2268(INI)): https://www.europarl.europa.eu/doceo/document/TA-9-2022-0064_EN.pdf

https://www.disarm.foundation/framework

https://euhybnet.eu/wp-content/uploads/2022/02/EU-HYBNET Policy-Brief -Information-Manipulation-and-Interference_Feb-2022.pdf.

foreign actors use proxies within their own territory and abroad to support their activities; how TTPs related to FIMI are used in combination with TTPs outside the FIMI remit, such as cyber criminality; how FIMI campaigns may target individual policymakers and/or social groups in attempts to influence decision-making processes in politics, economy or societal affairs, taking into account relevant characteristics of the targeted groups (e.g. gender, socioeconomic background, ethnicity). Likewise, the connections between foreign actors and their ecosystem with domestic democratic and anti-democratic forces should be explored – how do they influence each other, how do they align their TTPs and/or how could connections be addressed politically, without interfering in the democratic process. Other forms of foreign interference like elite capture, the use of foreign direct investment, or threats of armed attacks as means of influence, are also in the scope of the research this topic aims to cover. Contributions from behavioural, cognitive, political, legal and communication disciplines, among others, should ensure the required multidisciplinary coverage of such a research plan.

Based on these insights and research, response options should be proposed to give policymakers, but also stakeholders from civil society and private industry, solutions and options to implement as appropriate. These should take into account existing responses and tools, thereby extending and improving the solution space. All the possible response options need to be in full respect of fundamental rights and freedoms and potential risks of any such options should be outlined, e.g. how illiberal democracies, authoritarian regimes and domestic anti-democratic forces could exploit them for their own purposes. Given the very intense ongoing multilateral efforts to tackle this threat, international cooperation is strongly encouraged.

Proposals are encouraged to develop links and use outcomes in particular from the projects financed under HORIZON-CL3-2021-FCT-01-03: Disinformation and fake news are combated and trust in the digital world is raised. They should also foresee appropriate collaboration with the ongoing Horizon 2020 action EU-HYBNET ¹². Clustering and cooperation with other selected projects under this call and other relevant projects are strongly encouraged.

HORIZON-CL2-2023-DEMOCRACY-01-02: Developing a better understanding of information suppression by state authorities as an example of foreign information manipulation and interference

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.

https://cordis.europa.eu/project/id/883054

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<u>Expected Outcome</u>: Projects should contribute to all of the following expected outcomes:

- Better understanding on how to protect fundamental rights and freedoms from possible threats stemming from the use of information suppression as part of Foreign Information Manipulation and Interference (FIMI¹³) by authoritarian regimes.
- In-depth conceptual and practical understanding of how authoritarian states worldwide have used and use information suppression and the specific Tactics, Techniques, and Procedures (TTPs) involved in their foreign policy, foreign information manipulation operations.
- Increased understanding of the behavioural and societal effect both short- and long-term of information suppression.
- Develop policy recommendations, toolkits and methodologies to detect and address information suppression in the EU, associated and third countries.

Scope: Foreign Information Manipulation and Interference (FIMI) goes beyond the muchused concept of "disinformation", which focusses on the active promotion of messages and pushing out of false/misleading content. FIMI also includes other aspects of how the information environment and civic discourse can be manipulated, notably through the suppression of independent and critical voices. Information suppression can take many forms but has the opposite goal to active promotion of messages. It aims to eliminate – or suppress – from the public sphere certain voices or messages. Information suppression by authoritarian actors can be domestic but also reach outside of their borders. Domestic information suppression has been observed, for instance, surrounding the Russian invasion of Ukraine with a large scale crackdown on freedom of speech and freedom of the media (including social media) and cutting internet connections and access to mobile data use. Information suppression is also systematically employed by the Chinese Communist Party domestically but also outside of its borders.

Different facets of information suppression should be examined by means of multidisciplinary approaches bringing together historical, social, legal, political, behavioural and communication disciplines among others. Which countries outside the EU have used information suppression in a systematic manner as part of their policies and how could a conceptual definition of information suppression look like to incorporate all parts of such activity? This should include a collection of cases and examples of information suppression

(<u>https://op.europa.eu/s/vUUk</u>)

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conceptual model of hybrid threats can be found in "The landscape of hybrid threats"

Foreign Information Manipulation and Interference (FIMI) describes a mostly non-illegal pattern of behaviour in the information domain that threatens or has the potential to negatively impact values, procedures and political processes. Such activity is manipulative in character, conducted in an intentional and coordinated manner, often in relation to other hybrid activities. Actors of such activity can be state or non-state actors, including their proxies inside and outside of their own territory. FIMI is to be understood within the wider context of hybrid threats, of which it is one concrete modality. A

by different actors to establish such a conceptual definition and create an evidence base. The research should also look at both the domestic and cross-border dimensions of suppression and catalogue the tactics, techniques and procedures (TTPs) that have been used to suppress information by different actors. This should focus on different aspects, ranging from the individual (harassment, intimidation, etc.)¹⁴ to the society (restriction of fundamental rights and freedoms, including repression of women and minority rights) to the media (restriction of media freedom, pressuring foreign media outlets or journalists), academia (instigating self-censorship, using visa or archive access to pressure foreign researchers) as well as pressure on private industry (forcing social media companies to comply with national, authoritarian rules; using economic coercion to force international companies to be silent on certain issues, etc). A compendium of such TTPs should be created, with examples of such TTPs to document their use.

Information suppression can target any critical and independent voice; however, targeting the diaspora outside of the country's territory has been observed as one vector. The research should generate an understanding of how diaspora communities are being targeted by information suppression and how FIMI actors try to co-opt them as agents of information suppression.

This research will generate a better understanding of the functioning of information suppression as well as its behavioural and societal effects (e.g. self-censorship etc.). This research should contribute to an analytical methodology of how to identify and analyse information suppression in its different forms; it should give policy recommendations on how to reduce the vulnerability to information suppression, how to protect the targets of information suppression and how to respond to it. The policy recommendations, toolkits and methodologies on how to identify information suppression and protect against it should be made accessible to civil society and stakeholders.

Proposals are encouraged to develop links and eventually use outcomes from the projects financed in particular under HORIZON-CL3-2021-FCT-01-03: Disinformation and fake news are combated and trust in the digital world is raised. Clustering and cooperation with other selected projects under this call and other relevant projects are strongly encouraged.

HORIZON-CL2-2023-DEMOCRACY-01-03: New approaches for combatting corruption and other undue influences on political decision-making

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 5.00 and 6.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.

See the Commission's initiative of 27 April 2022 to protect journalists and human rights defenders against the phenomenon of Strategic Lawsuits against Public Participation (SLAPPs).

Indicative budget	The total indicative budget for the topic is EUR 12.00 million.
Type of Action	Research and Innovation Actions

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Increased knowledge and data on political corruption and other undue influences¹⁵ on policymaking and policy implementation, and on how these impact the understanding of democracy and rule of law and the adherence of citizens to those values.
- Advance knowledge on the use of technologies (including AI, blockchain, encrypted data analysis...) to prevent and detect corruption and other undue political influence in the EU and its neighbourhood.
- Reinforce national and EU legislative tools for preventing and fighting corruption, so as
 to bridge the gap between a fertile corruption measurement landscape and the different
 levels of commitment shown by governments to the prevention of and fight against
 corruption.

<u>Scope</u>: Beyond its financial and economic costs, corruption and undue influence – whether real or perceived – erodes the social contract underpinning democracies, and hence the system's credibility and legitimacy. By undermining democracy and exacerbating inequalities, corruption and policy/state/ elite capture in general decrease the legitimacy of the democratic system and pave the way for citizen's distrust and populist narratives. Despite abundant strategies, toolkits, approaches and indicators produced over the last two decades to win the fight against corruption, it can be argued that the practical results of anticorruption efforts have been disappointing. The problem appears resistant to solution and new / digitally enabled forms of undue influence seem to emerge.

Corruption and anticorruption are about human behaviour and require therefore multifaceted and multidisciplinary research. Proposals should aim at bringing together the contributions from behavioural and political economists, psychologists and anthropologists, historians, lawyers, political scientists, communication scholars, etc. Their research findings should contribute to a deeper understanding of corruption and further the evaluation of the quality of democracy and good governance. Proposals under this topic should aim at reproducing the level of ambition, both in terms of consortium composition and the breath, range and duration of their research plan, of the FP7 collaborative project ANTICORRP.¹⁶

On the conceptual level, research under this topic should build a solid and encompassing understanding of (i) the cross-border character of new expressions of political corruption involving a constellation of actors cutting across the political, administrative, financial and

Anticorruption policies revisited. Global trends and European responses to the challenge of corruption: https://cordis.europa.eu/project/id/290529

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According to the OECD, undue influence is the act of attempting to influence the design, implementation, execution and evaluation of public policies and regulations administered by public officials, whether by providing covert, deceptive or misleading evidence or data, by manipulating public opinion or by using other practices intended to manipulate the decisions of public officials.

commercial spheres; (ii) integrity and its relationship to corruption and the requirements of effective models of integrity management, both in the public and private sectors; (iii) the role played by the data analytics sector in political communication to malignly influence and disrupt politics in foreign jurisdictions; (vi) and the role played by investigative journalism in strengthening accountability by revealing transnational corruption and illicit financial flows. Studying, especially through comparative and historical research, rhetorical, linguistic and cultural aspects of corruption will help to develop a stronger theoretical ground for the critical analysis of social representations of corruption. The role of education and media, in particular social media, and their impact on how corruption is socially constructed, perceived and dealt with in the public sphere, deserves special attention.

On the practical side, international cooperation is encouraged, in particular with countries from the EU Neighbourhood and accessing countries. Proposals should look at tools to strengthen public-private partnerships for fighting corruption, including inter-institutional and inter-sectorial collaborations among different stakeholders (such as small/large enterprises mentorship), or transparent guidelines for the inclusion of interest groups in political processes. Understanding the potential use of technologies (e.g. artificial intelligence, encrypted data analysis, blockchain, building information modelling...) to detect, prevent and combat corruption and other undue influences should receive particular attention, without overlooking their potential misuse. The analysis of open government experiences and dissemination of practices of civic tracking systems, as opportunities of transparency and prevention of corruption, may also contribute to the assessment of the hopes and challenges of digital anti-corruption efforts. While abundant corruption indexes help to understand different angles of this problem, most of them are perception based and/or focus on particular issues. Overall overviews of corruption within the EU are difficult and proposals should aim to overcome this shortfall.

Proposals are encouraged to seek synergies and collaboration whenever possible with projects funded under the topic HORIZON-CL3-2022-FCT-01-05: Effective fight against corruption.

Clustering and cooperation with other selected projects under this topic and other relevant projects are strongly encouraged.

HORIZON-CL2-2023-DEMOCRACY-01-04: The emotional politics of democracies

Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.	
Type of Action	Research and Innovation Actions	

Eligibility conditions	The conditions are described in General Annex B. The following exceptions apply:
	The Joint Research Centre (JRC) may participate as member of the consortium selected for funding.

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Better informed political decision-making through a thorough understanding of the interactions between emotions, values, identities, collective and individual experiences, and beliefs in informing political decision-making, and how they impact democratic governance.
- Better integration of the emotional dimension of politics in policies to foster and promote European democracies and values.
- Boosted trust in governance through improved attention towards the emotional needs of citizens, and establishment of emotional ties when developing and communicating policies.
- Improved communication of evidence-based policies that resonate with the emotional needs and conditions of citizens.
- Enhance scientific evidence, from multidisciplinary disciplines, around emergent social
 interaction and communication concepts for the upcoming era of digital universes and
 intertwined real and virtual life. Build scenarios on how this may impact democracies
 and propose policy recommendations accordingly.

<u>Scope</u>: With a rise in polarisation and affective citizenship in European democracies, the role of emotions has become central in debates about democracy. This has become more evident when considering the role of social media and certain political narratives in targeting and capitalising on such emotions.

In this context, proposals under this call should examine the role of affect and emotions (such as hope, resentment, happiness, fear, dissatisfaction, frustration, solidarity, hatred, envy, shame, pride, humiliation, etc.) in European democracies, how they interact with values, identities ¹⁷, experiences and beliefs, and how this impacts democracies and democratic governance.

Using longitudinal analyses and cross-country comparisons, proposals would contribute to understanding how changing emotional landscapes, feeling rules, display norms and shifts in popular feelings interact with practices and values core to democratic politics. Examples of this might include, but are not limited to, participation and political mobilisation; voting trends; trust, disinformation and post-truths; identitarian movements; activism and social movements; collective action and collective responsibility; extremism, etc. Proposals are

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See for instance the JRC's "Values and Identities – a policymaker's guide": https://knowledge4policy.ec.europa.eu/projects-activities/values-identities-policymakers-guide_en

encouraged to consider political narratives, campaigns and styles of leadership that build on such emotional politics, and the role of traditional and social media in fostering such public emotions.

Proposals are invited to use current events as case studies. Climate change, the COVID-19 pandemic and its consequences, as well as the brutal aggression of Ukraine by Russia, elicit a variety of collective emotions (anxiety, pessimism, nostalgia, etc.), which have broader societal and political implications. Emotion-based responses to these crises (e.g. blaming others, outgroup hostility, hope for the better future, collective solidarity, etc.) correlated with socio-demographic and political factors (including dis/trust in political institutions and leaders, perception of in/efficacy, dis/interest in politics etc.) might have an impact on political participation patterns. What might it be? And in what ways can emotional resilience be increased in a post-pandemic Europe? Proposals are also encouraged to evaluate the role and use of emotions in political communication.

In addition, proposals should ideate and pilot innovative ways to build on the emotional dimension of democracies to foster and promote democratic practices and European values. They should also provide concrete guidelines on how to better listen to the emotional needs of citizens and take them into account when developing policies, with a view to boost trust in governance. This includes exploring better ways to communicate evidenced-based policies that resonate with the emotional needs of citizens and create emotional ties. Proposals can also put forward training or awareness raising activities to ensure informed decision-making.

Finally, proposals should provide a robust evidence base and forward-looking scenarios around emergent social interaction and communication concepts for the upcoming era of digital universes and intertwined real and virtual life. At a time when social media monetise emotions, and with the growing popularity of metaverses and multiverses, how emotions displayed in and arising from digitally-mediated communication may impact democracies should be investigated.

Researchers are encouraged to use a combination of methods from different fields, to build novel and mixed-methods research designs, concepts and theories that allow understanding the interplay between emotion and democratic politics.

Case studies may include countries outside of the European Union and Associated Countries, with a view to shed light on the target geographical area by way of comparison.

Proposals are encouraged to seek synergies and collaboration whenever possible with relevant projects selected under previous EU-funded calls. ¹⁸ Clustering and cooperation with other selected projects under this topic and other relevant projects are strongly encouraged.

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For instance under the topic HORIZON-CL2-2022-DEMOCRACY-01-05: Evolution of political extremism and its influence on contemporary social and political dialogue, and the JRC initiative for Meaningful and Ethical Communication (Enlightenment 2.0, https://knowledge4policy.ec.europa.eu/evidence-informed-policy-making/topic/enlightenment-20 en).

HORIZON-CL2-2023-DEMOCRACY-01-05: The climate imperative and its impact on democratic governance

Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.	
Type of Action	Research and Innovation Actions	

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Enhance the ability of democratic governance to address complex and long-term challenges, through better understanding of the socio-political dimension of the climate crisis (including climate movements) and its impact on democratic governance, participation and social cohesion; the impact of the green transition on public governance and democratic practices, their legitimacy and responsiveness; and the increasing role of non-majoritarian institutions in decision-making.
- Enhance the capacity of democratic governance to mobilise and engage citizens through
 participation, and better-informed decision-making and communication to citizens on
 climate related policies, based on learnings from the management of the COVID-19
 pandemic, disaster and end-time scenarios analysis, and other historic examples for such
 political and societal imperatives.
- Improve policymaking approaches at all levels of government through recommendations to address the climate imperative in a democratic manner supported by citizens, balancing it with other policy imperatives, including the role of education in fostering climate literacy.
- Encourage international cooperation through better understanding of the supranational challenges of the climate crisis, and of the consequences of climate crisis scenarios on demand for democratic structures, international politics and citizen engagement.

<u>Scope</u>: Climate movements have highlighted the question of whether urgent climate goals can be met while respecting democratic processes, maintaining trust, legitimacy and efficiency of democratic institutions. A large segment of society, on the other hand, perceives the changes on their personal lifestyle needed to mitigate or adapt to climate change as too burdensome, or focuses on other priorities, e.g. policy imperatives linked to financial or security issues. Policies adopted under the climate transition will not be pain-free, increasing the difficulty for democratic governments seeking re-election to legislate effectively to meet the demands of the climate crisis. Social inequalities increase the risk that the less advantaged segments of society will be more negatively impacted by the climate crisis and policies made for the

climate transition. The common global goals for the climate transition also highlight the deficiencies of governance on supranational issues.

At the same time, the climate imperative also opens up avenues for innovative civic participation in an existential policy area.

Thus, proposals under this topic should help reinvigorate democratic governance by suggesting pathways for improved effectiveness of rule-of-law based institutions and policies, notably pathways for open government practices that enable active civic participation throughout the policymaking process. They should help strengthen social and economic resilience and sustainability through a better understanding of the relationship between democratic governance and the climate imperative.

Proposals should use the lessons of history as well as analysis of the current situation and best practices to make policy recommendations for the future. In the light of existing tensions between democratic governance and climate imperatives, proposals should examine how societies have dealt with bottom-up participation in the past, whether more inclusive and politically democratic societies are better able to develop prevention and mitigation policies, and what new structures we need to tackle the climate imperative, to effectively address its complexity, urgency, and long-term impacts. Proposals are encouraged to consider social innovation activities to stimulate social change, new social practices, social ownership or market uptake. Gender and intersectional aspects (e.g. ethnicity, socioeconomic background) should be considered, particularly regarding citizen engagement, civic participation, and climate literacy.

Proposals should seek synergies and complementarity with other clusters, partnerships and missions of the Horizon Europe Programme, notably the Clean Energy Transition Partnerships, as well as with other EU programmes and financing instruments to maximise its impact in the long term. Proposals within this call can be the needed link to get the project outcomes out of partnerships to the policymakers who can directly implement them for maximum effective results. Clustering and cooperation with other selected projects under this topic and other relevant projects are strongly encouraged.

HORIZON-CL2-2023-DEMOCRACY-01-06: Democratic governance for times of disruptive changes to the social contract

Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.	
Type of Action	Research and Innovation Actions	

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Better understanding of ways to account for the need for evaluation and changes in the social contracts in the EU Member States countries through theoretical, philosophical, political, historical, legal, normative and comparative studies, amongst others.
- Investigate and propose safeguards and mechanisms that need to be in place in those circumstances when questioning the very foundations of the social contract.
- Scenarios for how new social contracts in EU Member States could look like or approaches for how to develop the narratives for new social contracts, accounting for the fact of the EU membership and the rights and duties that go with it.

<u>Scope</u>: A social contract is the intellectual construct referring to the agreement between members of a society, community, or organisation that spells out the obligations, functions, and rights of each citizen agreeing to the contract. The classic concept of social contract also implies the notion of the individual renunciation of some freedoms, in exchange for core public goods, including the right to democratic participation and the protection that societal life can offer. When the social contract fails to uphold its end of the bargain and leaves its citizens disappointed, there is a risk of social unrest and political instability. The COVID-19 pandemic exposed social and economic inequalities, leading to calls for a new social contract at national, EU and global levels based on inclusivity, participation and sustainability. Such calls may include requests for new articulations of the basic justifications, functions, rights and duties of democratic societies and their citizens likewise.

Some societies flourish while others struggle to maintain the social fabric, hardly avoiding the breakdown of their social contracts. Certain forms or configurations of the social contract appear more successful than others, and not necessarily because of their immutability or endurance. Instead, flexibility, adaptability, trust and resilience seem to be factors of success, in particular vis-à-vis external shocks or disruptive forces (a pandemic, abrupt technological changes, wars...). Such disruptions may hit a pre-exiting equilibrium, bringing to the light dimensions unforeseen by the existing social contract and putting it under stress. In such situations, the social contract could withstand, in the case of better prepared societies, and continue delivering after necessary adaptations, or alternatively could break up, not resisting the pressure, and open the door to the establishment of a new contract through some dramatic or arduous exercise.

In order to identify the factors that drive, or contribute to, the social success of certain societies and their social contract models, proposals are invited to use narrative approaches (historical, legal, anthropological methods and analysis) or data-driven / computer-based approaches, or mixed approaches. In terms of the geographical scope of the research, proposals should focus on EU and/or Member States societies, while international cooperation allowing comparative perspectives in view of extrapolations relevant to EU policies is also encouraged.

Clustering and cooperation with other selected projects under this topic and other relevant projects are strongly encouraged.

HORIZON-CL2-2023-DEMOCRACY-01-07: Intersectionality and equality in deliberative and participatory democratic spaces

Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.	
Type of Action	Research and Innovation Actions	
Eligibility conditions	The conditions are described in General Annex B. The following exceptions apply:	
	The Joint Research Centre (JRC) may participate as member of the consortium selected for funding.	

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Develop a thorough theoretical understanding of deliberative and participatory democratic practices through an intersectional lens that engages with structures of power, and identify limitations and opportunities for improvement of such spaces.
- Enhance the design, implementation and evaluation of deliberative and participatory processes at different levels of government (local, regional, national, European), with a focus on marginalised and vulnerable communities, by including an intersectional approach that allows accounting for power relations at all processes of design.
- Develop and pilot innovative designs for citizen engagement that consider intersectionality and allow for other types of participation and deliberation, and enhancing democracy, by addressing political inequality in such participatory spaces.

<u>Scope</u>: There has been a recent push to overcome the limits of representative democracy and reinvigorate democratic participation through participatory and deliberative democratic innovations at local, regional, national and European level. Such processes have aimed to bring power and decision-making closer to citizens, and have contributed to reimagining the meaning of democracy and to further fostering the involvement of citizens in democratic life.

Nevertheless, difficulties remain as regards the meaningful involvement of minorities and marginalised communities. Despite the implementation of quotas and processes to ensure parity in such democratic spaces, ensuring equality has been proved to be a challenge. In many cases, when the principle of parity has been achieved, there has been a difficulty to

ensure meaningful engagement and safe and equal spaces for all. And while many efforts are focused on better including under-represented groups into such spaces, less actions are targeted at making majority populations and non-marginalised communities more understanding and tolerant towards so-called, perceived 'Others'. Proposals should contribute to reinvigorating democracy and enhancing citizen participation by designing, envisioning and piloting processes of democratic innovation where overcoming the accumulation and intersection of discrimination or stigmatisation is a core part of the process.

For this, proposals should offer both conceptual and practical insights into designing, implementing and evaluating more inclusive participatory processes. Thus, research should help to identify the limitations of participatory exercises, and draw power analysis that provide insights into the systemic exclusion and reproduction of inequalities in certain democratic spaces. This could also include behavioural insights to enhance participation of marginalised groups and the deconstruction of biases or unwelcoming practices by majority groups and privileged communities. Furthermore, they should contribute to innovation through the piloting and testing of alternative models of participatory democratic practices and mini publics that allow for meaningful engagement between marginalised or vulnerable communities and mainstream communities (counter/alternative publics, community deliberation, intercultural dialogues, multilevel deliberations, theatre and artistic interventions, etc.). This should take into account the challenges marginalised communities face in different geographic locations, such as rural and urban areas. Proposals may consider the role of digital technologies in such innovative designs.

Proposals may draw on the results of deliberative / participatory democracy related EU projects, in particular under Horizon 2020. Clustering and cooperation with other selected projects under this topic and other relevant projects are strongly encouraged.

Proposals are encouraged to collaborate with the JRC Competence Centre on Participatory and Deliberative Democracy, ¹⁹ particularly with respect to the design and evaluation of innovative and inclusive participatory processes, including concepts, frameworks and implementation thereof as part of alternative models of participatory democratic practices.

HORIZON-CL2-2023-DEMOCRACY-01-08: Political perspectives for the Eastern Neighbourhood and the Western Balkans

Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.	

https://knowledge4policy.ec.europa.eu/participatory-democracy_en

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Type of Action	Research and Innovation Actions
Eligibility conditions	The conditions are described in General Annex B. The following exceptions apply:
	The following additional eligibility criteria apply: In order to achieve the expected outcomes of the action, the consortium must include at least one entity from the following countries: Georgia, Republic of Moldova or Ukraine.

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Improvement of the European Union's neighbourhood policy and accession process, thanks to a clear vision for the political agenda of the European Union towards the Eastern Neighbourhood countries and the Western Balkans, based on a deep and nuanced analytical basis.
- Forecast and scenarios of the geopolitical ambitions of Russia, China and other countries towards the countries of the Eastern Neighbourhood and accession candidates.
- Strengthened resilience and foreign policy arsenal of the European Union against military threats on the European continent thanks to policy recommendations.

Scope: The political and economic consequences of the Russian invasion of Ukraine go well beyond Ukrainian borders. The European Union had to change overnight from a neighbourhood policy focused on incremental reform to one that is about the survival of some Eastern Neighbourhood countries as independent, self-determined states. Ukraine's application for European Union membership has been immediately replicated by Georgia and Moldova. Russian and Chinese influence in some accession candidate countries is on the rise. This opens crucial questions about the European Union's enlargement strategy, requiring not only political answers but also academic reflection and expertise. Therefore, proposals are expected to analyse the European Union's current neighbourhood and enlargement strategy and toolbox in the light of the new situation where military aggression or the threat with it and political exploitation of economic dependencies are once more used as foreign policy tools in Europe. Based on this, they should provide innovative perspectives on the origins and evolutions of policies aimed at stabilising and democratising the Eastern Neighbourhood along with evidence-based policy options to adapt this strategy to the new state of play.

Furthermore, in the context of the accession process, there is need to strengthen mechanisms of compliance with the acquis in the area of social policies and to strengthen social cohesion to avoid brain drain and care drain in Eastern Partnership and Western Balkans countries.

Proposals are invited to take this dimension into account when developing robust evidence-based, forward-looking visions for the political agenda of the European Union towards the Eastern Neighbourhood and the Western Balkans.

In addition, the Russian ambition to have a sphere of influence in the former Soviet Union countries puts governments in the Eastern Neighbourhood in a much more vulnerable position. It increased their dependencies on big geopolitical powers, be it the West, China or Russia. It also highlighted Russia's ambition to play an even more decisive political role in the larger region, including the power to install governments of its choice through a return to Cold War tactics. Is this shift back to brutal military intervention the sign of a new age in international relations and new geopolitical blocks? Proposals are expected to analyse and forecast possible scenarios regarding Russia, but also China and other countries' geopolitical ambitions towards the countries of the Eastern Neighbourhood, grounded in a historical perspective. Based on sound and robust analyses, they should provide policy recommendations, scenarios and options to strengthen the Union's resilience and diplomatic arsenal in a potential new era of military intervention on the continent. They are also expected to provide evidence-based advice on whether the European Union should factor military interventions into its foreign policy toolbox, and offer perspectives as to what implications that would entail.

Proposals are strongly encouraged to involve stakeholders, including non-state actors and citizens, from the countries in the topic scope. The consortium must include at least one entity from the following countries: Georgia, Republic of Moldova or Ukraine. Legal entities from these countries must take part in the project as beneficiaries.

Participation of Ukrainian researchers in exile with refugee status and employed by eligible beneficiaries is strongly encouraged and would be an asset.

International cooperation is strongly encouraged.

Proposals are encouraged to network with and build on previously funded projects under the Horizon Europe calls²⁰, Horizon 2020 or other EU programmes, e.g. Global Europe²¹, as appropriate. Clustering and cooperation with other selected projects under this topic and other relevant projects are strongly encouraged.

Call - Past, present and future of democracies

HORIZON-CL2-2024-DEMOCRACY-01

Conditions for the Call

Indicative budget(s)²²

in particular HORIZON-CL2-2022-DEMOCRACY-01-09: Global governance for a world in transition: Norms, institutions, actors, HORIZON-CL2-2021-DEMOCRACY-01-04: Democratic politics in the EU's neighbourhood, as well as other relevant projects funded under other clusters and pillars of Horizon Europe.

^{21 &}lt;u>https://ec.europa.eu/international-partnerships/global-europe-programming_en</u>

The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.

The Director-General responsible may delay the deadline(s) by up to two months. All deadlines are at 17.00.00 Brussels local time.

Topics	Type of Action	Budgets (EUR million)	Expected EU contribution per project (EUR million) ²³	Indicative number of projects expected to be funded
Opening: 0	04 Oct 20	23		
Deadline(s):	07 Feb 2	024		
HORIZON-CL2-2024-DEMOCRACY-01-01	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2024-DEMOCRACY-01-02	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2024-DEMOCRACY-01-03	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2024-DEMOCRACY-01-04	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2024-DEMOCRACY-01-05	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2024-DEMOCRACY-01-06	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2024-DEMOCRACY-01-07	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2024-DEMOCRACY-01-08	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2024-DEMOCRACY-01-09	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2024-DEMOCRACY-01-10	RIA	6.00	2.00 to 3.00	2
HORIZON-CL2-2024-DEMOCRACY-01-11	RIA	4.00	3.00 to 4.00	1
HORIZON-CL2-2024-DEMOCRACY-01-12	CSA	4.00	3.00 to 4.00	1
Overall indicative budget		95.00		

General conditions relating to this call	
Admissibility conditions	The conditions are described in General Annex A.
Eligibility conditions	The conditions are described in General Annex B.

The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for years 2023, 2024 and 2025.

Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.

Financial and operational capacity and exclusion	The criteria are described in General Annex C.
Award criteria	The criteria are described in General Annex D.
Documents	The documents are described in General Annex E.
Procedure	The procedure is described in General Annex F.
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G.

Proposals are invited against the following topic(s):

HORIZON-CL2-2024-DEMOCRACY-01-01: Protest politics and cultures of opposition in democracy

Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.	
Type of Action	Research and Innovation Actions	
Eligibility conditions	The conditions are described in General Annex B. The following exceptions apply:	
	The Joint Research Centre (JRC) may participate as member of the consortium selected for funding.	

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Practical understanding of the role and evolution of all forms of opposition (protest, cultural opposition, non-compliance, subversion, activism), their different platforms (physical and online), and their impact on democracy, including in resisting the rise of authoritarian tendencies and in taking down authoritarian regimes.
- Policy recommendations based on a deep analysis of the potential shift from traditional
 party structures to social mobilisation and activism as means for democratic
 participation, including drivers and factors that might play a role in fostering such forms
 of politics.

- Innovative forms of non-conflictual constructive engagement, which can channel social and community mobilisation and protest resulting from lack of/limited channels for democratic civic engagement and collective political action.
- Rebuilding citizens' trust in the impact and validity of electoral processes at various levels.

<u>Scope</u>: Citizens increasingly disengage from traditional party politics and voting as a way to express political views, values and beliefs. On the other hand, recent years have seen diverse forms of political protest, social and artistic movements and activism, flourish both offline and online. In fact, the Eurobarometer Youth Survey 2021 showed that a majority of young people in Ireland, Spain and Belgium, amongst others, consider participating in forms of street politics equal to, or more effective, than voting.

Research proposals under this topic should analyse further the shift towards politics of collective action, and their impact on European democracies, including their role in resisting the rise of authoritarian tendencies and in taking down authoritarian regimes. This could refer to both online and offline forms of collective political action, including artistic forms of protest (audiovisual art, literature, music, etc.). Proposals should consider drivers and factors that play a role in fostering such forms of politics (emotional, gender, socioeconomic, cultural, historical, generational, geopolitical, geographical etc.), including the role of social media platforms. This should be contextualised in a historical study of the role of protest movements and their impact on democracy. Proposals may analyse local, regional, national as well as transnational movements, mobilisation, and democracy within the European Union.

Proposals should consider the relationship between (i) collective action as a way to channel democratic grievances and (ii) limited channels for citizen participation, thus analysing the implications of further citizen support for democracy combined with the dissatisfaction with the current democratic channels (with a special focus on accessibility and inclusiveness of democratic channels such as voting for vulnerable people, mobile citizens, migrants, etc.). This could also mean exploring self-organised alternative forms of citizen participation (such as assemblies) and other innovative forms of non-conflictual constructive engagement.

The growing defiance towards the 'usefulness' of voting and electoral processes should also be addressed. Voting abstention as a mean to protest against a perceived lack of options, and how to remediate disengagement with electoral processes, can be a particular focus. Proposals should propose concrete paths to rebuild citizens' trust in the impact and validity of electoral processes at various level, from local to European.

Special attention could be put on younger generations, who have vastly participated in shaping the public sphere with their activism in movements such as Pride, Fridays for Future and feminist mobilisations. A focus could also be on violence and extremist movements' influence, for instance on protests against COVID-19 public health measures. How social networks act as a factor to increase societal resilience and as a way to pressure political change could also be investigated. Finally, how formal education contexts are integrating these new manifestations into citizenship education could also be explored. As new forms of

political participation are still very much urban-based, proposals should include a specific focus on how to constructively channel rural youth's discontent.

Proposals are encouraged to make use of participative methodologies and to draw on a combination of methods and literature.

In order to achieve the expected outcomes, international cooperation is encouraged in particular with countries from the MENA region.

Clustering and cooperation with other selected projects under this topic and other relevant projects are strongly encouraged.

Proposals are encouraged to collaborate with the JRC Competence Centre on Participatory and Deliberative Democracy,²⁴ particularly in respect to innovative forms of non-conflictual constructive engagement and its potential to transform democracies and democratic systems.

HORIZON-CL2-2024-DEMOCRACY-01-02: Multilevel governance in times of digital and climate transitions

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.
Type of Action	Research and Innovation Actions
Eligibility conditions	The conditions are described in General Annex B. The following exceptions apply:
	The Joint Research Centre (JRC) may participate as member of the consortium selected for funding.

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Encourage international cooperation through better understanding of the articulation between local, regional, international and transnational governance.
- Encourage the development and implementation of policy in two areas of transnational and multi-level importance: the digital and climate transitions, also taking into account how does the division of policy ownership in multi-level governance systems impact the effectiveness of policymaking in these two policy areas.

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- Lead to better-informed decision-making and policy implementation at national and EU levels, based on the identification of where the tensions and the opportunities are in top-down and bottom-up policymaking. The development of community-based innovations in the field of democratic governance and processes, notably at the level of cities and regions, and evaluation of their implications for social development, cohesion and inclusion.
- Provide policy recommendations on improvements and alternative pathways for the national and local implementation of EU law that are endorsed by the targeted public administrations, including through experimentation in deliberative processes.

<u>Scope</u>: The threat of climate change will require changes in the ways in which we organise our societies, action at all levels of government, and coordination between these levels so that actions are taken at the most appropriate one and complement each other effectively. Optimising complementarity will also be important to face the challenge of staff shortage to tackle the climate transition.

The digital transition is also at the heart of the question of multi-level governance of major transitions: for instance, the COVID-19 pandemic has changed practices, and shown that further paths can be followed in order for digitalisation to be moulded to benefit the climate, and society.

The EU Green Deal and digital strategy, and their national and local implementation strategies, are the policy roadmaps to be examined under this topic.

Proposals should analyse how different levels of government in the EU work in developing and implementing policy on the digital and climate transitions. Where is collaboration and collective agenda-setting most effective, in order for climate and digital roadmap goals to be met? How does the division of policy ownership in multi-level governance systems impact the effectiveness of policymaking in these two policy areas: where are the gaps, and where are the duplications? Questions of responsiveness and legitimacy might also be considered.

Proposals should also analyse the development of community-based innovations in the field of democratic governance and processes, notably at the level of cities and regions, and evaluation of their implications for social development, cohesion and inclusion.

Given the very particular situation of border regions, proposals could analyse innovative legal instruments, organisational set-ups, cross-border democratic processes that strengthen cross-border cooperation and ultimately the resilience of cross-border territories.

As the innovation part of this action, proposals should experiment with community-led innovations in one or both policy areas, such as through deliberative processes, or engaging social innovation partners and citizens representatives.

Based on this analysis, proposals should suggest pathways for better-informed decision-making at national and EU levels based on the identification of where the tensions the opportunities are in top-down and bottom-up policymaking, and policy implementation.

Proposals should form partnerships with government authorities at the relevant levels, in order for their policy recommendations on improvements and alternative pathways for the national and local implementation of EU law to be more likely to be endorsed by the targeted public administrations.

Proposals are encouraged to collaborate with the JRC Competence Centre on Participatory and Deliberative Democracy ²⁵, which provides expertise in particular with respect to experimentation with community-led innovations through deliberative and other participatory processes and approaches.

HORIZON-CL2-2024-DEMOCRACY-01-03: What is the long-term impact of rule of law and other European values on socio-economic outcomes?

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.
Type of Action	Research and Innovation Actions

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Policy recommendations based on a better understanding of the impact of rule of law and other European Union values on socio-economic outcomes of individuals and states.
- Enhanced knowledge of the social cost aspects of weakening the rule of law and robust quantification strategies in the area of rights and freedoms in the national and European context.
- New datasets for this area of research, incorporating a systematic use of historical experiences, economic and econometric history approaches in conjunction with legal and political history analysis, where adequate.

<u>Scope</u>: Recent insights into the role of networks for the creation of value (for instance, the use of network models by human resources departments to estimate existing or future staff value, or the use of network theories to enrich the understanding of financial systems and related risks) have yet to be transferred in an important manner to areas of study dealing with important public/common goods such as rule of law and the various human and fundamental rights and freedoms established by European Union law. It is well understood that networks can amplify asset values in an important manner. How do structural features and metrics of societal networks impact that value of common/public goods? Is it possible to identify similar

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magnifying effects? And how can they be measured, in which unit can they be expressed? On the other hand value created within one particular network may not be transferable to another network without significant losses. What factors will determine the importance of such losses?

Variables under scrutiny may go beyond those used in the European Commission's annual Rule of Law Report (variables such as baskets of opportunities, capabilities, etc.) as well as areas of outcomes that do not figure in this report and yet have important impacts on justice and inequality.

In addition, networks can also create value for individuals and clubs (club goods) that transfer the benefits of public goods (such as tax-funded education in elite institutions) to individual families, specific social groups and their descendants. Such social and economic captures, which have always existed, persist and in many cases have become stronger over time, thus reinforcing inequalities in the modern age. Similarly, the value of environmental public goods/commons might benefit only better off residents of certain types of cities. Such examples can be multiplied. Proposals should also map this type of value creation in a quantitative manner.

Proposals should explore changing valuation of public/common goods depending on different network topologies. They should investigate how are metrics of social (persons, individuals, not social media networks) and contractual (private contracts, private trades) networks associated with varying valuations public/common goods. Based on that, proposals should improve knowledge of the social cost aspects of weakening the rule of law. They should provide robust quantification strategies in the area of rights and freedoms in the national and European context.

Proposals should investigate historical developments to provide better understanding of present situation and present challenges.

Clustering and cooperation with other selected projects under this topic and other relevant projects are strongly encouraged.

HORIZON-CL2-2024-DEMOCRACY-01-04: The interrelation between social, cultural and political identities, as well as the sense of belonging, and democracies

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.
Type of Action	Research and Innovation Actions

Eligibility conditions	The conditions are described in General Annex B. The following exceptions apply:
	The Joint Research Centre (JRC) may participate as member of the consortium selected for funding.

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Provide a comprehensive analysis of the interrelations between social, cultural and
 political identities, the sense of belonging and identification with a group, and
 democracy, including in matters of political representation, participation and trust. This
 includes considering the intersecting, fluid and fragmented dimension of identities and
 their relation to the need to belong as well as values.
- Build on findings to formulate policy recommendations to address, prevent and correct negative trends, including piloting of strategies and frameworks to prevent discrimination, marginalisation and alienation. Insights on how to contribute to encompassing identities with concrete policy recommendations are highly encouraged.
- Develop critical insights into the ways in which processes of social, cultural and political participation can contribute to further fostering the sense of belonging/ownership to local, national and European democratic institutions and processes, or the diffusion of antagonistic identities or social norms.

<u>Scope</u>: The role of identities and the sense of belonging in democracies is of uttermost importance, where both have been key to define and understand political participation in democratic societies. In the past few years, Europe has arguably experienced an increased fragmentation of identities, given rapid generational, demographic, social, religious and political changes. Simultaneously, the pandemic has highlighted the importance of communities in times of uncertainty. This has opened up questions about the negative impact that such fragmenting trends might have on democratic life, as well as the barriers that certain groups face to be actively and meaningfully engaged in democratic participation, among these youths, migrants, and LGBTIQ+ collectives.

Conversely, it can be argued that the involvement of certain communities in democratic processes of decision-making (through quotas, but also through other participatory processes at different levels such as participants sortition) can contribute to further foster the sense of belonging to a democratic society, and further increase their participation in democratic life.

In this context, proposals should help further investigate the way that democracy and its key tenets such as political representation, participation or trust are interrelated to social, cultural, and political identities and a sense of belonging and identification with different communities. This includes gender, ethnic, multicultural, multilingual and spatial identities and subjectivities, amongst others, taking into account the cumulative effects of discrimination. To better understand social identities and their role in shaping political and social discourse, proposals could consider the condition of migration and refugees, segregation as well as

inclusion; the notion of European identity and heritage; people with disabilities; perception of belonging to urban/rural communities, to local communities or to diasporas; the role of media and social media in identity fragmentation, mixtures of ethnic, political and religious identities; the role of the cultural and artistic sectors in representing the diversity of identities (cinema, film series, literature, etc.).

Proposals should identify and explore barriers and factors that limit or impact the engagement of certain communities in democratic practices and processes, and erode their political participation, representation or trust in democratic institutions. Moreover, they should consider and propose policies, frameworks and recommendations to prevent and revert such negative trends, as well as ways to further foster the sense of belonging to democratic societies. This could include the piloting of participatory processes or civic engagement activities targeted at identifying and discussing the issues underpinning the sense of democratic belonging in said communities. Identities do not happen in a vacuum. People are attached to groups that grant them an identity that has currency in the social domain: being identified as a member of a certain group grants social capital. They belong to groups they value and that cater to their social and psychological needs. Proposals should therefore also develop critical insights into the ways in which processes of social, cultural and political participation can contribute to further fostering the sense of belonging/ownership to local, national and European democratic institutions and processes.

Finally, proposals may also study social representations and intergroup stereotypes, which determine to which groups individuals choose to belong. The benefits of group membership and identification, including the social capital that comes with group projects as an inherent part of social representations, may also be analysed. In that regard, the role of identification and belonging in the diffusion of antagonistic identities or social norms online and offline should be studied.

It is important that proposals integrate an intersectional, historical, fluid and multiple approach towards identities, as well as consider the varying concepts and experiences of "belonging" and "identification", as well as the possibility to develop several feelings of belonging to different communities simultaneously.

Proposals should also utilise participatory methods for research, involving academic and non-academic actors, with a focus on community empowerment. They might utilise methodologies that build on disciplines such as political and social psychology, behavioural politics, history, sociology, gender and race theories, religious studies, post-colonial studies, etc.

Clustering and cooperation with other selected projects under this topic and other relevant projects are strongly encouraged. Proposals may consider social innovation activities to stimulate social change, new social practices, social ownership or market uptake.

Proposals are encouraged to collaborate with the JRC Competence Centre on Participatory and Deliberative Democracy, ²⁶ in particular with respect to the design and utilisation of

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participatory methodologies and how they consider, shape or transform individual and group identities. Proposals are also encouraged to collaborate with the JRC unit working on the Enlightenment 2.0 research programme, ²⁷ particularly with respect to the influence of identities in evidence uptake, political decision-making and effective remedies that can benefit collective decision-making.

HORIZON-CL2-2024-DEMOCRACY-01-05: Gender-roles in extremist movements and their impact on democracy

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.
Type of Action	Research and Innovation Actions

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Develop a critical understanding of the construction and performance of gender roles in extremist, identitarian and nationalist movements and their impact on democracy, EU values and fundamental rights.
- Provide evidence-based insights into the role of online communities in the promotion of reactionary, identitarian and extremist ideals, focusing in particular on different forms of masculinity from an intersectional perspective and drawing on engagement with these communities and platforms.
- Examine gender roles in political leadership styles and narratives, especially in nationalist and extremist parties, and their impact on democratic participation, decision-making and trust in governance, and propose alternative models for more democratic leadership.
- Develop innovative methods, policy approaches and tools to tackle antidemocratic narratives and tendencies, characterised by identitarian, nationalist and extremist ideals.

<u>Scope</u>: While gender and feminist scholarship in democracy tends to focus on the role of women and female representation, the role of men and different forms of masculinity are equally important to gain a comprehensive understanding of the impact of gender roles and inequalities on democratic discourse, decision-making and governance.

The past years have witnessed a rise of identitarian (alt-right), reactionary and other extremist politics, arguably strengthened by the pandemic and the isolation it created. Many of these

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ideals and politics are developing in online forums and platforms, often characterised by a contempt for the 'liberal' elite and perceived as tools for the radicalisation of (young) men. In extreme cases, such politics have been openly hostile towards women, LGBTIQ+ collectives and people with a minority racial or ethnic background, and even openly advocated for violence towards them, leading to increased hate speech, harassment, and hate crimes. More research is needed into these groups and milieus, especially through active engagement and deliberation with them on their perceptions around socio-political change, fundamental rights, and anxiety about perceived threats to their gendered identity. Therefore, proposals should develop strategies and practical solutions for the engagement and deliberation with men involved in reactionary, identitarian, or far-right nationalist online forums, and examine the influence of the online discourse in such platforms on the constitution of extremist movements, as well as their relation to mainstream (online) platforms and political discourse. This includes, but is not limited to, an analysis and engagement with different types of masculinity, how these relate to political violence, gender-based violence, and hate crimes, and perceptions around EU values and socio-political change. Interdisciplinary approaches, connecting social and political sciences with the use of information and communication technologies, including artificial intelligence, are particularly encouraged for this topic.

Moreover, the increased uncertainty and political challenges generated by the pandemic, has been coupled with a turn towards hyper-masculinistic modes of leadership and politics that require further analysis. In this context, proposals should consider the interrelation between top-down hyper-masculinistic leadership styles and bottom-up identitarian, nationalist and other extremist movements developing in online spaces, and analyse their impact on democratic participation, decision-making and trust in governance. Historical experiences of leadership and politics in crisis situations may also be considered in this regard.

Building on the evidence-based insights, proposals should develop innovative methods, policy approaches and tools for policymakers and practitioners to address the underlying roots of violent, discriminatory and illiberal political discourse and actions in both public and online spaces. This could include awareness-raising and training activities on the threats of identitarian and reactionary ideals for democracy and EU values, as well as innovative practices to deliberate with the targeted communities.

Proposals are encouraged to build on past EU-funded projects as well as plan to exploit potential synergies with project(s) funded under HORIZON-CL3-2024-FCT-01-04: Radicalisation and gender.

HORIZON-CL2-2024-DEMOCRACY-01-06: Computational Social Science approaches in research on democracy

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.
Type of Action	Research and Innovation Actions
Eligibility conditions	The conditions are described in General Annex B. The following exceptions apply:
	The Joint Research Centre (JRC) may participate as member of the consortium selected for funding.

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Insights into various aspects of democracy, its institutions, its capacity to adapt to changing circumstances, interaction with structural socio-economic patterns utilising Computational Social Science²⁸ (CSS) to identify systematic patterns to test working hypotheses.
- Develop and test methodologies that combine and integrate CSS and other Social Sciences and Humanities (SSH) methods to study democratic governance, overcoming traditional academic boundaries in the field and producing synthetic data and simulation environments to stage full scale experiments which otherwise are reserved to historical study.
- Use of critical approaches to data and datafication of social data, the development of
 alternative approaches to research including critical software studies, digital studies, and
 critical media studies, and development of clear and concise policy recommendations for
 harmonising CSS approaches with GDPR guidelines in order to encourage and facilitate
 such studies.

<u>Scope</u>: Social sciences have not yet fully embraced the breakthrough of computational science that took place in past years with costs for data transport and data storage ceasing to be a limiting factor for data-driven social science. Developing new crosscutting tools of social and computational science will indeed contribute to better understanding how the EU society acts.

At the same time, although big data (including personal data) has become widespread and minable, datasets available to researchers for scientific enquiry are not so easily available, only under restricted regimes, or they vary in quality. Another important limitation to using these datasets is the respect of data protection regulations put in place by the European Union legislation (for instance GDPR). With CSS it could be critically examined where there is need for more data access to what kind of data, and also where there is not enough high-quality data at all. Proposals are therefore expected to propose new strategies and approaches on how

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Computational Social Science (CSS) uses methods developed in statistical physics to take advantage of the very rich big data sets and identify systematic patterns to deliver new forms of testing hypothesis at comparably low costs.

to deal with data, and the lack thereof, in a way that fully complies with the EU's notion of privacy and personal data.

A promising avenue in this respect is the creation and use for research of synthetic data sets, including full-scale synthetic reference populations. Those can link, while not interfering with personal data use restrictions, highly granular data set. As a result, empirical analysis can much better cater for distributional impacts across a wide range of types of households, and individual socio-economic backgrounds, and the impact of socio-economic policies in different geographical settings can be studied at the same level of detail as currently the case in environmental studies.

Thematically, proposals may choose whichever research focus, in the area of democracy, deemed relevant to exploit the potential of CCS. They may concentrate on testing age-old questions of political economy and political sociology and see how they change or survive when tested in a highly granular simulation environment, as synthetic population data allows to do, or they may identify more recent topics such as political communication, political participation, or resilience of democracies, in relation to structural socio-economic patterns. They may also do methodological research with access to new data sources, develop new methods, or refine existing ones, like social network analysis.

Concrete efforts should be made to ensure that the data produced in the context of the funded projects is FAIR (Findable, Accessible, Interoperable and Re-usable), particularly in the context of real-time data feeds, exploring workflows that can provide "FAIR-by-design" data, i.e., data that is FAIR from its generation. Proposals should leverage the data and services available through European Research Infrastructures federated under the European Open Science Cloud, as well as data from relevant Data Spaces in the data-driven analyses. Additionally, efforts should be made to increase the data availability in European Research Infrastructures federated under the European Open Science Cloud by depositing generated data in relevant infrastructures.

Clustering and cooperation with other selected projects under this topic and other relevant projects are strongly encouraged.

Proposals are encouraged to collaborate with the JRC and its Centre for Advance Studies and project on Computational Social Science for Policy.

HORIZON-CL2-2024-DEMOCRACY-01-07: Digital democracy

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.

Type of Action	Research and Innovation Actions
Eligibility conditions	The conditions are described in General Annex B. The following exceptions apply:
	The Joint Research Centre (JRC) may participate as member of the consortium selected for funding.

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Policymakers, practitioners and researchers gain increased understanding of digital democracy, the challenges and opportunities involved in digital democratic deliberations, the current state of the art and the framework conditions supporting its successful implementation.
- Informed investment decisions of (any level) government based on mapping future trends, emerging next practices, related participation culture and engagement strategies for building a thriving digitally enhanced public sphere in Europe.

Scope: The COVID-19 pandemic made e-democracy more relevant and influential than ever before since access to the physical public sphere was limited. Through digital platforms and social media, individuals continue to voice their opinions, expose and mobilise for social movements, fostering change and raising awareness of democracy and fundamental rights. Citizens turned to digital media and collaborative platforms to deal with public affairs, exercising active citizenship virtually. Digital democracy platforms expand the opportunities for democratic deliberations through better and faster political information exchange, public dialogue, engagement in public decision-making and exercising voting rights in political elections. Digital democracy can also play an active role in creating and deepening societal change. However, digital solutions are also more vulnerable to disruption e.g. cybersecurity and privacy threats, misinformation campaigns or digital lobbying, attempting to impact public decision-making, including political election outcomes, and is likely to bring important ethical challenges concerning digital education and digital literacy, access to information, built-in bias, etc.

Increased level of participation between government and citizens requires radical changes and major investment making public administrations more relevant to the social, economic, political and technological environment. To prepare public administrations for increased engagement with the broader public, structures and processes need to be put in place, human and financial resources allocated, an ecosystem of intermediaries and representative organisations defined, most suited technological solutions identified, making public deliberation and moderation in the digital age an integral part of a governmental and also societal 'culture of participation'.

For this aim, proposals should investigate - building on existing literature and data - the most recent developments, especially as regards the pandemic-induced innovative e-democracy and e-participation solutions at all levels of governance (international, EU, national, regional,

local). Historical analysis will allow the consideration of the wider and long-term impacts of e-participation on democracy, political and civic culture, and international cooperation will facilitate the exchange of good practice and success stories. The framework conditions i.e. rules, policies and processes; ways of working (partnerships, structures, collaboration); people (skills, culture and values, leadership); knowledge (data, learning) that support next level democratic participation (emerging and next practices) should be investigated. Research should pay particular attention to digital inclusion as a key challenge and essential element of inclusive citizen participation in public deliberations for a healthy digitally enabled democracy through equal participation irrespective of citizen's income level, education, ethnicity, gender, religion, language used, ability, geographical location, etc., and to the digital divide between generations.

Based on lessons learnt from existing good practice cases and experiences, proposals should consider the citizens' perspectives in building digital democracy tools and processes, including related technical aspects (e.g. gamification, artificial intelligence). The involvement of different stakeholders, including public administrations, end-users, political actors and the private sector is strongly encouraged to foster dialogue and understanding between diverse interest groups in democratic deliberations, enhance the legal frameworks and safeguards against threats and challenges (e.g. fraud prevention in e-voting), overcoming polarisation and reaching better public policy outcomes.

Proposals are encouraged to collaborate with the JRC Competence Centre on Participatory and Deliberative Democracy, ²⁹ particularly with respect to new emerging forms of democratic participation – through or assisted by – digital means, as well as to the innovative application of frameworks and methods for citizen engagement in building and experiencing digital democracy tools and processes.

HORIZON-CL2-2024-DEMOCRACY-01-08: Culture, the arts and cultural spaces for democratic participation and political expression, online and offline

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.
Type of Action	Research and Innovation Actions
Eligibility conditions	The conditions are described in General Annex B. The following exceptions apply: The Joint Research Centre (JRC) may participate as member of the

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consortium selected for funding.

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

- Recommendations on how to foster civic participation through a deep analysis of the use of spaces beyond classic democratic institutions, especially cultural and artistic_spaces, as well as cyberspace and metaverses, for political expression.
- Forward-looking policy recommendations to ensure that digital spaces (including metaverses and social networks) can, by design, have a positive impact on democratic life and limit potential threats to democracy.
- Experimentation of solutions, methods and tools to support democratic behaviour and social well-being for the next generation of social media.

<u>Scope</u>: Participation in political life through conventional means, such as elections, has become a challenge. Participation rates decrease while parts of society feel unheard by political elites and see electoral processes as inefficient.

On the other hand, some citizens find alternative outlets to express political opinions, such as protests³⁰, expression on social media and in virtual spaces, art creation, music and vocal forms of expressive culture, etc. Cultural, artistic and online spaces (such as public libraries, art exhibition spaces, heritage sites, cultural centres, parks and other public places used temporarily to convey a message, social media platforms, metaverses, etc.) are increasingly positioning themselves as catalysers for social and economic changes. They become privileged places for deliberation and alternative engagement with politics through debate, education and free expression, for instance. Proposals should evaluate how effective they are at channelling bottom-up political energy. They should also propose options as to how those alternative initiatives could feed into the wider political debate (for instance through social innovation). In addition, proposals could look at art and cultural productions (in the broader sense, online and offline) as vectors of political expression, be it in democratic or nondemocratic contexts. How efficient are they in mediating political messages? What kind of attacks and counterattacks are targeted at them, with what effects, from the side of the professional politicians and organisations? How are questions regarding the legitimacy of artistic activities answered?

Aside from physical spaces, virtual spaces for exchange and communication have been very active in the dissemination of political views and have influenced the political debate, notably through the use of popular culture references (memes, etc.) and through cyber-culture. While the link between social media and disinformation as well as political engagement has already been investigated, the revival of virtual alternative universes, such as metaverses, begs for more scientific evidence regarding what impact this will have on democracy. Digital universes have a strong potential to both threaten and nurture democracies. Proposals should

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See, under the same call, HORIZON-CL2-2024-DEMOCRACY-01-01: Protest politics and cultures of opposition in democracy.

propose forward-looking policy recommendations to ensure that such digital spaces can, by design, have a positive impact on democratic life, and to limit the potential threats to democracy. How can these new spaces be exploited as positive tools for citizen engagement? Proposals should also experiment solutions, methods and tools to support democratic behaviour and well-being for the next generation of social media.

Proposals are expected to investigate cultural activity and engagement, online and offline, as political expression, civic participation and political engagement, historically, in contemporary society, and to provide forecasts for the future. Gender, decoloniality and intersectionality should be taken into account. Investigation of examples and initiatives from outside Europe will be instrumental, given the many interesting experiences of art and activism around the world. Therefore, international cooperation is encouraged. Proposals should produce concrete policy recommendations and design proposals to allow the potential for political engagement through physical and virtual non-traditional spaces to be fully expressed, in an inclusive manner.

Research methodologies should include field research and participative methods. They may also involve culture and art practitioners and art-based research.

Clustering and cooperation with other selected projects under this topic and other relevant projects are strongly encouraged.

Proposals are encouraged to collaborate with the JRC Competence Centre on Participatory and Deliberative Democracy, ³¹ particularly in respect to the development of evidence-informed policy recommendations on how digital universes, such as metaverses, can have positive impacts on democratic systems and democratic life in general.

HORIZON-CL2-2024-DEMOCRACY-01-09: The role and functioning of public administrations in democratic systems

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.
Type of Action	Research and Innovation Actions
Eligibility conditions	The conditions are described in General Annex B. The following exceptions apply:
	The Joint Research Centre (JRC) may participate as member of the consortium selected for funding.

https://knowledge4policy.ec.europa.eu/participatory-democracy_en

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Better understanding of the changing concept and practices of public administrations and approaches to public management, emerging trends and paradigm shifts, and the role public institutions and public management play in in fostering democratic, economic and social stability.
- Mapping emerging innovative solutions in public management and institutional framework conditions (e.g. human resource management policies, leadership, new ways of working, changing public decision- and policymaking, etc.) that enable innovation in public administrations and deepen democratic governance.
- Recommendations for European Union Member States on key focus areas and (from local to EU level) actions as regards public administration modernisation and reform agendas, and whole-government innovation strategies for effective, innovative, futurecapable and citizen-centric government administrations in Europe.

<u>Scope</u>: Governments are excessively under pressure today to adapt and respond to rapidly changing global economic, social, political, ecological and technological trends, to develop better public policy outcomes and high-quality public services that respond to the needs of their citizens, and to transform their internal operations on the go, creating modern and innovative public administrations. This area of research intends to investigate how European Union governments are approaching public administration and governance reform i.e. what areas they strategically invest in, what challenges they encounter, what (national, European or international) support (expertise, finance) they capitalise on, and how they generally approach transforming their government administrations (through e.g. systems approaches, open government approaches, innovation portfolio approach, organisational framework conditions enabling innovation, etc.) as they face the challenges of today.

The true measure of the successful practice of public service lies in the ability of government administrations to remain faithful to the tenets of democratic society (e.g. respect for human dignity, freedom, democracy, equality, the rule of law, human rights, including the rights of persons belonging to minorities). Therefore, particular attention should be paid to the role and functioning of public institutions in democratic systems, their role in fostering democratic, economic and social stability, and in reforming public management and institutions in ways that enhance citizens' trust in government and active participation in public affairs [e.g. engagement with citizens, open and transparent public decision- and policymaking, edemocracy, participatory and deliberative democracy, experimentation, working with innovation ecosystems (Quadruple and Quintuple Helix models), etc.], including emerging visions and narratives for public management and institutions.

To this effect, beyond the available literature review and internationally comparable data (e.g. World Economic Forum, United Nations, World Bank, European institutions, etc.), this research will need to involve intensive engagement with national government officials orchestrating and engaged in internal innovation processes, large-scale data collection and

analysis, and drawing up illustrative cases from European Union Member States and OECD governments actively working towards improving democratic governance and innovation in government administrations.

Proposals are also encouraged to collaborate with the JRC unit working on strengthening and connecting science-for-policy ecosystems across the EU, ³² particularly with respect to projects interested in building the analytical foundations for reforms in public administration and in the science, technology and innovation system to improve evidence-informed policymaking processes, the use of expertise in policymaking, the establishment of boundary organisations and competence-building of knowledge brokers, and the public deliberation between science, policymaking, and society at large.

HORIZON-CL2-2024-DEMOCRACY-01-10: Political participation in multilingual spaces

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 6.00 million.
Type of Action	Research and Innovation Actions
Eligibility conditions	The conditions are described in General Annex B. The following exceptions apply:
	The Joint Research Centre (JRC) may participate as member of the consortium selected for funding.

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Development of a European public space for citizen deliberation through a better understanding of the tools and mechanisms that can overcome barriers to political participation in multilingual spaces.
- Better management of linguistic diversity in political participation, from the local to the European level.
- Effective use of automated language tools and multilingual means of communication, through analysis of these tools and their impact on democracy-fostering processes.

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See <a href="https://knowledge4policy.ec.europa.eu/evidence-informed-policy-making/topic/science-policy-ecosystems-en-or-https://knowledge4policy.ec.europa.eu/projects-activities/strengthening-connecting-science-policy-ecosystems-across-eu_en-en-or-https://knowledge4policy.ec.europa.eu/projects-activities/strengthening-connecting-science-policy-ecosystems-across-eu_en-or-https://knowledge4policy.ec.europa.eu/evidence-informed-policy-making/topic/science-policy-ecosystems-across-eu_en-or-https://knowledge4policy.ec.europa.eu/projects-activities/strengthening-connecting-science-policy-ecosystems-across-eu_en-or-https://knowledge4policy.ec.europa.eu/projects-activities/strengthening-connecting-science-policy-ecosystems-across-eu_en-or-https://knowledge4policy.ec.europa.eu/projects-activities/strengthening-connecting-science-policy-ecosystems-across-eu_en-or-https://knowledge4policy.ec.europa.eu/projects-activities/strengthening-connecting-science-policy-ecosystems-across-eu_en-or-https://knowledge4policy.ec.europa.eu/projects-activities/strengthening-connecting-science-policy-ecosystems-across-eu_en-or-https://knowledge4policy.ec.europa.eu/projects-activities/strengthening-connecting-science-policy-ecosystems-across-eu_en-or-https://knowledge4policy.ec.europa.eu/projects-activities/strengthening-connecting-science-policy-ecosystems-across-eu_en-or-https://knowledge4policy.ec.europa.eu/projects-activities/strengthening-connecting-science-policy-ecosystems-across-eu_en-or-https://knowledge4policy.ec.europa.eu/projects-activities/strengthening-connecting-science-policy-ecosystems-across-eu_en-or-https://knowledge4policy.ec.europa.eu/projects-activities/strengthening-connecting-science-policy-ecosystems-across-eu-en-or-https://knowledge4policy.ec.eu-en-or-https://knowledge4policy.ec.eu-en-or-https://knowledge4policy.ec.eu-en-or-https://knowledge4policy.ec.eu-en-or-https://knowledge4policy.ec.eu-en-or-https://knowledge4policy.ec.eu-en-or-https://knowledge4policy.ec.eu-en-or-https://knowledge4policy.ec.eu-en-or-https://

<u>Scope</u>: The European Union is made up of a population with a multitude of languages (including sign languages) and dialects, which reflect a mosaic of cultures in constant interaction and evolution. Although this is not new, managing political participation in multilingual spaces is a challenge, particularly with a view to creating a European public space for citizen deliberation.

The Conference on the Future of Europe has shown that solutions exist to facilitate multilingual communication in a democratic context, including thanks to the use of automated translation tools. However, multi-lingual deliberations tend to crystallise on ensuring that opinions have been rightly conveyed through translation rather than on the outcomes of the discussions and the understanding of cultural codes and perceptions. In other words, how to ensure that multilingual deliberations focus on the content, rather than the form of what is said? How to allow deep and meaningful engagement among participants from diverse linguistic communities? Technological tools may help in virtual settings, but how can these technical innovations be brought into the non-virtual world, in order to address such a deeprooted societal challenge?

In addition, multilingual spaces are almost always also multicultural. In other words, the translation process is never limited only to translation between language(s), but involves also intercultural translation. How would it be possible to ensure that notions of identity and belonging at the local, national and European level, be coupled with democratic, open and trusting societies? What role can inter-cultural dimensions of social capital and social dialogue play in strengthening democratic dialogue and on building democratic communities and citizenship (at the national and EU level)?

Proposals should consider outcomes from the Conference on the Future of Europe. They should explore how deliberations in multilingual settings can be best mediated, by design or through technological assistance. Special attention could be paid to linguistic minorities and people with communication impairments. Proposals under this call are encouraged to make use of participative methodologies and experimental methods. Proposals are encouraged to consider social innovation activities to stimulate social change, new social practices, social ownership or market uptake.

Clustering and cooperation with other selected projects under this topic and other relevant projects are strongly encouraged.

Proposals are encouraged to collaborate with the JRC Competence Centre on Participatory and Deliberative Democracy³³, particularly with respect to experimentation with the design of multilingual deliberative and other participatory processes in light of lessons learned from the implementation of the Conference on the Future of Europe.

https://knowledge4policy.ec.europa.eu/participatory-democracy_en

HORIZON-CL2-2024-DEMOCRACY-01-11: Future scenarios and young visions for European democracy 2040

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 3.00 and 4.00 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 4.00 million.
Type of Action	Research and Innovation Actions
Eligibility conditions	The conditions are described in General Annex B. The following exceptions apply:
	The Joint Research Centre (JRC) may participate as member of the consortium selected for funding.

Expected Outcome: Projects should contribute to the following expected outcome:

 Future scenario workflows, roadmap and strategy playbook to achieve the most preferred scenarios for democracy in the European Union 2040, researched, debated and codeveloped through iterative, large-scale engagement processes with diverse groups of stakeholders i.e. young European citizens, political and institutional actors and organised civil society.

<u>Scope</u>: Democracy in the EU faces challenges from rising extremism and polarisation, covert authoritarianism, election interference and the spread of manipulative information. Political democracies are looking for new balances in fast-changing societal contexts while facing countless number of internal and global challenges and changes in power relations. This – in turn – reduces the willingness to undertake reforms that could deepen the European Union further. Nationalistic and populistic tendencies, tensions between national and international frameworks, political and social polarisation jeopardise established values and practices (e.g. parliamentary democracy, the rule of law, separation of powers, democratic dialogue, etc.) and seem to weaken the political clout of the European Union in the long run.

In light of the current discourse about the need to rethink and redesign virtual and real public spaces and civic engagement, this research will also investigate the future of democracy and its instruments, and will also explore the views of political institutions such as national parliaments and the European Institutions, and those of organised civil society actors as regards their visions for the future, emerging trends such as e.g. participatory and deliberative democracy models that better serve the public good, build trust between governments and citizens, and deepen democracy at large. Particular attention should be paid to the development of future European (and national) public spaces that mutually support one

another and work together, and the evolution of the current EU model (with its peculiarities and often quoted democratic deficit) into its best potential.

With the accelerating complexity of change, there is a growing need to combine solid scientific forecasting methods that rely on objective historical data with qualitative and speculative foresight practices, and with a series of iterative, large-scale (online and inperson) engagements in order to build and co-develop alternative future scenarios that can empower young people living in the EU to proactively shape their collective future in the European Union. In addition, proposals should help to understand the visions of the next generation and how to provide them with the tools to put those visions in practice. It is important to document (e.g. the making-of film, documentary, library of video interviews, etc.) the journey undertaken over time from research through large-scale stakeholder engagements, debates and co-development of outcomes for European citizens to engage with the content as the project is progressing and after its conclusion.

HORIZON-CL2-2024-DEMOCRACY-01-12: Testing and implementation of research results fostering democracy and governance

Specific conditions	Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 3.00 and 4.00 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 4.00 million.	
Type of Action	Coordination and Support Actions	
Eligibility conditions	The conditions are described in General Annex B. The following exceptions apply:	
	The Joint Research Centre (JRC) may participate as member of the consortium selected for funding.	
	Legal entities established in Algeria, Azerbaijan, Egypt, Jordan, Lebanon, Libya, Morocco, Palestine ³⁴ and Syria may exceptionally participate in this Coordination and Support Action as a beneficiary (or affiliated entity).	
	The following additional eligibility criteria apply:	
	• The topic requires the active involvement, as beneficiaries, of at least two non-academic [end-user] organisations (for instance: local or regional or national government authorities, or any other relevant organisations) from at least two different EU Member	

This designation is not to be construed as recognition of a State of Palestine and is without prejudice to the individual positions of the Member States on this issue

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	States or Associated Countries. The proposals must draw on the results of research and innovation projects that were publicly funded (at EU or national level), and whose end date must be after 1 st January 2023. • The proposed actions must not duplicate or replace dissemination and exploitation activities that are part of the initial R&I projects. Proposed actions should go beyond such actions aiming at knowledge transfer and exchange.
Procedure	The procedure is described in General Annex F. The following exceptions apply: The granting authority can fund a maximum of one project.
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). 35. Beneficiaries may provide financial support to third parties. The support to third parties can only be provided in the form of grants. The maximum amount to be granted to each third party is EUR 100,000 in order for selected projects to be of a scale ambitious enough to achieve the objectives of the action as outlined in the expected outcomes. The respective options of the Model Grant Agreement will be applied. Beneficiaries should refer to General Annex B of the Work Programme for further information and guidance.

Expected Outcome: Projects should contribute to all of the following expected outcomes:

• Policymakers, practitioners and researchers have increased understanding of the validity of theoretical models, the possibilities to implement recommendations, toolkits, narratives and methodologies and other solutions for issues for democracy and governance stemming [in particular] from Horizon 2020 projects.

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This <u>decision</u> is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

- Testing and uptake of research results on democracy and governance relevant for the future of democracy in the EU, involving stakeholders (non-science actors, including public bodies, NGOs, civil society organisations, policymakers, educational bodies, other potential end-users of the research results, etc.) to explore their readiness to implement the solutions developed in the previous research and innovation project, possibly adapting the solutions to the respective societal / administrative / political context based on the tests.
- Better informed decision-making on changes in democratic processes and governance, based on scientific, policy, legal, etc. conclusions from experiments with the results of such earlier projects in a practical / real life context, that allow to replicate the methods, recommendations for legislative changes, or translate the research results into innovations.

<u>Scope</u>: The aim is to bring to society the benefits from previously EU-funded research in the field of democracy and governance be it in Horizon 2020 or other relevant programmes (such as Citizens, Equality, Rights and Values Programme or the Global Europe Programme). The proposals have to build on the rich stock of actionable recommendations, knowledge, toolkits, educational material, and scientific methods etc. developed in particular by the over 300 Horizon 2020 projects on democracy and governance related issues. For proposals building on Global Europe research in particular, cooperation with third countries is encouraged.

Proposals have to credibly identify a targeted democracy and/or governance related issue that can be addressed by implementing existing research and innovation results. In addition, proposals should take those research and innovation results further through testing and experimenting in the relevant operational environment, and enhancing the potential take-up of innovative solutions by civil society, public institutions, including educational institutions, and policymakers at all governance levels, including in third countries. Potential instruments for this testing, such as twinning or the launch of open calls for pilots, are possible through financial support to third parties. Proposals suggesting financial support to third parties should lay out the selection criteria that will be used. In addition, proposals should demonstrate the need or interest for the solution they propose by involving end-users in the project design. Proposals should also provide a clear pathway to impact as well as a comprehensive risk assessment plan with different mitigation strategies.

Proposals should address issues in line with the European Democracy Action Plan or EU policy initiatives that emanated from this Action Plan.

Possibilities of coordination with related activities funded through in particular the Citizens, Equality, Rights and Values Programme or the Global Europe Programme should be analysed. Cooperation should be sought with the Network for innovative solutions for the future of democracy funded under HORIZON-CL2-2022-DEMOCRACY-02-01.

Proposals should involve end-users (including civil society organisations) and/or strategic partners who can foster the societal impact of the research and innovation results. Possible end-users and strategic partners could include for instance local or regional authorities,

schools/universities, cultural institutions, civil society, foundations, political parties, trade unions, or youth organisations. Proposals should also involve practitioners and experts in science communication.

Besides fostering the societal impact of previous democracy and governance related research and innovation actions, proposals should explore and draw lessons on how the translation between research results in this field and policy actions takes place and what kinds of expertise is needed for achieving this. Proposals could also develop strategies to promote citizens activism and community engagement to build inclusive societies.

Proposals are also encouraged to collaborate with the JRC Competence Centre on Participatory and Deliberative Democracy,³⁶ particularly with respect to actions and initiatives directly contributing to the provisions of the European Democracy Action Plan for the promotion of democratic engagement and active participation beyond elections.

https://knowledge4policy.ec.europa.eu/participatory-democracy_en

DESTINATION: INNOVATIVE RESEARCH ON EUROPEAN CULTURAL HERITAGE AND CULTURAL AND CREATIVE INDUSTRIES - BUILDING OUR FUTURE FROM THE PAST

Europe's rich cultural heritage and strong creative tradition not only reflect our past, but also shape our future. It is by building on this foundation and developing our strengths that we can face the great challenges of our time with confidence, and shape a future based on European values and the respect of human rights. Europe's cultural heritage is well alive because it is the result of the interaction between people and their environment, and above all of the collective effort of EU citizens, who all have the same entitlement to enjoy their human and in particular cultural rights.³⁷

Convinced that cultural heritage and the cultural and creative industries are an important part of the "social" dimension of democracy and sustainability, the Horizon Europe calls under this destination invite suggestions for policies and practices to address, at all levels of action, current challenges and provide innovative responses. Europe's wealth of monuments and sites and its creative diversity of traditions, crafts, arts, architecture, literature, languages, theatre, films, games and music is a unique asset. It enriches our lives, fosters social and cultural cohesion and contributes to a sense of belonging. It also underpins an economy generating more employment than the automotive industry and a similar trade balance as food, drinks and tobacco combined. Many of Europe's multinationals build their international success on the European heritage and creativity. At the same time, the sector is nurturing large numbers of dynamic small and micro enterprises, creating employment not the least for young people and women, while deploying their creativity not only to generate income but also to contribute to social and cultural sustainability, well-being and projecting European values at home and abroad.

This destination adopts a people-centred perspective and places cultural heritage and the cultural and creative industries at the very heart of the European economy and its sustainable development. European R&I activities under this destination will support and strengthen European cultural heritage and cultural and creative industries essentially under three areas:

Green: Europe's cultural heritage and its cultural and creative industries need to share their responsibilities for adapting to the consequences of climate change, and mobilise their resources to support European citizens and societies for an inclusive, socially and culturally sustainable climate transition. A participatory approach to European cultural heritage and digital transformations in the preservation of tangible and intangible heritage will guide new endeavours.

R&I actions will focus on, for example, supporting the cultural and creative industries to turn the challenges of the climate transition into opportunities, and become drivers of an inclusive societal transition. R&I actions will foment the development of new environmentally friendly

CETS 199 - Council of Europe Framework Convention on the Value of Cultural Heritage for Society (coe.int)

technologies and methods to manage, restore and preserve cultural heritage, with a view to making Europe a world leader in sustainable management of cultural heritage. R&I will also strengthen our capacity to manage anthropogenic threats. Support to the New European Bauhaus initiative is part of this area, integrating the core New European Bauhaus values of sustainability, inclusion and aesthetics.

Digital: The digital transition promises enormous opportunities for Europe's cultural heritage and cultural and creative industries, but also serious challenges. It is important to ensure that, through the digitisation, EU citizens benefit from cultural heritage and be enabled to contribute to its enrichment. Digitisation should also provide new training opportunities on creative industries for young citizens in less populated areas.

R&I actions will focus on, for example, innovative approaches to empower the cultural and creative industries, including its many micro enterprises, to reap the benefits of using digital technologies, creating more appealing and valuable products, services and experiences for its users. R&I actions will deepen our knowledge on what, how and why digitised and digital cultural heritage may be exploited, reaping the benefits while avoiding the many pitfalls, and creating societal value. Collaborative platforms for cultural heritage and cultural and creative industries will be supported. A dedicated call, namely HORIZON-CL2-2023-HERITAGE-ECCCH-01, will support the establishment of a digital European cultural heritage collaborative space, including a cloud platform for European cultural heritage institutions. Such platforms will strengthen the collaboration and co-creation among cultural heritage institutions and with other stakeholders in the cultural heritage domain, widen access for citizens and strengthen research. Please consider below some key characteristics and specific conditions of the call. Also, cooperation between different actors within the cultural and creative industries and between the CCIs and other economic sectors and industries will be strengthened, creating new market opportunities for CCI stakeholders.

Innovative: To an ever greater degree, creative and cultural aspects drive socio-ecological innovation, participatory democratic processes and economic growth. Successful new digital and physical products and services need to be appealing and attractive, adapted to cultural particularities. Similarly, societal transformations such as the green and digital transitions depend on behavioural changes, which are largely based on changes in lifestyle, culture and perceptions. In such processes, the human is at the centre, and cultural heritage, the arts and the cultural and creative industries are key.

R&I actions will cover a variety of subjects, such as strengthening the innovation capacity of the cultural and creative industries, and their capability to act as innovation engines. Actions will focus both on cultural heritage and cultural and creative industries holistically, as an innovation ecosystem, and on specific CCI sectors such as music, filmmaking and video games. Actions will also foment innovation in cultural tourism, as well as explore innovative connections between cultural expressions and democracy and politics. Actions will also support the development of new innovative technologies and methods to restore, preserve and manage cultural heritage, as well as reinforce the role of Europe's cultural heritage in promoting European values among EU citizens and abroad.

The innovation ecosystems created and nurtured by the Knowledge and Innovation Communities (KICs) of the European Institute of Innovation and Technology (EIT), in particular the KIC "EIT Culture and Creativity", may contribute to innovation actions under this destination, and should as appropriate be considered.

In line with the Commission priorities, R&I actions under this Destination will help promote the European way of life, contribute to achieving the Green Deal goals and support an economy that works for people. They will contribute to the New European Bauhaus³⁸ initiative, to reaching the UN Sustainable Development Goals and to building a stronger, more participatory and crisis-resilient society and economy. They will support the realisation of the full potential of cultural heritage, arts and cultural and creative industries as drivers of sustainable innovation and a European sense of belonging.

The topics under the calls HORIZON-CL2-2023-HERITAGE-ECCCH-01 and HORIZON-CL2-2024-HERITAGE-ECCCH-01 aim at supporting the establishment of a digital European cultural heritage collaborative space, including a cloud platform, and contribute to the vision and objectives of the Commission³⁹. For the purpose of these calls, the collaborative space will be referred to as the "European Collaborative Cloud for Cultural Heritage" (ECCCH).

An ex-ante impact assessment for the ECCCH was carried out between December 2021 and March 2022 by eight renowned independent experts contracted by the Commission⁴⁰. This exante impact assessment examined and described the needs of a digital European cultural heritage collaborative space from the perspective of the foreseen users (cultural heritage institutions, researchers, cultural and creative industries, etc.) and of European societies, thoroughly reviewed existing initiatives that might satisfy parts of these needs, and outlined the most important aspects to consider in implementing such a collaborative space.

The conclusion of the ex-ante impact assessment is that the ECCCH is highly important to Europe's cultural heritage institutions and to European societies. In order to address the urgent evolving needs of Europe's cultural heritage sector in the digital age for specifically adapted collaborative spaces, the European Union will ramp up its investments through the ECCCH, and also the common European Data Space for Cultural Heritage (the Data Space)⁴¹ funded under the Digital Europe programme. The topics under the ECCCH calls are based on the conclusions and recommendations of the experts' ex-ante impact assessment.

Some key characteristics of the vision for the ECCCH include:

The New European Bauhaus initiative was launched by European Commission President von der Leyen in her State of the European Union speech autumn 2020. More information here: https://europa.eu/neweuropean-bauhaus/index_en

Recommendation (EU) 2021/1970 of 10 Nov 2021 on a common European Data Space for Cultural Heritage.

European Commission, Directorate-General for Research and Innovation, Brunet, P., De Luca, L., Hyvönen, E., et al., Report on a European collaborative cloud for cultural heritage: ex – ante impact assessment, 2022, https://data.europa.eu/doi/10.2777/64014

⁴¹ See further https://digital-strategy.ec.europa.eu/en/library/staff-working-document-data-spaces

- The ECCCH will be addressed to professionals⁴². It will enable an unprecedented level of lasting collaboration and co-creation between public and private players that will generate new realms of research, knowledge and creation of societal value.
- The basic ECCCH platform will provide easy to use tools for the most important needs.
- Active user communities that contribute to training and support, as well as common data
 models, guidelines and libraries for developing tools (including support for Graphical
 User interfaces (GUI) and visualisation), will ensure that also less well-equipped
 institutions will draw the full benefit of the ECCCH.
- To enhance collaboration and co-creation, IPR rights of the digital objects stored in the ECCCH and produced by ECCCH-based collaboration will be fully recorded and traceable. Guidelines for the use of IPR rights, such as rights statements provided by RightsStatements.org should be used where appropriate. This will enable new business models in the intersection between cultural heritage and cultural and creative industries.
- The long-term sustainability of data and data formats is one of the underlying principles of the ECCCH. The ECCCH will tackle these challenges through its architecture and basic functionalities. The design and architecture of the ECCCH is based on three principles:
 - o digital twins of heritage objects,
 - o digital continuum, tracing all interactions with heritage objects and related data objects,
 - o digital ecosystem, open to all stakeholders, professions and activities to interact with each other and with the digital heritage objects, ultimately leading towards a new generation of multidimensional, interconnected and knowledge-enhanced heritage data forming digital commons, where the ECCCH will play a key role.
- The architecture of the ECCCH will ensure an evolutionary design, which will allow the adaption and incorporation of new technologies and tools and to fulfil new user requirements, while discontinuing less used tools.
- An open Application Programming Interface will allow new functionality to be developed and incorporated in the ECCCH by different initiatives, and encourage interoperability.
- The ECCCH will be open and inclusive, both in terms of the users of the platform and the connections to other related initiatives/platforms such as the Data Space.

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In the context of the ECCCH calls, 'professionals' should be understood as the wide and interdisciplinary group of people working with cultural heritage in a professional or semi-professional way, researchers as well as people working with related activities such as within the cultural and creative industries.

- The ECCCH should build on the wealth of existing knowledge, technologies and work processes in Europe. It should draw on previous experience and best practice. The ECCCH and the Data Space should complement each other towards the common vision.
- The ECCCH should ensure, through its Governance body, the engagement of a wide range of appropriate representatives from Member States and Associated Countries, as well as from related EU initiatives.

The ECCCH will thus be a genuine collaboration platform, which brings together a wide array of professions, researchers and technologies for museums and other cultural heritage institutions. It will include and develop interactive tools for research, curation, restoration, preservation and for reaching out to citizens and cultural and creative industries, properly protect and manage IPR and allow commercial as well as non-commercial collaboration with a wide range of players.

All topics under the ECCCH calls are subject to the following conditions:

- All software developed should be open source, licensed under a CC0 public domain dedication or under an open source license as recommended by the Free Software Foundation⁴³ and the Open Source Initiative⁴⁴.
- If the use of fully open source software would require disproportional efforts or significantly diminish the quality or performance of the software, and if suitable non open source function libraries exists, such libraries may be used provided that a full user license free of charge for an unlimited period of time is granted to the consortium responsible for the ECCCH as well as to all users of the ECCCH.
- All software and other related deliverables should be compliant with the data model and the software development guidelines elaborated by the project funded under topic 'HORIZON-CL2-2023-HERITAGE-ECCCH-01-01'.
- All projects funded should participate in concertation activities with the project funded under topic 'HORIZON-CL2-2023-HERITAGE-ECCCH-01-01'

Expected impacts:

Proposals for topics under this Destination should set out a credible pathway to contributing to the following expected impact of the Horizon Europe Strategic Plan:

The full potential of cultural heritage, arts and cultural and creative sectors as a driver of
sustainable innovation and a European sense of belonging is realised through a
continuous engagement with society, citizens and economic sectors as well as through
better protection, restoration and promotion of cultural heritage.

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https://opensource.org/licenses

Legal entities established in China are not eligible to participate in Innovation Actions in any capacity. Please refer to the Annex B of the General Annexes of this Work Programme for further details.

The following call(s) in this work programme contribute to this destination:

Call	Budgets (E	Deadline(s)	
	2023	2024	
HORIZON-CL2-2023-HERITAGE- 01	78.00		14 Mar 2023
HORIZON-CL2-2023-HERITAGE- ECCCH-01	35.00		21 Sep 2023
HORIZON-CL2-2024-HERITAGE- 01		65.00	07 Feb 2024
HORIZON-CL2-2024-HERITAGE- ECCCH-01		48.00	22 Jan 2025
Overall indicative budget	113.00	113.00	

Call - Research and innovation on cultural heritage and CCIs - 2023

HORIZON-CL2-2023-HERITAGE-01

Conditions for the Call

Indicative budget(s)⁴⁵

Topics	Type of Action	Budgets (EUR million) 2023	Expected EU contribution per project (EUR million) ⁴⁶	Indicative number of projects expected to be funded
Openin	g: 14 Dec	2022		
Deadline(s): 14 Mar 2023				
HORIZON-CL2-2023-HERITAGE-01-01	RIA	12.00	3.00 to 4.00	3
HORIZON-CL2-2023-HERITAGE-01-02	RIA	12.00	3.00 to 4.00	3
HORIZON-CL2-2023-HERITAGE-01-03	RIA	12.00	3.00 to 4.00	3
HORIZON-CL2-2023-HERITAGE-01-04	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2023-HERITAGE-01-05	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2023-HERITAGE-01-06	RIA	12.00	3.00 to 4.00	3
HORIZON-CL2-2023-HERITAGE-01-07	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2023-HERITAGE-01-08	CSA	3.00	2.00 to 3.00	1
Overall indicative budget		78.00		

General conditions relating to this call

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The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.

The Director-General responsible may delay the deadline(s) by up to two months.

All deadlines are at 17.00.00 Brussels local time.

The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for years 2023, 2024 and 2025.

Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.

Admissibility conditions	The conditions are described in General Annex A.
Eligibility conditions	The conditions are described in General Annex B.
Financial and operational capacity and exclusion	The criteria are described in General Annex C.
Award criteria	The criteria are described in General Annex D.
Documents	The documents are described in General Annex E.
Procedure	The procedure is described in General Annex F.
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G.

GREEN

Proposals are invited against the following topic(s):

HORIZON-CL2-2023-HERITAGE-01-01: Advanced technologies for remote monitoring of heritage monuments and artefacts

Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 3.00 and 4.00 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 12.00 million.	
Type of Action	Research and 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).	

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- New and innovative remote methods to monitor the state of degradation of original materials of cultural heritage monuments, buildings and artefacts.
- Innovative on-site monitoring methods of pollutants and the status of previous interventions in cultural heritage buildings, monuments and artefacts in order to select the optimal green and effective conservation strategies and material.

<u>Scope</u>: Cultural heritage monuments, sites and artefacts are threatened by a variety of natural anthropogenic and environmental factors such as earthquakes, floods or sea level rise, fires, atmospheric pollution, urbanisation and man-made threats. Innovative advanced and cost-effective remote technologies for systematic and representative monitoring of built cultural heritage monuments' and artefacts state of preservation are needed, addressing limitations of location size and transportability.

Remote technologies with emphasis on non-destructive techniques should focus on obtaining analytical chemical information regarding pollutants and/or degradation products from previous interventions in monuments, buildings or large size cultural objects, which are not easily accessible or in remote places for representative sampling. Remote chemical mapping should be included too.

For onsite studies of the chemical or structural state of cultural heritage items (monuments, buildings, artefacts), a toolbox of chemical probes (e.g. fibre optics sensors...), assays and technologies should be adapted. These may include:

- Novel transportable equipment for rapid in situ chemical analysis and/or mapping of
 pollutants and/or degradation products including, when necessary, data from previous
 interventions. This is crucial not only for monuments or buildings but also for assessing
 the state of valuable artworks and artefacts in museums, which are difficult or of
 enhanced danger if removed.
- Sensors (including embedded sensors), interferometric or photoacoustic technologies for systematic monitoring of the structural integrity of monuments, buildings and artefacts are also important for their early protection or for determining proactively interventions in response to natural disasters (earthquakes, extreme climate or anthropogenic effects, etc.).

A variety of other innovative techniques and/or technologies as well as combinations among them might be explored depending on the targeted intervention. The approach(es) developed should integrate modern practice and concepts in conservation and preservation of cultural assets in cooperation with concerned stakeholders in this field.

HORIZON-CL2-2023-HERITAGE-01-02: Cultural and creative industries for a sustainable climate transition

Specific conditions	
Expected EU	The Commission estimates that an EU contribution of between EUR

contribution per project	3.00 and 4.00 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 12.00 million.
Type of Action	Research and Innovation Actions

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Enhanced and updated understanding of the challenges and opportunities for the cultural and creative industries (CCIs)⁴⁷ in relation to a sustainable climate transition.
- Research and knowledge-based approach(es) on how innovative business models, including use of new technology, can make Europe's CCIs true drivers of a sustainable climate transition.
- Significant contributions to help European CCIs become better prepared to adapt to and contribute to the climate transition in line with the 2030 goals spelled out under a European Green Deal⁴⁸.

<u>Scope</u>: The cultural and creative industries (CCIs) are an important source of growth and job creation in the European economy. Moreover, the CCIs play a key role in shaping culture, values and perceptions across the European Union and beyond. Thus, the role of the CCIs in achieving the European Union's climate transition objectives is crucial.

At the same time, the CCIs are characterised by a large and diverse number of chiefly small and micro enterprises, as well as by hefty differences across geographical and sectorial divides. Large parts of the CCIs, thus, lack the capacity to take the necessary measures to adapt to and thrive under the climate transition, not to speak of driving this transition.

Specific approaches are therefore needed to enable Europe's CCIs to develop their full potential to support a sustainable climate transition.

Proposals should provide for developing and validating an economically sustainable model, or a portfolio of approaches, that address this challenge. A suitable set of CCI sector(s) or/and cross-sectoral issues should be selected to focus on, which allow significant impacts to be achieved.

The approach(es) developed should address the adoption of new sustainable business models, including the use of new technologies and possibly the development or adaption of new technological solutions, as well as gaps in skills and capacities. The proposed models should

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CCIs as defined in the European Parliament Resolution 'A coherent EU policy for cultural and creative industries':

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016IP0486&from=EN https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal en

be valid across different Member States/Associated Countries (where appropriate including regions), and address the needs of small, micro as well as larger companies. Different Member States/Associated Countries should therefore be involved, as well as a wide set of stakeholders including concerned policymakers, in order to ensure that solutions developed are effective and realistic.

Solutions may involve the use of platforms or networks to facilitate sharing investments, facilities or competencies among several companies or across sectors. In such cases, established platforms, networks or clusters for CCIs should be taken into account, to avoid duplication of efforts.

Proposals should build on existing knowledge, activities and networks, notably the ones funded by the European Union. Furthermore, links should be established and synergies sought with closely related actions, such as relevant R&I actions funded by Horizon Europe or Horizon 2020. In particular, when appropriate cooperation with projects funded under the topic 'Cultural and creative industries for a sustainable climate transition' of the Horizon Europe Cluster 2 2024 calls should be sought.

DIGITAL

HORIZON-CL2-2023-HERITAGE-01-03: Re-visiting the digitisation of cultural heritage: What, how and why?

Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 3.00 and 4.00 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 12.00 million.	
Type of Action	Research and Innovation Actions	

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Increased critical understanding of the potential, opportunities, barriers and risks of digitising cultural heritage.
- Research and knowledge-based recommendations and/or method(s) on how the European cultural heritage sector can better manage digitisation of their collections, including setting priorities, ensuring the correct context is reflected on the digital objects created, and guaranteeing their long term durability.
- Validated framework(s) that support the cultural heritage sector to make best use of their digital assets, in order to reap the full benefits of the digital transition and avoid the pitfalls.

 Significant contributions to help European cultural heritage institutions become more digitally adept, capable of capitalising fully on the opportunities of digital cultural heritage.

<u>Scope</u>: The cultural heritage sector, as the rest of society, finds itself in the midst of a dramatic digital transition. This transition deeply affects its activities, its organisation, and at times the purpose or existence of its institutions and subsectors.

A key component of European and national cultural heritage policy has been, and is, the digitisation and subsequent broad access to cultural heritage⁴⁹. Large sums have been invested by the European Union and Member States to digitise collections, monuments and buildings, and more are likely to follow.

Digitisation of cultural heritage can bring many benefits. In terms of research, preservation, accessibility and of supporting cultural and creative innovation, digitised cultural heritage can be an enormous asset. One of the reasons why these large investments are made is that such digitised objects facilitate a wider, more creative use of Europe's world-renowned cultural heritage, and the creation of more societal value in Europe and beyond.

However, along with the benefits of digitising cultural heritage come pitfalls. One risk may be that digitised cultural heritage is used, or misused, out of its context.

Libraries, museums and archives, as well as other collections, often have long histories. Both the collections they house and the language they use(d) to describe these collections are products of that historical legacy. Taken out of its context, such items may be used to convey messages contrary to the intended, possibly in conflict with European values or the policy of the institutions housing the collections.

Other risks may emerge from the (perceived) loss of control over the uses of the digital objects, possibly prompting cultural heritage institutions to limit the access to and the use of their digital assets, thus hampering the realisation of the wider societal value digitisation is expected to bring.

The uses of digitised cultural heritage, and the strategies that might be pursued in order to reap the full benefits while avoiding the pitfalls, have not been thoroughly researched. Proposals should address these gaps in knowledge, and elaborate evidence-based recommendations on how digitisation of cultural heritage can best be managed, as well as on how digitised cultural heritage can best be used.

The European cultural heritage sector is wide and diverse, comprised of many different actors, from large public institutions to independent artists and artisans. Moreover, the context, the cultural heritage itself and the policy landscape often vary strongly between different countries and regions. This diversity should be taken into account when elaborating recommendations, so that these can realistically be applied across Europe.

See for instance https://digital-strategy.ec.europa.eu/en/policies/cultural-heritage

To the extent possible, proposals should build on existing knowledge, activities and networks, notably the ones funded by the European Union. Furthermore, where appropriate links should be established and synergies sought with related actions, such as relevant R&I actions funded by Horizon Europe or Horizon 2020. In particular, funded proposals should liaise with the projects funded under the "European Collaborative Cloud for Cultural Heritage" calls in the frame of Horizon Europe Cluster 2, as well as, to the extent appropriate, with projects funded under the Digital Europe programme to establish a European data space for cultural heritage.

INNOVATIVE

HORIZON-CL2-2023-HERITAGE-01-04: Cultural heritage in transformation – facing change with confidence

Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.	
Type of Action	Research and Innovation Actions	

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Deeper and broader understanding of the constantly changing nature of cultural heritage, and of how this understanding can be effectively shared with citizens.
- Evidence based method(s), tested in small scale, that deploy a deeper understanding of the transformative nature of cultural heritage to help citizens face current and future societal transformations, change and disruption with greater confidence.

<u>Scope</u>: Cultural heritage has enormous potential in terms of its contribution to improving the quality of life for people, understanding the past and assisting territorial cohesion⁵⁰. Cultural heritage gives us a sense of identity and belonging, and shape our future. Current policy discourses focus essentially on the need to protect and preserve cultural heritage for the benefit of future generations⁵¹.

However, just as culture and society, cultural heritage is in reality subject to constant change. Cultural heritage, ranging from the tangible to the intangible, from narratives and practices to monuments, landscapes and objects, is created, developed, destroyed, re-interpreted and revalued relentlessly. Moreover, how we interpret, value (or not) and manage our cultural heritage is, necessarily, a function of our currently dominating beliefs, values and other cultural and socio-economic circumstances. In effect, the now dominating discourse

See for instance the preamble to the World Heritage Convention (UNESCO 1972)

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See for example Cultural Heritage in a Changing World (Borowiecki, Forbes, Fresa 2016)

emphasising the need to protect and preserve a cultural heritage which is perceived as precious and fragile is a relatively recent phenomenon.

European citizens and societies are facing an ever-faster pace of cultural, social and technological change, where old habits and beliefs are forcefully replaced by new ones. Every age in the course of history has experienced change to a greater or lesser extent, but it hardly seems an exaggeration to suggest that the world in the 21st century faces epochal changes, which affect every part of society. Subjected to such a dramatically changing environment, it is natural that citizens feel uncomfortable, perhaps lost, and long for the perceived stability of the past.

Making the constantly changing nature of our cultural heritage, the ongoing creation, destruction and re-interpretation, a more prominent and visible feature in the interaction with users, can potentially help make sense of today's and tomorrow's societal transformations. A greater understanding and broader awareness of the transformative nature of our cultural heritage can help put societal changes in perspective, diminish the stress perceived by people affected, and help approaching change with more confidence and less fear. Yet, the transformative nature of cultural heritage and the potential societal benefits it can bring has not been thoroughly researched.

The challenge is to deepen knowledge in this area, and devise ways to broaden and deepen the understanding of the transformative nature of cultural heritage, with the aim to help citizens face current and future societal transformations with greater confidence. The approach(es) chosen should be evidence based, effective and economically, culturally, politically and environmentally sustainable.

In order to verify and refine the effectiveness and sustainability of the proposed method(s) across Europe, at least three small scale pilot trials should be carried out in different settings.

Proposals may choose to focus broadly on a wide spectrum of cultural heritage or only on a highly relevant and potentially high-impact subset. However, the recommended methods should be effective across the cultural, geographic, political and socio-economic diversity of Europe.

To the extent possible, proposals should build on existing knowledge, activities and networks, notably the ones funded by the European Union. Furthermore, funded proposals may establish links and seek synergies with related actions, such as relevant R&I actions funded by Horizon Europe or Horizon 2020.

HORIZON-CL2-2023-HERITAGE-01-05: Fostering socio-economic development and job creation in rural and remote areas through cultural tourism

Specific conditions	
Expected EU	The Commission estimates that an EU contribution of between EUR
contribution per	2.00 and 3.00 million would allow these outcomes to be addressed

project	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 9.00 million.
Type of Action	Research and Innovation Actions

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Increase the macro-regional cultural tourism cooperation to help the socioeconomic development of rural and remote areas⁵².
- Develop cultural tourism⁵³ and creative tourism⁵⁴ business models for rural and remote areas to increase sustainable job opportunities and investments.
- Promote an inclusive and sustainable cultural and creative tourism that fosters social inclusion and engagement, respects the needs of local communities, the heritage and the capacity of the rural and remote areas.

<u>Scope</u>: A large part of European cultural landscapes outside urban territories is rural. Cultural and creative tourism, as a driver of sustainable development, could give visibility to those rural cultural landscapes and have a significant positive impact on the revitalisation of rural and remote areas. It could bring benefits to local communities, foster sustainable development, job creation and social inclusion, by promoting the indigenous cultural history and culture (with its traditions, arts and crafts) as well as the local gastronomy and farming.

However, increasing cultural and creative tourism in rural and remote areas might not be an easy task, as it requires specific and different policy solutions to address the challenges and specificities of the diversified rural and remote areas. Neighbourhood countries encounter similar challenges and specific problems, which the current one-size-fits-all cultural tourism business models cannot address. In addition, the geographical and cultural similarities within each macro-region provide the basis for cooperation and joint strategies, which could help to profile each region as a cultural tourism destination for key markets, but their full innovation potential is not yet fully exploited.

Therefore, research and innovative solutions for sustainable cultural and creative tourism development in rural and remote areas (including outermost areas) that will aim at job creation and socio-economic regeneration, taking into consideration the specificities of each

According to the definition adopted by the UNWTO General Assembly, at its 22nd session (2017), Cultural Tourism implies "A type of tourism activity in which the visitor's essential motivation is to learn, discover, experience and consume the tangible and intangible cultural attractions/products in a tourism destination.

Typology of the rural and remote territories is given on LTVRA: https://ec.europa.eu/info/sites/default/files/strategy/strategy_documents/documents/ltvra-c2021-345-documents-part1_en.pdf

UNESCO (2006) also identifies creative tourism as "travel directed toward an engaged and authentic experience, with participative learning in the arts, heritage, or special character of a place, and it provides a connection with those who reside in this place and create this living culture" (UNESCO, 2006:3).

region and the diversity of economies should be explored by the research proposals under this topic.

Research should first explore and analyse how cultural tourism can benefit rural and remote areas as well as should address the challenges and needs of cultural tourism in these areas. Considering that cross-border cooperation might help rural and remote areas to promote the region as an attractive destination, the research should identify existing cross-border and macro-regional strategies for cultural tourism and analyse the level of cooperation of the EU neighbourhood countries and the countries of the same region. The researchers should examine whether the implementation of the existing practices contribute to or burden the balanced development of cultural tourism in rural and remote regions, as well as identify the barriers in their implementation. The proposals are expected to provide recommendations with methodologies, and good practices for improvements and develop cross-border/macroregional sustainable cultural tourism policy scenarios for rural and remote areas that will aim to connect the more touristic with less touristic and remote destinations and to foster a balanced level of socioeconomic development. Solutions that would include the use of digital technologies to promote less touristic and remote destinations are welcome. The proposals should guarantee an equilibrium between the increase of cultural tourism and the capacity of the sites and the rural areas.

Cultural and creative tourism business models that will act as catalysts for the cooperation between the rural/remote areas of each region should be developed. Such models should aim at creating new job opportunities, fostering participation of local citizens in cultural tourism and increasing social inclusion, while promoting not only the natural and historical heritage but also the local identity, arts and crafts by engaging tourists with the creative process. The cultural and creative tourism business models and the processes of settlement development that the models might include should consider the protection of nature and built heritage of the rural and remote areas.

The proposals should also analyse how these business models can be applied to the cultural tourism for rural and remote areas to fully utilise their potential. The proposals may also consider promoting silver economy and silver tourism, through the proposed cultural and creative business models, while they should consider building on relevant H2020 projects. Finally, the topic should contribute to the EU long-term Rural Vision.

HORIZON-CL2-2023-HERITAGE-01-06: A world leading European video game innovation system

Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 3.00 and 4.00 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 12.00 million.
Type of Action	Research and Innovation Actions

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Well founded and prioritised recommendations for European policy, including R&I policy, to support sustained innovation and growth in the European video game industry.
- Methodology(ies), supported by evidence, to increment the use of video game know-how and technology to drive innovation in other economic sectors.
- Significant contributions towards a thriving European video game industry that contributes decisively to economic growth, job creation, physical and mental well-being as well as to social and cultural cohesion.

<u>Scope</u>: The video game industry has shown exceptional growth and a fast paced evolution since its inception in the 1970's. In 2019, the size of the European Union video game market was over EUR 20 billion⁵⁵, a growth of 55% compared to 2014. 51% of the Union's population played video games in 2019. Most forecasts predict continued rapid growth both in usage, turnover and added value for the foreseeable future.

The video game industry is in many ways a pioneer when it comes to harnessing the digital transition to create attractive products and rewarding experiences for its users. Also, the video game industry drives the development of new methods and technologies which have proven valuable in other industries, such as the automotive and pharmaceutical industries, as well as in the public sector.

Thus, the video game industry is not only a key channel of increasing importance for the expression of culture and creativity in Europe, but also a major economic sector in itself, and a vital driver of innovation in other economic sectors. Yet, the potential contributions to European economic growth, well-being, sustainability and social cohesion, and how to mobilise this potential, has not been thoroughly researched.

Research should address these gaps in knowledge, and develop recommendations for how to support sustained innovation, growth and competitiveness in the European video games sector, as well as for how to encourage the uptake of know-how and new technologies in other economic sectors.

The European cultural heritage and arts are diverse and uniquely renowned, and the European creative tradition strong. Such factors can constitute an important source of competitiveness for the sector.

Parts of Europe are often considered examples of success in the video game industry, such as Sweden, France or Finland, where some leading companies are headquartered and where the sector produce sizeable contributions to gross domestic product (GDP) and export revenues.

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⁵⁵ "Key Facts" (2020), by ISFE

Other parts of Europe, however, punch below their weight. Proposals should therefore involve different Member States/Associated Countries, in order to develop recommendations that are valid on a European scale.

The value chain – or ecosystem – of the video game industry is complex, diverse and rapidly evolving, as is generally the case in creative industries. Key roles are played by established companies with well-known brands, small independent development companies and freelancers, as well as by distribution platforms of various kinds.

Proposals do not have to cover the entire ecosystem in all its complexity, but may chose a more limited focus to allow a stronger impact. Research should, however, properly take into account all parts of the ecosystem which are key in accordance with the chosen focus and scope. Proposals should therefore provide for engagement with a wide set of stakeholders, including relevant policymakers, to ensure that solutions/methodologies developed are effective and economically, culturally and politically feasible at a European level.

Proposals should build on existing knowledge, activities and networks, notably the ones funded by the European Union. Furthermore, funded proposals should establish links and seek synergies with closely related actions, such as relevant R&I actions funded by Horizon Europe or Horizon 2020.

HORIZON-CL2-2023-HERITAGE-01-07: Promoting cultural literacy through arts education to foster social inclusion

Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.	
Type of Action	Research and Innovation Actions	

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Increase understanding of the value of cultural literacy on social cohesion and the increase of tolerance on cultural diversity.
- Provide innovative policy solutions that will increase cultural literacy in Europe through formal and non-formal education, as well as ways to integrate them into the education policies.
- Foster cultural literacy around European cultures.

<u>Scope</u>: Cultural literacy may help individuals encounter cultural differences and to elaborate one's own identity in a respectful social interaction with other people. Cultural literacy is

necessary in the current European landscape, which has been intensified due to the various socioeconomic challenges, including misinformation, demographic change and migration, increasing the plurality of cultures and identities. Existing research has examined the importance of cultural literacy, its value in formal and non-formal education, while has examined ways to improve cultural literacy in Europe. However, the challenge is to better understand the value of cultural literacy on social cohesion and inclusion, how we could exploit its benefits through arts in education and what are the best practices/ policies to further integrate it in school and out of school activities. Education and education policies are a key to increasing resilience and cohesion in Europe, however, cultural literacy in education differs among the European countries, while the current policies in Europe commonly have a narrow and normative notion on how to implement this in practice.

Research proposals should first analyse the role of arts in the different stages of education (primary, secondary and/or higher education), including in non-formal education (especially in cases when non-formal education methods are integrated in formal education curricula) as well as how arts education can enhance/promote cultural literacy, aiming to develop prosperous, inclusive, and sustainable societies.

The research under this topic should examine the value/impact of cultural literacy on social cohesion and cultural diversity, and analyse how it can assist on the inclusion of disadvantaged groups and minorities into the cultural and social life. This analysis should include an indicative/representative examination of educational systems where cultural literacy education is well integrated as well as systems where it is less integrated or even absent (vis a vis indicators on multicultural competence).

The research proposals should examine the implementation/development of cultural literacy in Europe in the different stages of education including in non-formal education (taking also into consideration digital experiences) and identify the main barriers and needs for the integration of cultural literacy in education policies. Using the results of previous funded projects under H2020, the proposals should also analyse existing proposed solutions for the inclusion of cultural literacy in formal and informal forms of education and provide recommendations for effective actions for increased access of children and young people on cultural literacy. Proposals should take into consideration digital solutions, such as the interactive digital arts and ludic literacy. Proposals should include a lifelong learning perspective (early childhood education and care, school, vocational education and training and higher education, non-formal learning), and include national, regional and local support for partnerships (for example between schools and arts and cultural heritage organisations), while may consider the role of CCIs.

Europe needs policies and practices that seek to advance social cohesion and inclusion in a way that reflects the increasingly diverse reality of today's Europe, supports respect for diversity and difference, and enables the growth of young people's identities. Therefore, the proposals under this topic should develop innovative policy solutions/recommendations to increase cultural literacy to positively affect society and provide ways that those solutions could be integrated into the education policies in Europe. The proposals should also propose

methods that will help countries better assessing the impacts of cultural literacy on the inclusion of all children and young people.

The participation of countries with diverse educational policies is encouraged.

HORIZON-CL2-2023-HERITAGE-01-08: Cultural and creative approaches for gender-responsive STEAM education

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 3.00 million.
Type of Action	Coordination and Support Actions
Procedure	The procedure is described in General Annex F. The following exceptions apply: The granting authority can fund a maximum of one project.
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). ⁵⁶ .

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- A coordination network between organisations from the cultural and creative industries (CCIs), civil society, technological enterprises, secondary and higher education institutions and digital citizen platforms to foster the uptake of artistic, cultural and social science approaches in STEM education, research and innovation.
- Increased understanding about the benefits of integrating artistic, cultural and social science approaches in STEM education, research and innovation and its impact on competitiveness, gender equality and career perspectives.

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This <u>decision</u> is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

- Pilot for the first European Union "STE(A)M week for future women innovators" together with science and technology museums, technological enterprises, secondary and higher education institutions, CCIs and relevant civil society organisations, engaging at least 4000 students in STEM educational activities through cultural and creative approaches.
- STEAM skills development and increased interest in new technologies, including those applied to cultural value chains and cultural heritage, to bridge the gender gap.

<u>Scope</u>: Women have long played an important, but often unacknowledged role in science, technology, engineering, and mathematics (STEM), and while the demand for STEM-skills in the labour market is growing to meet the green and digital transitions, women risk losing out on these opportunities due to their underrepresentation in these fields⁵⁷. Similarly, whilst women are overall well represented in many cultural professions, certain cultural and creative sectors which demand more digital and technological skills, such as the gaming and filming industry, still see a stark underrepresentation of women in these fields, as well as persisting gender stereotypes in the content that is produced.

In order to improve girls' participation and interest in these fields from an early age, a STEAM approach, featuring creative thinking, and a scientific evidence-based approach, applied arts (the "A" in STEAM), and the teaching of science in political, environmental, socio-cultural contexts, can prove particularly useful. By highlighting the social impact and market relevance of research and innovation, the interdisciplinary STEAM approach can strengthen the appeal of scientific and technological careers, and make new products, including from the CCIs, more gender sensitive.

The action should establish a coordination network between the CCIs, technological enterprises, SMEs, secondary and higher education institutions, and other relevant organisations, including digital citizen platforms to develop a better understanding of the potential benefits of cultural and artistic approaches in traditional STEM education, research and innovation. This includes examining the effects of such approaches on competitiveness, gender equality, and talent recruitment and retention in STEM-driven innovation, including in CCIs, where women are underrepresented. The network should provide mutual learning opportunities and develop evidence-based recommendations for policymakers and relevant organisations, wishing to adopt a STEAM approach. It should also offer decision-makers and persons in leadership positions training on the aspects that hinder the presence and promotion of women in STE(A)M, including stereotypes and double standards, gender-based violence (including sexual harassment), as well as successful strategies in preventing and overcoming these occurrences.

In addition, in line with the European Strategy for Universities and the Digital Education Action Plan 2021-2027, the coordination network should engage female students in learner-

According to She Figures 2021, women are still underrepresented as doctoral graduates in STEM fields, including physical sciences (38%), ICT (20.8%), engineering (27%), and mathematics (32.5%).

driven experiences in cultural and creative sectors, such as the gaming, filming and music industry, to strengthen their digital skills and broaden their interest in STEM-related skills.

The network should develop a pilot for an "EU STEAM week for future women innovators", together with science and technology museums, secondary and higher education institutions, relevant organisations from civil society, digital citizen platforms and the cultural and creative industries. Activities during this week should focus on exploring and learning about science history, STEAM-related skills, and new technologies, like artificial intelligence and virtual reality, through interdisciplinary and creative approaches. The week should engage at least 4000 students aged 11-18 across EU Member States and Associated Countries. Activities should be open to all genders and the participation of girls from minority, socially disadvantaged and rural backgrounds is particularly encouraged.

Proposals should develop strategies for reproducibility and sustainability of the activities towards new skills' learning pathways, including through the creation of networks for the participants and follow-up training courses (e.g. summer schools, mentoring, and intersectoral exchange programs).

Activities may build on outcomes of relevant projects, funded under earlier Framework Programmes (e.g. Equals-EU, shemakes.eu, HYPATIA and Scientix 4) ⁵⁸, results funded under the call HORIZON-CL2-2021-HERITAGE-01-03 and HORIZON-CL2-2022-HERITAGE-01-09, as well as relevant results from Erasmus+ projects and Creative Europe.

Call - A European Collaborative Cloud for Cultural Heritage - 2023

HORIZON-CL2-2023-HERITAGE-ECCCH-01

Conditions for the Call

Indicative budget(s)⁵⁹

Topics	Type	Budgets	Expected	Indicative
	of	(EUR	EU	number
	Action	million)	contribution	of
		2023	per project	projects

https://cordis.europa.eu/project/id/101000063;

https://cordis.europa.eu/project/id/665566;

https://cordis.europa.eu/project/id/101000063

https://equals-eu.org/;

The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.

The Director-General responsible may delay the deadline(s) by up to two months.

All deadlines are at 17.00.00 Brussels local time.

The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for years 2023, 2024 and 2025.

			(EUR million) ⁶⁰	expected to be funded
Opening: 10	Jan 2023	1		
Deadline(s): 21 Sep 2023				
HORIZON-CL2-2023-HERITAGE-ECCCH- 01-01	IA	25.00	20.00 to 25.00	1
HORIZON-CL2-2023-HERITAGE-ECCCH- 01-02	RIA	10.00	4.00 to 5.00	2
Overall indicative budget		35.00		

General conditions relating to this call		
Admissibility conditions	The conditions are described in General Annex A.	
Eligibility conditions	The conditions are described in General Annex B.	
Financial and operational capacity and exclusion	The criteria are described in General Annex C.	
Award criteria	The criteria are described in General Annex D.	
Documents	The documents are described in General Annex E.	
Procedure	The procedure is described in General Annex F.	
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G.	

Proposals are invited against the following topic(s):

HORIZON-CL2-2023-HERITAGE-ECCCH-01-01: A European Collaborative Cloud for Cultural Heritage



Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.

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Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 20.00 and 25.00 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 25.00 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).
	The following additional eligibility criteria apply:
	Proposals must include an outline of previously funded projects in areas relevant to the European Collaborative Cloud for Cultural Heritage (ECCCH), at both European and national levels, as well as of other pertinent existing digital resources, and they must identify the outputs or resources that could be incorporated in, connected to, or facilitate interoperability with, the ECCCH. Proposals must outline a business plan for the sustainable operation of the structure and activities of the ECCCH after the end of the project.
Procedure	The procedure is described in General Annex F. The following exceptions apply: The granting authority can fund a maximum of one project.
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). ⁶¹ . The use of significant parts of the project budget to purchase or lease hardware equipment or commercial software is strongly discouraged.

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This <u>decision</u> is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

Beneficiaries may provide financial support to third parties to cultural heritage institutions, in take-up of tools, technologies and for populating and validating the relevant use cases through experiments. A maximum of 10% of the budget should be dedicated to financial support to third parties. The maximum amount to be granted to each third party is EUR 60 000.

Beneficiaries will be subject to these additional requirements on outputs:

All software developed should be open source, licensed under a CC0 public domain dedication or under an open source licence as recommended by the Free Software Foundation⁶² and the Open Source Initiative ⁶³. If the use of open source software components would require disproportional efforts or significantly diminish the quality or performance of the software, proprietary components may be used provided that: an open functional replacement is available; they do not introduce proprietary data formats or Application Programming Interfaces; a full user license free of charge for an unlimited period of time is granted to the consortium responsible for the ECCCH and all its users.

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- The ECCCH is established as a legal entity, which serves as a Single Entry Point⁶⁴ (SEP) and managing body, and is supported by an external independent advisory board that assesses and advises on the technical robustness, effectiveness and usability of the ECCCH platform, its tools and services.
- The European Collaborative Cloud for Cultural Heritage (ECCCH) enhances the ability of cultural heritage actors to interact across disciplinary, institutional, sectorial and political boundaries and cooperate effectively in advancing research on cultural heritage and in developing innovative solutions for the discovery, recovery, conservation, digitalisation and valorisation of digital, digitised and digitisable cultural heritage objects ⁶⁵. This might also facilitate the prevention of illicit trafficking of cultural heritage objects ⁶⁶.

https://www.gnu.org/licenses/license-list#SoftwareLicenses

https://opensource.org/licenses

See further: https://ec.europa.eu/research/participants/data/ref/h2020/other/guides_for_applicants/h2020-im-ac-

innotestbeds-18-20 en.pdf and https://www.lawinsider.com/dictionary/single-entry-point

In the context of this topic, cultural heritage objects or artefacts should be understood as any form of cultural heritage that can be represented in a digital format: tangible, intangible, born digital, etc.

In line with the European Commission action plan against trafficking in cultural goods: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13352-Trafficking-in-cultural-goods-EU-action-plan_en.

- Cultural heritage institutions, curators, conservators, researchers, art managers, educators, other cultural heritage professionals and potential users in Europe are aware of, have access to and use the ECCCH platform, its tools and services for the study, digitisation, conservation, valorisation and access to cultural heritage artefacts and related data, in particular for the sharing and preservation of such data, and are involved in its validation and assessment, in view of continuously improving the ECCCH's performance and use.
- Cultural heritage institutions, curators, conservators, researchers, art managers, educators
 and other cultural heritage professionals apply new working approaches to collaborate
 across geographic, cultural, and political borders within Europe (and beyond), develop
 new business models to manage and valorise intellectual property related to cultural
 heritage artefacts and their digital twins, and unleash the full potential of a digitally
 enabled cultural heritage ecosystem connecting cultural heritage actors, activities and
 objects.
- The governance and management of the ECCCH is widely accepted, trusted and supported by stakeholders at European, national, regional and local level, in particular by Member States, and its sustainability at legal, technical, financial, human resources and scientific level is ensured.
- Participants of past and ongoing EU-funded initiatives, activities and networks are invited to cooperate with the ECCCH-related actions and to contribute with data to the ECCCH and testing of ECCCH tools.

<u>Scope</u>: This topic aims at designing and establishing a European Collaborative Cloud for Cultural Heritage (ECCCH) and demonstrating its basic capacities.

The cultural heritage sector is in the middle of a digital transition: digital technologies are revolutionising existing workflows, procedures and practices. To support this transition and further enhance research and innovation collaboration and activities in the field, the action should extend and improve the availability of sophisticated digital instruments and provide a platform for data exchange and collaboration to the cultural heritage sector. It should fulfil the requirements of the practitioners in the field by being inclusive, collaborative, interactive, safe, fidelity- and equality-based, and providing open access.

The overall goal is to define, extend and accelerate the development of a platform for multidisciplinary and multi-sectoral collaboration on cultural heritage, focusing on users' requirements and ease of use, as well as underpinning an open digital ecosystem that provides the tools and services needed to enable and scale-up future research and innovation in the field.

The initial focus is on the design and implementation of the basic architecture and governance of the ECCCH. The design and implementation of the ECCCH should be driven by the needs of its users: The professionals with various disciplinary background working on cultural heritage and in related sectors. The governance body of the effort therefore should include a

wide representation from the European cultural heritage sector, research organisations, other related initiatives and from Member States and Associated Countries (see further below).

The project should:

- Provide services to both large and small museums and other cultural heritage institutions, thereby bridging the gap between national, regional and local cultural heritage institutions, both public and private.
- Establish a pan-European network of key stakeholders from cultural heritage institutions, including a robust scientific and professional community and be open to the cooperative efforts of a wide community of users.
- Supervise and steer the overall development strategy for the ECCCH. This includes the
 collaborative production, enrichment, structuring and dissemination of shared data to
 support community needs, while at the same time establish clear rules for access and
 participation and set up a framework for connecting existing communities and initiatives
 related to research and digital innovation in cultural heritage and cultural and creative
 industries.
- Provide a unified framework for long-term access and preservation of digital(ised) data, both public and private, based on a user-driven and scalable design as well as a general strategy for stimulating the use of innovative tools and services for the ECCCH.
- Propose a convincing consortium structure and outline a business plan ensuring viability during and after the implementation of the grant.
- Ensure continued maintenance of the ECCCH platform and the required storage, beyond the lifetime of the project and position the digital ecosystem as a key to connecting cultural heritage actors, activities and objects in synergy with the other related initiatives in the field.
- Enable semantic representation of multiple data types (various incarnations of 2D and 3D media, video, text), stored in federated repositories according to FAIR principles ⁶⁷ and encoding data provenance. Previous and current ongoing related European initiatives should be properly taken into account. If appropriate, collaboration with the common European Data Space for Cultural Heritage (the Data Space) should be established.
- Allow for efficient web-based visualisation and analysis, and the creation of annotations over visual data.

Controlled use of data is an important goal. Thus, the ECCCH should support authentication (single user/groups of users), identification of ownership, data rights and traceability of modifications (creation of derived data), data quality/fidelity information, and data security

Findable, Accessible, Interoperable and Reusable

facilities. Technologies enabling access and use from geographic areas with low-performance network connections should be provided. The system should allow national communities/institutions to link and potentially configure their own local clouds in case this is necessary.

The project should build an inventory of previously funded EU and national initiatives and existing digital resources in areas relevant to the ECCCH, such as for instance EOSC, the Data Space, Europeana or Gaia-X, establish a comprehensive gap analysis and identify the outputs or resources that could be incorporated in, connected to or facilitate interoperability with the ECCCH, with a view to build on previous investments and already available initiatives.

The proposed open source platform should:

- Build on and expand existing standards and consolidated practices for managing the relevant data, including resources such as ontologies, vocabularies and terminologies.
 Where appropriate, this work should be conducted in collaboration with the Data Space;
- Be based on a modular, extensible and evolutionary model, that enables the incorporation of other instruments/tools developed by other subsequent consortia (thus providing libraries and Application Programming Interface (API) for designing tools, including HTML5- and WebGL-compliant Graphical User Interface (GUI) and data visualisation libraries);
- Provide instruments for assessing the quality of the data on the platform (and related attributes in the data model), and for monitoring the effectiveness/usage of the tools integrated into the ECCCH;
- Along with basic data management layers, the ECCCH should provide the necessary
 instruments for developing applications working on and integrating with the cloud.
 These instruments and related libraries should be properly documented by means of
 software development guidelines, allowing other consortia to design additional tools to
 extend the ECCCH.

Demonstrating successfully a selection of essential tools enabling collaborative research and innovation activities of users within the ECCCH that can also serve as good-practice examples for the development of additional professional tools needed for the sustainable functioning of the platform, e.g.:

- Integrating and accessing data, providing interactive and batch functionalities for data and metadata stored on the (federated) semantic repository, as well as sophisticated search and retrieval features, with web-based browsers specific for each data type, with compatible GUI;
- Data management, to structure, encode, store and analyse all knowledge needed to support curation activities (organisation of catalogues, bibliographies, conservation

history of specific artworks, loan and travel history, monitor fraudulent use of museum's digital assets, etc.).

All basic infrastructure components should be provided as open-source, with proper documentation and training material to enable other consortia to cooperatively contribute data and tools to the cloud platform, according to the principle of an extensible and evolutionary design of the cloud. The good practice proposed for software documentation should become a reference for other project consortia under topics promoted in future ECCCH calls.

The ECCCH governance should follow basic requirements. In concrete terms, it should be structured and defined around the following needs: data security, scalability, technical robustness, technical and economic sustainability, independent usability evaluation and long-term assessments, networking, training and community building. ⁶⁸ To this end, the governance should include a legal entity with a Single Entry Point (SEP), as well as an independent external advisory board. The governance should be properly documented.

The governance body should include representative stakeholders of existing communities and cultural heritage institutions, potentially involving coordinators of other actions funded under the ECCCH calls and, where appropriate, relevant actions funded under the Digital Europe Programme, such as the Data Space. Furthermore, the governance body should ensure the engagement of appropriate representatives of a wide range of Member States and Associated Countries, as well as of related EU initiatives.

The governance body should:

- drive continuous evaluation processes (integration and interoperability aspects, verification of user interface consistency and usability, and evaluation of effectiveness). These evaluations need to be conducted independently of the funded consortium;
- connect technical consortia with the cultural heritage community at large, as well as with an inclusive community of professionals and researchers, through networking and training programs;
- capture community expectations and oversee user-based assessments of ECCCH resources;
- contribute to the future development agenda of the ECCCH and ensure economic, organisational and technical long-term sustainability.
- ensure sustainability after the implementation of the grant.

The proposal should set out active links and coordination with projects funded under the call HORIZON-CL2-2023-HERITAGE-ECCCH-01, and if appropriate also with relevant projects funded under the Digital Europe programme, to take part in common technical coordination

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See European Commission, Directorate-General for Research and Innovation, Brunet, P., De Luca, L., Hyvönen, E., et al., Report on a European collaborative cloud for cultural heritage: ex – ante impact assessment, 2022, Executive summary, p. 5, https://data.europa.eu/doi/10.2777/64014

activities, and with a view to ensure synergies with current and previous activities in the field. It is expected to provide clear guidelines and technical support on how the deliverables developed by subsequent projects should be designed and implemented, with the goal of ensuring a proper integration in the ECCCH platform. Therefore, the proposal is expected to include a budget for the attendance to regular joint meetings and may consider to cover the costs of any other joint activities without the prerequisite to detail concrete joint activities at this stage. The Commission may take on the role of facilitator for networking and exchanges, including with additional relevant stakeholders, if appropriate.

The proposal should also set up and manage a common ECCCH website, where all projects funded under the ECCCH calls should be granted space. It is critical that any interested party from the EU or Associated Countries can access the ECCCH at fair conditions and pricing and with transparent and mutual obligations with regards to, for instance, security, safety and intellectual property rights. This should include the promotion of examples of collaborative work in representative application areas that relate to a large part of the cultural heritage sector.

Beneficiaries may provide financial support to third parties, in particular cultural heritage institutions with regional or local scope or mandate, in view of promoting the take-up of tools and methodologies as well as for demonstrating and validating the relevant use cases through experiments. The financial support to third parties can only be provided in the form of grants. A maximum of 10% of the budget is expected to be dedicated to financial support to third parties.

The Commission estimates that a project duration of approximately 5 years is appropriate for the project funded under this topic, in order to ensure that results from future ECCCH actions can be properly incorporated.

Please also refer to the Destination introduction text to consider some key characteristics of the vision for the ECCCH.

HORIZON-CL2-2023-HERITAGE-ECCCH-01-02: A European Collaborative Cloud for Cultural Heritage – Innovative tools for digitising cultural heritage objects

Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 4.00 and 5.00 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 10.00 million.	
Type of Action	Research and 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).
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). ⁶⁹ . Beneficiaries will be subject to these additional requirements on outputs: All software developed should be open source, licensed under a CC0 public domain dedication or under an open source licence as recommended by the Free Software Foundation ⁷⁰ and the Open Source Initiative ⁷¹ . If the use of open source software components would require disproportional efforts or significantly diminish the quality or performance of the software, proprietary components may be used provided that: an open functional replacement is available; they do not introduce proprietary data formats or Application Programming Interfaces; a full user license free of charge for an unlimited period of time is granted to the consortium responsible for the ECCCH and all its users.

<u>Expected Outcome</u>: Projects should contribute to all of the following expected outcomes:

- Cultural heritage professionals in Europe, including curators, conservators and researchers of cultural heritage, use a common set of new innovative tools and methods for the digitisation and visualisation of cultural heritage objects (3D and enhanced 2D) with regard to their visible and non-visible properties and characteristics, which are accessible through and connected to the European Collaborative Cloud for Cultural Heritage (ECCCH).
- The European Collaborative Cloud for Cultural Heritage (ECCCH) provides cultural heritage institutions and professionals with enhanced technological and methodological

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This <u>decision</u> is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

https://www.gnu.org/licenses/license-list#SoftwareLicenses

https://opensource.org/licenses

capabilities to study cultural heritage objects, to share related data of their visible and non-visible properties and characteristics, and to develop new forms of collaboration.

<u>Scope</u>: This topic aims at designing and implementing innovative tools and methods for digitisation of (a) visible characteristics and (b) non-visible characteristics of cultural heritage objects, to be incorporated into the European Collaborative Cloud for Cultural Heritage (ECCCH).

As regards digitisation of visible characteristics of cultural heritage objects, technologies are now satisfying the needs for a considerable part of uses and objects. For instance, in the field of digital documentation of cultural heritage, three-dimensional acquisition and reconstruction methods have been developed in the past twenty years, using photogrammetry and laser scanning techniques to capture the characteristics of physical cultural heritage objects. Such methods already provide robust solutions for the digital reconstruction of the geometry and visual appearance of object surfaces. In addition to these methods, in the field of cultural heritage conservation various non-destructive testing (NDT) techniques have become important technical and scientific means of examination. Such techniques allow understanding the phenomena of deterioration and defining the restoration, conservation and documentation needs of cultural heritage objects.

Nevertheless, there are still major needs in cultural heritage that require further research and innovation on more advanced digitisation tools and methods:

- New AI-powered tools and methods that improve the digitisation process of tangible cultural heritage objects. The robustness and efficiency of the 3D digitisation process should be improved, especially in the case of massive digitisation (for example collections of objects). The accuracy and completeness of surface appearance acquisition should also be improved, as well as the mapping of complex reflectance data on digital surfaces. Furthermore, such solutions should yield new improved methods for post-processing and cleaning of the 3D models produced.
- Improved methods for acquiring and processing enhanced 2D representations (e.g. reflectance transformation imaging, multispectral, panoramic), and for better integrating 2D representations with 3D representations.
- Future 3D models need to encode other key attributes in addition to the usual geometric and reflectance data, such as local uncertainty information. New tools and methods are therefore needed to calculate and encode local accuracy limits with high precision in reconstructed 3D models. These tools should be capable of producing measurement-based limits of the similarity between the digital model and the physical object at any surface point, as well as algorithmically estimated accuracy boundaries.
- To model a complex assembly is a costly effort, and today often requires dismounting the assembly - which is often not possible. Specific digitisation solutions should be developed that are capable of mixing various digitisation approaches (e.g. scanning and

computer tomography scans) in order to capture dynamic or hidden characteristics of complex assemblies without dismounting them.⁷²

As regards the study of non-visible characteristics of complex objects, nowadays different techniques are used, e.g. multispectral imaging, X-rays, infrared reflectance, terahertz imaging, etc. Proposals should focus on innovations at the data acquisition level, with a view to improve the quality and usability of the data generated. An important aspect is the robustness, reliability as well as the ease of use of any tool and method for analysing the visible characteristics and non-visible materials properties of cultural heritage objects under real world conditions. In addition, several recent experimental approaches have shown that multimodal analysis techniques should include a temporal dimension, observing the evolution of features and phenomena over time.

These challenges highlight the need for flexible, transferable, and simple solutions for documenting multimodal analyses. These solutions should include the integration of data acquisitions from different technologies into complex data structures that provide new analysis opportunities for conservation scientists, conservators and curators. This requires the introduction of new visualisation tools that act as virtual environments for scientific exploration, allowing scientists and curators to explore the full material complexity of cultural heritage objects beyond what is visible.

Large datasets are often generated (e.g., many dozens of images in the case of hyperspectral imaging). To address this, new AI solutions should be developed to generate categorised or pre-analysed data, enabling the selection and/or identification of specific elements, images or regions of interest that exhibit important differences for subsequent analysis and validation by the human expert.

The tools and methods introduced should focus on geometric and projective consistency of heterogeneous data from different technologies, with respect to different scales of observation and analysis, over a wide spectral range, to produce an integrated digital representation. Spatially localised characterisation of individual material layers is one of the goals, including coupling multi- or hyperspectral analyses with physicochemical characterisation of materials. New methods for access, exploration, and temporal monitoring of acquired data should be developed, including their interactive visualisation and classification.

The proposed software tools and methods to be developed should go beyond the lab prototype status, should be practical and possible to deploy easily in un-controlled environments (e.g. digitise in a museum room), and should ensure low cost and flexibility of use. The component for data integration into the ECCCH may extend the features of the basic tool developed by the project funded under topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01, with the goal of streamlining the upload of metadata/paradata and of raw sampled data.

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Concerning digitisation tools and methods mentioned, see European Commission, Directorate-General for Research and Innovation, Brunet, P., De Luca, L., Hyvönen, E., et al., Report on a European collaborative cloud for cultural heritage: ex – ante impact assessment, 2022, pp. 38-42 and 61-62, https://data.europa.eu/doi/10.2777/64014

The proposals should demonstrate the potential of the developed tools and methods through representative case studies, conducted in collaboration with relevant stakeholders. These case studies should cover a significant share of the range of cultural heritage objects, materials and conservation/restoration issues. The results of these case studies should produce emblematic data that can serve as models for promoting the re-use of the tool(s) and methods in other contexts and by other users within the ECCCH.

The proposed tool(s) to be developed should be implemented adopting the low-level libraries established by the project funded under topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01. The tool(s) developed should be compliant with the design of the ECCCH, and should be integrated with the ECCCH before the end of the project, together with proper documentation. All software and other related deliverables should be compliant with the data model and the software development guidelines elaborated by the project funded under topic 'HORIZON-CL2-2023-HERITAGE-ECCCH-01-01'. If appropriate these tools should be developed with a view to a wider deployment, including in the Data Space.

The proposals should furthermore make provisions to actively participate in the common activities of ECCCH initiative. In particular, the proposals should coordinate technical work with other selected projects and contribute to the activities of the project funded under the topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01.

The proposals should set up its project website under the common ECCCH website, managed by the project funded under topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01. The proposal is further expected to include a budget for the attendance to regular joint coordination meetings and may consider covering the costs of any other joint activities without the prerequisite to detail concrete joint activities at this stage.

Please also refer to the Destination introduction text to consider some key characteristics of the vision for the ECCCH.

Call - Research and innovation on cultural heritage and CCIs - 2024

HORIZON-CL2-2024-HERITAGE-01

Conditions for the Call

Indicative budget(s)⁷³

Topics Type Budgets Expected EU Indicative of (EUR contribution per number

The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.

The Director-General responsible may delay the deadline(s) by up to two months.

All deadlines are at 17.00.00 Brussels local time.

The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for years 2023, 2024 and 2025.

	Action	million)	project (EUR million) ⁷⁴	of projects expected to be funded
	g: 04 Oct			
HORIZON-CL2-2024-HERITAGE-01-01	IA	16.00	3.00 to 5.00	3
HORIZON-CL2-2024-HERITAGE-01-02	IA	13.00	3.00 to 4.00	3
HORIZON-CL2-2024-HERITAGE-01-03	IA	13.00	3.00 to 4.00	3
HORIZON-CL2-2024-HERITAGE-01-04	IA	13.00	3.00 to 4.00	3
HORIZON-CL2-2024-HERITAGE-01-05	RIA	10.00	2.00 to 3.00	3
Overall indicative budget		65.00		

General conditions relating to this call	
Admissibility conditions	The conditions are described in General Annex A.
Eligibility conditions	The conditions are described in General Annex B.
Financial and operational capacity and exclusion	The criteria are described in General Annex C.
Award criteria	The criteria are described in General Annex D.
Documents	The documents are described in General Annex E.
Procedure	The procedure is described in General Annex F.
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G.

-

Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.

GREEN

Proposals are invited against the following topic(s):

HORIZON-CL2-2024-HERITAGE-01-01: New European Bauhaus – Innovative solutions for greener and fairer ways of life through arts and culture, architecture and design for all

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 3.00 and 5.00 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 16.00 million.
Type of Action	Innovation Actions
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). ⁷⁵ .

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Innovative solutions, validated in pilot trials, demonstrating how strategic investments in the spirit of the New European Bauhaus initiative⁷⁶ in cultural heritage (which may include cultural landscapes) and the CCIs can be successfully realised.
- Increase the understanding and visibility of the role that cultural-led innovation integrating the New European Bauhaus approach can play.
- Wider involvement and social inclusion of citizens in the preservation and enhancement of cultural heritage through engagement with local ecosystems.

This <u>decision</u> is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

For further information on the initiative, please refer to the Commission Communication on the New European Bauhaus (COM(2021) 573 final) as well as its official website (https://europa.eu/neweuropean-bauhaus/index_en).

<u>Scope</u>: The New European Bauhaus, as closely connected to cultural heritage and culture, brings a cultural and creative dimension to the European Green Deal. The September 2021 <u>Communication on the New European Bauhaus</u>⁷⁷, recognises that artists and cultural and creative professionals are essential actors when it comes to reflecting and conveying values, to transmitting new and symbolic meanings, and to ensuring sustainability and enabling societal transformation.

Proposals should test, demonstrate and refine innovative solutions to achieve strategic investments in cultural heritage and the CCIs in the spirit of the New European Bauhaus initiative and search for links with the ESFRI Research Infrastructures in the Social and Cultural Innovation. ⁷⁸. They are expected to bring together researchers, practitioners, managers and entrepreneurs from different cultural and creative industries (e.g. design, fashion, crafts, arts and heritage professionals at large) as well as to engage with the on-the-ground communities. At least 5 small scale-trials under real world conditions should be carried out in a minimum of 3 different Member States/Associated Countries.

Proposals should tackle at least one of the thematic axes of the New European Bauhaus. They should include an ambitious and credible executive plan that:

- Identifies and analyses the challenges and resources of the targeted spaces in terms of the three core values of the New European Bauhaus.
- Proposes a set of strategies and methodologies to address the challenges identified, considering the wide variety of actors involved.
- Foresees the development and implementation of an ambitious, quality co-design process, based on citizens' and stakeholders' participation, inter-disciplinary, and multilevel collaboration.

They should highlight the social value of cultural heritage and cultural diversity. The proposed solutions should consider:

- Use of renewable materials (e.g. nature-based materials produced sustainably) with a circular economy mind-set
- Role of arts, design and quality architecture, in line with quality principles⁷⁹ to leverage the full potential of cultural heritage and cultural landscapes
- Synergies between crafts and new industrial techniques that can also help revitalising traditional skills

COM/2021/573 final "New European Bauhaus Beautiful, Sustainable, Together" https://eurlex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52021DC0573&from=EN

COM (2020)628 final "A new ERA for Research and Innovation" https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0628&from=EN.

As framed in the ICOMOS revised publication on "Quality principles for EU funded interventions having a potential impact on cultural heritage" See also OMC report Towards a shared culture of architecture - Publications Office of the EU (europa.eu) and Council conclusions on culture, high-quality architecture and built environment as key elements of the New European Bauhaus initiative.

• Regeneration, life extension (i.e. smart monitoring, conservation and restoration), re-use and transformation of cultural heritage buildings and landscapes ⁸⁰, while ensuring attentive cultural interpretation of the original buildings and respecting their cultural contents and contexts.

The proposed solutions should be replicable⁸¹ under different cultural, political and societal conditions across Europe. Results should be appropriately documented to serve as guidance for actors in other territories and contexts. Proposals should build on existing knowledge, activities, networks and platforms, notably the ones so far funded by the European Union or under the New European Bauhaus initiative.

Proposals are expected to contribute to the New European Bauhaus initiative by interacting with the New European Bauhaus Community, NEBLab and other relevant actions of the initiative⁸² through sharing information, best practice, and, where relevant, results.

To ensure a balanced portfolio covering demonstration activities in diverse geographical areas of the European Union and Associated Countries, grants will be awarded first to the highest ranked application according to the standard procedure described in Horizon Europe General Annexes D and F, followed by other applications that are the highest ranked among those that ensure the most complementary geographical coverage, provided that the applications attain all thresholds. When assessing geographical coverage, the evaluation will take into account the location of the application's demonstration activities, not the location of the application's participants/beneficiaries.

In the context of this topic, geographical areas of the European Union and Associated Countries are NUTS level 1 regions of European Union Member States and of Associated Countries for which they are defined. In the case of Associated Countries without NUTS classification, the country as a whole is to be considered as one geographical area:

- List of Associated Countries not defined by NUTS level 1: Armenia; Bosnia and Herzegovina; Faroe Islands; Georgia; Kosovo*; Israel; Moldova; Tunisia; Ukraine.
- List of countries not defined by NUTS level 1 with which association negotiations are being processed or where association is imminent: Morocco.

Results generated during the project implementation (for example, know-how, innovative solutions, new business models, policy recommendations, guidelines, prototypes, demonstrators, databases and datasets, new infrastructures, networks) should be directly usable for implementation after the project ends. Results should be appropriately documented to serve as guidance for actors in other territories outside the project interested in applying or adapting the solutions to their specific context.

For further info, see the UNESCO Recommendation on the Historic Urban Landscape.

See NEB website at https://europa.eu/new-european-bauhaus/index_en
* This designation is without prejudice to positions on status, and is in line with UNSC 1244 and the ICJ Opinion on the Kosovo declaration of independence.

HORIZON-CL2-2024-HERITAGE-01-02: Cultural and creative industries for a sustainable climate transition

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 3.00 and 4.00 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 13.00 million.
Type of Action	Innovation Actions
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). 83.

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Refined and validated approach(es) for Europe's cultural and creative industries (CCIs)⁸⁴ to become true drivers of a sustainable climate transition.
- Significant contributions to help European CCIs become better prepared to adapt to and contribute to the climate transition in line with the 2030 goals spelled out under a European Green Deal⁸⁵.

<u>Scope</u>: The cultural and creative industries (CCIs) are an important source of growth and job creation in the European economy. Moreover, the CCIs play a key role in shaping culture, values and perceptions across the European Union and beyond. Thus, the role of the CCIs in achieving the European Union's climate transition objectives is crucial.

At the same time, the CCIs are characterised by a large and diverse number of chiefly small and micro enterprises, as well as by hefty differences across geographical and sectorial

This <u>decision</u> is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision he en.pdf

CCIs as defined in the European Parliament Resolution 'A coherent EU policy for cultural and creative industries': https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016IP0486&from=EN

https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

divides. Large parts of the CCIs, thus, lack the capacity to take the necessary measures to adapt to and thrive under the climate transition, not to speak of driving this transition.

Specific approaches are therefore needed to enable Europe's CCIs to develop their full potential to support a sustainable climate transition.

Such approaches need to address the adoption of new sustainable business models, including the use of new technologies, production methods and possibly the development or adaption of new technological solutions, as well as gaps in skills and capacities. They should be valid across different Member States/Associated Countries, and address the needs of small, micro as well as larger companies. Such approaches may involve the use of platforms or networks to facilitate sharing investments, facilities or competencies among several companies or across sectors.

Proposals should provide for testing and refining such model(s) through small scale pilot trials under real world conditions. These pilot trials should verify the economic, social and environmental sustainability of the action(s), as well as the efficacy.

Proposals should choose a suitable set of CCI sector(s), or/and cross-sectoral issues, to focus on, which allow significant impacts to be achieved. Results should be valid at a European level, therefore the pilot trials need to involve at least five Member States/Associated Countries, as well as CCI companies of different size and origin, according to the focus chosen by the proposal.

A wide set of stakeholders should be involved, in order to ensure that pilots are developed in an effective and realistic way, so that conclusions can readily be taken up and solutions scaled up effectively.

Proposals should build on existing knowledge, activities, networks and platforms, notably the ones funded by the European Union. Furthermore, links should be established and synergies sought with closely related actions, such as relevant R&I actions funded by Horizon Europe or Horizon 2020. In particular, proposals should establish links to, and where appropriate build on findings from, projects funded under the topic 'Cultural and creative industries for a sustainable climate transition' of the Horizon Europe Cluster 2 2023 calls.

DIGITAL

HORIZON-CL2-2024-HERITAGE-01-03: Leverage the digital transition for competitive European cultural and creative industries

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 3.00 and 4.00 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 13.00 million.
Type of Action	Innovation Actions
Legal and financial set-up of the Grant	The rules are described in General Annex G. The following exceptions apply:
Agreements	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). ⁸⁶ .

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Validated and refined measures to increase the use of innovative digital technologies by Europe's cultural and creative industries (CCIs) ⁸⁷, with a view to increased competitiveness and sustainability ⁸⁸.
- Significant contributions to strengthen the ability of European CCIs to contribute to a human-centred digital transition.

<u>Scope</u>: The cultural and creative industries (CCIs) are an important source of growth and job creation in the European economy. Moreover, the CCIs play a key role in shaping culture, values and perceptions across the European Union and beyond.

At the same time, the CCIs are characterised by a large and diverse number of chiefly small and micro enterprises, as well as by hefty differences across geographical and sectorial divides.

The ongoing digital transition brings great opportunities for the CCIs, but also serious threats. The measures taken during the Covid-19 pandemic to reduce contagion forced much human interaction into the digital realm, to a degree illustrating possible consequences of the digital transition. Large parts of the European CCIs were devastated⁸⁹.

To take full advantage of the many opportunities offered by the digital transition, and avoid the pitfalls, require capacities and competencies that many of Europe's CCIs currently lack.

This <u>decision</u> is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision he en.pdf

CCIs as defined in the European Parliament Resolution 'A coherent EU policy for cultural and creative industries': https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016IP0486&from=EN

Sustainability' should in the context of this topic be interpreted as comprising several dimensions: Economic, environmental, cultural and social.

See for example the report 'Rebuilding Europe – The cultural and creative economy before and after the COVID-19 crisis', published in January 2021 by GESAC and EY

Proposals should provide for devising effective and cost-efficient measures to support CCIs to embrace and make full use of digital technologies for competitiveness and sustainability.

Proposals should choose a suitable set of CCI sector(s), or/and cross-sectoral issues, to focus on, which allow significant impacts to be achieved. A wide array of digital technologies should be considered, which are deemed crucial to the CCI sector(s) or/and issues chosen. Analytical technologies such as "big data" or "artificial intelligence" could be used for instance to better understand users' behaviours, to better plan activities or/and to engage deeper with customers. Visualisation and multi-sensorial technologies such as "virtual reality", "augmented reality" or "extended reality" could be employed to create more attractive products and services.

The proposed support measures should be effective and efficient across different Member States/Associated Countries, and address the needs of small, micro as well as larger companies. Such measures may involve the use of platforms or networks to facilitate sharing investments, facilities or competencies among several companies or across sectors.

Funded proposals should set up at least four small scale pilot trials under real world conditions to test and refine the proposed support measures. To ensure validity of the results across different national contexts and company sizes, the pilot trials need to involve at least four different Member States/Associated Countries, as well as CCI companies of different size. A wide set of stakeholders should be involved, in accordance with the focus chosen, with a view to ensure that pilot trials are developed in an effective and realistic manner and that results can readily be taken up by relevant policymakers or/and other decision-makers.

Proposals should build on existing knowledge, activities, networks and platforms, notably the ones funded by the European Union. Furthermore, links should be established and synergies sought with closely related actions, such as relevant R&I actions funded by Horizon Europe or Horizon 2020. In particular, proposals should, if appropriate, seek collaboration with projects funded under the "European Cloud for Cultural Heritage" call in the frame of Horizon Europe Cluster 2.

INNOVATIVE

HORIZON-CL2-2024-HERITAGE-01-04: Europe's cultural heritage and arts – promoting our values at home and abroad

Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 3.00 and 4.00 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 13.00 million.	

Type of Action	Innovation Actions
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). ⁹⁰ .

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Further increase the visibility of and access to European arts and culture internationally.
- Develop and test pilot solutions based on a model that will allow cooperation between local, national and European level and establish strategic alliances between art and cultural sectors and with other sectors.
- Assess the effectiveness of good practices, programmes and policies that promote the EU priorities, culture and fundamental values abroad.
- Strengthen the CCIs presence worldwide by promoting the European arts internationally.

<u>Scope</u>: The European Union should endeavour to use its cultural and creative assets to better assert its influence around the world. The arts can play an important role on building the contemporary image of the EU by increasing the visibility of the European identity, cultural heritage and the promotion of its values. In addition to the cultural benefits, the increased visibility of European arts and culture abroad can foster a sustainable and inclusive local, regional and national development and growth, including the growth of the cultural and creative industries (CCIs), while influence countries outside the EU on important societal issues, such as the protection of the environment, peace and security, migration, gender equality, justice, or freedom of expression.

However, when it comes to the presentation of the European traditional arts and culture abroad there is still lack of cooperation between national and European level. Even though there is a lot of funded research on the benefits of the European arts and culture and the ways to increase their visibility, the EU does not yet have an aligned vision and approach on how to promote the European values and identities through arts and meet common goals on behalf of the EU.

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This <u>decision</u> is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

The objective of this innovation proposal is to test existing practices and policies that enable arts and culture to promote European values and identities outside Europe, allowing people to experience European arts, culture and traditions both in their original environments and settings and by visiting the rich European cultural landscapes. It also aims to identify potential existing barriers and propose a mixed model for cooperation that will take into account participation at the local, national and regional level and the coordination of different sectors and stakeholders. In this analysis, the presence of the cultural and creative industries (CCIs) should be considered.

Building on existing evidence, including from projects funded under topic HORIZON-CL2-2022-HERITAGE-01-02, proposals should identify creative practices, policies and programmes that aim to increase the attractiveness of the European arts (including digital arts) and culture abroad. They should collect good innovative practices developed at the EU and national level and develop small-scale pilots that will test their efficiency. Proposals should identify and analyse the barriers, shortcomings and needs of the existing policies and practicities and propose policy recommendations for improvements.

In this context, the proposals should also analyse the extent to which the existing practices and policies encourage coordination among countries as well as coordination among bodies at regional and local levels as well as the role and support of the EU on the cooperation and harmonisation of the Member States' actions, as regards the of European arts' promotion abroad.

The proposals may also look after the potential impacts of new regulations on the arts sector, including the copyright Directive that was adopted in March of 2019, and evaluate their effectiveness as regards their international access to European works of arts and performing arts.

The proposals should propose pilot policy solutions based on a mixed model that will allow cooperation at local, national and European level, better cooperation of the art sectors and the CCIs, while establish strategic alliances with other sectors.

The proposed mixed model should be developed and tested in wide and diversified partnerships of stakeholders. The proposals should develop policy recommendations for integrating this innovative mixed model into the arts policies.

HORIZON-CL2-2024-HERITAGE-01-05: Strategies to strengthen the European linguistic capital in a globalised world

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 10.00 million.
Type of Action	Research and Innovation Actions

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Strategies for protection of the European linguistic capital at the era of the digital shift in
 economy, education and communication, which will include socially sustainable and
 economically affordable implementation measures and processes in the short and
 medium term.
- A deeper understanding of the impact of digitalisation/language related technologies on the European linguistic capital, especially on the endangered languages and identity preservation of EU citizens.
- Enhanced cooperation at the European level between experts on the subject and other relevant stakeholders including educational institutions.
- Recommendations to inform multilingual policies on further measures to promote the learning and daily use of more than one language, while encouraging European youth to value and possibly undertake humanistic studies in particular in their native languages.

<u>Scope</u>: European languages are vehicles of our identity, behaviour and cultural perception. Communicating in their native languages, EU citizens connect with their cultural heritage, build their collective and individual identity and better understand the contribution of their national or regional culture to the European culture as a whole. However, in the globalisation era, some languages are dominating, leading gradually to a 'language oligopoly'.

More than ever, so-called 'international languages' threaten less-spoken languages. The European language capital is at risk of impoverishment. The domination of digital technologies leads to changes in the way people exchange i.e. by disregarding languages' rules (syntax, semantics and orthography) and underestimating humanistic education. Protecting Europe's linguistic capital is essential to avoid cultural dilution, to strengthen European identity, culture and creativity and to promote mutual understanding and social inclusion, which serve social, economic and political stability in Europe.

Therefore, research should address tensions between globalisation and the preservation of European identities as expressed by languages, paying attention to policies and practices regarding the use of national and 'international' languages and their place in each country's cultural, scientific, academic, social, political and economic life. It should develop evidence-based strategies and policy recommendations to help policymakers and stakeholders protect endangered European languages in the context of the massive socio-cultural and economic changes of the present era. Proposals should inform EU multilingualism policy and provide national education (and other) policies with guidance to better link EU citizens with each other as well as with their own language and literature tradition, which are the main repository of the European culture and history. In times when democracy faces cumulative threats, it is

particularly important that proposals advise on ways where all languages spoken in Europe can harmoniously coexist and benefit from equal treatment, including the use of language digital technologies. Links can also be made to the projects developed under the topic HORIZON-CL2-2024-DEMOCRACY-01-10: Political participation in multilingual spaces.

Proposals should develop recommendations that empower citizens to utilise their own language at national, regional and EU level. These recommendations should aim at combating marginalisation of disadvantaged linguistic communities. In pursuing these recommendations, proposals could identify weaknesses of the multilingual policies in the EU (explicit and implicit) and share best practices from other multilingual countries across the globe. In their design, proposals are encouraged to involve young people from the very beginning with a view to grasping their views and perceptions as regards to multilingualism in the EU as well as the most suitable ways to protect their native languages.

Call - A European Collaborative Cloud for Cultural Heritage - 2024

HORIZON-CL2-2024-HERITAGE-ECCCH-01

Conditions for the Call

Indicative budget(s)⁹¹

Topics Type **Budgets** Expected Indicative of (EUR EU number Action million) contribution of per project projects 2024 (EUR expected million)⁹² to be funded Opening: 18 Jun 2024 Deadline(s): 22 Jan 2025 5.00 to 6.00 2 HORIZON-CL2-2024-HERITAGE-ECCCH-IA 12.00 01-01 HORIZON-CL2-2024-HERITAGE-ECCCH-IΑ 8.00 3.00 to 4.00 2 01-02 2 HORIZON-CL2-2024-HERITAGE-ECCCH-IA 12.00 5.00 to 6.00

The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for years 2023, 2024 and 2025.

The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.

The Director-General responsible may delay the deadline(s) by up to two months.

All deadlines are at 17.00.00 Brussels local time.

Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.

01-03				
HORIZON-CL2-2024-HERITAGE-ECCCH- 01-04	IA	8.00	3.00 to 4.00	2
HORIZON-CL2-2024-HERITAGE-ECCCH- 01-05	IA	8.00	3.00 to 4.00	2
Overall indicative budget		48.00		

General conditions relating to this call	
Admissibility conditions	The conditions are described in General Annex A.
Eligibility conditions	The conditions are described in General Annex B.
Financial and operational capacity and exclusion	The criteria are described in General Annex C.
Award criteria	The criteria are described in General Annex D.
Documents	The documents are described in General Annex E.
Procedure	The procedure is described in General Annex F.
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G.

Proposals are invited against the following topic(s):

HORIZON-CL2-2024-HERITAGE-ECCCH-01-01: A European Collaborative Cloud for Cultural Heritage – Innovative tools for digitisation and analysis of dynamic processes, objects and complex combined data

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 5.00 and 6.00 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 12.00 million.

Type of Action	Innovation Actions
Admissibility conditions	The conditions are described in General Annex A. The following exceptions apply:
	The page limit of the application is 60 pages.
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).
Legal and financial set-up of the Grant	The rules are described in General Annex G. The following exceptions apply:
Agreements	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). ⁹³ .
	Beneficiaries may provide financial support to third parties to cultural heritage institutions, in take-up of tools, technologies and for populating and validating the relevant use cases through experiments. A maximum of 15% of the budget may be dedicated to financial support to third parties. The maximum amount to be granted to each third party is EUR 60 000.
	Beneficiaries will be subject to these additional requirements on outputs:
	All software developed should be open source, licensed under a CCO public domain dedication or under an open-source licence as recommended by the Free Software Foundation ⁹⁴ and the Open-Source Initiative ⁹⁵ . If the use of open source software components would require disproportional efforts or significantly diminish the quality or performance of the software, proprietary components may be used provided that: an open functional replacement is available; they do not introduce proprietary data formats or Application Programming Interfaces; a full user license free of charge for an unlimited period of

⁹³ This decision is available on the Funding and Tenders Portal, in the reference documents section for 'Simplified through Horizon Europe, under costs decisions' or this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/lsdecision_he_en.pdf

⁹⁴ https://www.gnu.org/licenses/license-list#SoftwareLicenses

⁹⁵ https://opensource.org/licenses

time is granted to the consortium responsible for the ECCCH and all its
users.

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- The European Collaborative Cloud for Cultural Heritage (ECCCH) is widely used by European cultural heritage professionals and researchers⁹⁶ for digitising dynamic objects, processes and practices⁹⁷.
- The ECCCH is widely used by European cultural heritage professionals and researchers for monitoring the evolving status of cultural heritage objects⁹⁸ over time.
- The ECCCH is widely used by European cultural heritage professionals and researchers for advanced interaction with digital content, enabling new ways to interact, cross-mix and re-mix different data types, enhancing insight capabilities and representation potential.
- European cultural heritage professionals and researchers are provided with clear information as well as targeted training modules on the innovative tools and methods developed.

<u>Scope</u>: This topic aims at developing and implementing a set of innovative tools and methods on the European Collaborative Cloud for Cultural Heritage (ECCCH) for digitisation and analysis of dynamic processes, objects and complex combined data. Concrete applications of these tools and methods should be provided for at least the following uses:

- Digitising dynamic objects, processes and practices
- Monitoring the evolving status of cultural heritage objects over time
- Interacting with, cross-mixing and re-mixing different data types

Digitisation of dynamic objects, processes and practices

The main focus of 3D digitisation initiatives in the realm of cultural heritage has thus far been the shape and appearance of static objects. Practical techniques and technologies that enable accurate physical simulations of digitised items are mostly unexplored. Mechanical characteristics like stiffness, flexibility, mass distribution and strength, as well as mechanisms

^{&#}x27;Cultural heritage professionals and researchers' should in the context of the ECCCH be interpreted as including all different professions and disciplines involved in the cultural heritage field, such as curators, conservators, researchers, art managers, educators, etc., that may develop their activities for instance at cultural heritage institutions, research organisations, higher education establishments or in the cultural and creative industries.

⁹⁷ 'Dynamic objects, processes and practices' should in the context of the ECCCH be interpreted as including all sorts of heritage where complex movements are important characteristics, and may include for instance complex assemblies, mechanisms, dance, etc.

⁹⁸ 'Cultural heritage objects' should in the context of the ECCCH be interpreted as including any form of cultural heritage that can be represented in a digital format: tangible, intangible, born digital; movable objects, buildings, documents, inscriptions, etc.

and moving parts are still largely undocumented. However, many heritage objects, including human-made devices, machines or practices, exhibit dynamic behaviours. Making adequate and precise digital models of such items and phenomena would enable more realistic simulations of, for instance, ancient artefacts like tissues, mechanisms, tools or practices, which would facilitate more insightful analysis and understanding.

For this use, projects funded under this topic should develop new digitisation approaches enabling the correct capture of mechanical and dynamic characteristics of objects and practices.

Monitoring the evolving status of cultural heritage objects over time

Monitoring the evolution over time of a heritage object is a key task in many cultural heritage contexts. This involves monitoring very slow phenomena (e.g. changes in the reflection attributes of a painted surface) as well as very rapid ones (for example fractures introduced by an abrupt event, such as damages to a loan artwork while traveling, or to a monument due to a seismic impact). The accurate sampling and detection of such changes occurring over time requires a number of new and integrated technologies: shape & colour sampling, use of networks of sensors displaced in a space, data integration, and software technologies able to make comparisons and to assess the changes. Innovative AI-based solutions may be developed to characterise and detect the changes, subject to the validation of human experts.

For this use, projects funded under this topic should develop new digitisation approaches enabling an unprecedented capability to monitor the evolution over time of the status of heritage objects.

Interacting with, cross-mixing and re-mixing different data types

Mixing and integrating different media and media types in effective ways can expand insight capabilities, and lead to new knowledge generation. Projects funded under this topic should develop innovative tools and methods that give the ECCCH ground-breaking capabilities in this area.

For this use, projects funded under this topic should explore how different media can be combined, using both the space and time axes, and how the creative processes involved can be supported. Such new methods will require studying new interaction modes, enabling the navigation over different media types and spaces (2D, 3D, text, ...), and creating a common cross-media interaction language. Users should easily be able to use multiple media in a coordinated manner, for instance for the visual presentation and analysis of heritage objects (e.g. interconnecting 3D and text to tell the story of an artwork, intermixing the navigation of a 3D space and panoramic images to present both spatial and surface colour/reflection characteristics in an accurate manner, enabling the navigation of datasets which join 3D scanned external surfaces with computer tomography scanned data of the interior, or using 3D and images in the documentation of restoration). The tools and methods developed should allow the representation of non-static heritage, such as industrial heritage with many complex machines and processes. As an alternative to producing full digital models of complex

machinery, which may be excessively expensive, different media may be combined to represent the dynamic essence of such assets with less effort, for instance using 3D models for the static characteristics of a machinery and adding video and sound to enhance the dynamic experience.

The work produced may be implemented as new specific tools, and/or as extensions to the functional libraries included in the core ECCCH platform.

With a view to use resources efficiently and go beyond the state of the art, projects funded under this topic should, where appropriate, build on previous existing research, methods and solutions. Proposals should therefore ensure that existing tools and methods and their potential (re-)use are properly examined.

Ease of use for the target users is of paramount importance. Therefore, tools and methods should be developed in close collaboration with actively involved representative target users. Furthermore, tools and methods should be thoroughly tested and verified with a significant number of users before the end of the project. Financial support to third parties may be used to facilitate the engagement with users. The financial support to third parties can only be provided in the form of grants.

In order to facilitate the access for less well-equipped users, the developed software tools should to the extent possible be accessible online without requiring installation nor special or particularly powerful equipment. Also, the developed software tools should to the extent appropriate be designed to allow use and avoid loss of work in situations with unstable or limited connectivity.

Projects funded under this topic should demonstrate the potential of the developed tools and methods through representative case studies, conducted in collaboration with relevant users. These case studies should cover a significant share of the range of cultural heritage objects, materials and issues that the tools and methods intend to address. The results of these case studies should produce information that can serve as models for promoting the re-use of the tools and methods in other contexts and by other users within, and where appropriate beyond, the ECCCH.

Proposals should, furthermore, foresee appropriate resources to provide clear information and elaborate targeted training modules for users of the developed tools and methods.

The tools to be developed should be implemented using the low-level libraries established by the project funded under topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01. The tools developed should be compliant with the design of the ECCCH, and should be integrated with the ECCCH before the end of the project, together with proper documentation. All software and other related deliverables should be compliant with the data model and the software development guidelines elaborated by the project funded under topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01. If appropriate these tools should be developed with a view to a wider deployment, including in the Common European Data Space for Cultural Heritage, as well as, when appropriate, for reuse via the European Open Science Cloud. Furthermore,

content produced by these tools for the ECCCH should, when appropriate, be interoperable for sharing via the Common European Data Space for Cultural Heritage and/or the European Open Science Cloud.

Proposals should furthermore make provisions to actively participate in the common activities of the ECCCH initiative. In particular, projects funded under this topic should coordinate technical work with projects funded under other call topics of the ECCCH initiative, and contribute to the activities and objectives of the project funded under the topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01. Proposals should include a budget for the attendance to regular joint coordination meetings, and may consider covering the costs of any other joint activities without the prerequisite to detail concrete joint activities at this stage.

Projects funded under this topic should moreover set up their project websites under the common ECCCH website, managed by the project funded under topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01.

Furthermore, the Commission expects projects funded under this topic to establish regular coordination mechanisms in order to ensure synchronised planning as well as synergy and/or complementarity of deliverables and outcomes.

The Commission recommends considering reporting periods of 12 months when elaborating proposals.

Please also refer to the Destination introduction text to consider some key characteristics of the vision for the ECCCH.

HORIZON-CL2-2024-HERITAGE-ECCCH-01-02: A European Collaborative Cloud for Cultural Heritage – Innovative tools for documenting, interlinking and organising data

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 3.00 and 4.00 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 8.00 million.
Type of Action	Innovation Actions
Admissibility conditions	The conditions are described in General Annex A. The following exceptions apply: The page limit of the application is 60 pages.
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).
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). ⁹⁹ .
	Beneficiaries may provide financial support to third parties to cultural heritage institutions, in take-up of tools, technologies and for populating and validating the relevant use cases through experiments. A maximum of 15% of the budget may be dedicated to financial support to third parties. The maximum amount to be granted to each third party is EUR 60 000.
	Beneficiaries will be subject to these additional requirements on outputs:
	All software developed should be open source, licensed under a CC0 public domain dedication or under an open-source licence as recommended by the Free Software Foundation ¹⁰⁰ and the Open-Source Initiative ¹⁰¹ . If the use of open source software components would require disproportional efforts or significantly diminish the quality or performance of the software, proprietary components may be used provided that: an open functional replacement is available; they do not introduce proprietary data formats or Application Programming Interfaces; a full user license free of charge for an unlimited period of time is granted to the consortium responsible for the ECCCH and all its users.

Expected Outcome: Projects should contribute to all of the following expected outcomes:

This <u>decision</u> is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

https://www.gnu.org/licenses/license-list#SoftwareLicenses

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- The European Collaborative Cloud for Cultural Heritage (ECCCH) is widely used by European cultural heritage professionals and researchers¹⁰² for creating, enriching and refining annotated bibliographies linked to digital cultural heritage objects¹⁰³.
- The ECCCH is widely used by European cultural heritage professionals and researchers for documenting the results of fieldwork such as archaeological or paleontological excavations and studies.
- European cultural heritage professionals and researchers are provided with clear information as well as targeted training modules on the innovative tools and methods developed.

<u>Scope</u>: This topic aims at developing and implementing a set of innovative tools and methods on the European Collaborative Cloud for Cultural Heritage (ECCCH) for documenting, interlinking and organising data. Concrete applications of these tools and methods should be provided for at least the following uses:

- Creating, enriching and refining annotated bibliographies
- Documenting the results of fieldwork such as archaeological or paleontological excavations or other collection processes and studies

Creating, enriching and refining annotated bibliographies

A crucial task in both education and professional duties within cultural heritage is compiling bibliographies. This time-consuming activity entails gathering relevant literature on a cultural heritage object, entering bibliographic references in a list, assessing each document, and producing notes that are subsequently saved in the bibliography. This work has a value of its own, not only as part of the papers or reports created. Bibliographies therefore ought to be kept on the ECCCH, made accessible, and further enriched, refined and extended by collaborative and supervised efforts.

For this use, projects funded under this topic should make sure that the ECCCH offers tools that automate much of the tedious tasks, and support cooperative work and re-use. Existing tools and bibliographic frameworks should be evaluated and when appropriate built upon. The tools to be developed should offer significant added value to its users beyond what is currently available, and should be developed based on the data model of the ECCCH, gathering data from and incorporating data in the ECCCH. These tools may, to the extent feasible, include functionality to parse and enrich data from for instance retrodigitised sources not readily machine readable. Given a topic or a specific heritage object and/or a small initial

'Cultural heritage objects' should in the context of the ECCCH be interpreted as including any form of cultural heritage that can be represented in a digital format: tangible, intangible, born digital; movable objects, buildings, documents, inscriptions, etc.

^{&#}x27;Cultural heritage professionals and researchers' should in the context of the ECCCH be interpreted as including all different professions and disciplines involved in the cultural heritage field, such as curators, conservators, researchers, art managers, educators, etc., that may develop their activities for instance at cultural heritage institutions, research organisations, higher education establishments or in the cultural and creative industries.

set of papers selected by the user, enhanced AI technologies working on text or/and on images should be able to retrieve related works, evaluate the fit of a given paper with the subject of the research, and produce a preliminary bibliography. The authoring system should support the creation, editing, and annotation of bibliographies. It should be possible to define with whom the results are shared (e.g. with a restricted group of professionals or with all users).

Documenting the results of fieldwork such as archaeological or paleontological excavations or other collection processes and studies

Fieldwork such as archaeological or paleontological exploration and research typically produce large amounts of different kinds of data, such as survey documentation and documents presenting, narrating and interpreting the findings, photographic data, 3D models, drawings, maps and geographic information system data. At a later stage, most of the findings become assets for cultural heritage institutions such as museums. Such activities (excavation, study, etc.), thus, are a crucial phase of the musealisation process. Moreover, most countries enforce legal obligations regarding the archiving of data produced by excavations, as well as periodic reports.

For this use, projects funded under this topic should offer a set of tools that makes the ECCCH a valuable resource for the community involved in such excavations and studies, using an extensible data model based on semantic technology, as well as a repository for the produced data, together with appropriate data visualisation and analysis instruments. Regulated reporting and archiving obligations in different countries should be analysed, and to the extent possible semi-automatised.

Ontologies and vocabularies should be extended as needed to define the data structures and relationships between different data, in view of achieving interoperability. Repositories from different institutions and countries should be inter-operable and inter-connected. The semantic information layer should make it possible for AI technologies to access and "learn" from the archive. An extension to the ECCCH 3D browser should provide an interactive and visual interface to excavation data, and to the related findings.

Also, citation capabilities should be integrated, to facilitate publication, sharing and reuse of data. Authoring tools should provide a way for the user to build "narratives" 104 starting from the archival data.

With a view to use resources efficiently and go beyond the state of the art, projects funded under this topic should, where appropriate, build on previous existing research, methods and solutions. Proposals should therefore ensure that existing tools and methods and their potential (re-)use are properly examined.

In particular, in order to exploit potential synergies, proposals may consider, where appropriate, to build on the work of the projects funded under the topics HORIZON-INFRA-

¹⁰⁴ "Narratives" in this context means all documents that use, as their building blocks, the data entities contained in the archive, such as periodic reports, formulation of new interpretations or confutation/discussion of the already existing ones, preparation of scientific papers and publications, set-up of teaching/didactic material, schemes and graphs.

2021-EOSC-01-04 and HORIZON-INFRA-2023-EOSC-01-03, especially concerning Science Knowledge Graphs (SKGs) as flexible tools to monitor and track events of science linked to provenance, publishing, citation, data processing, data and software usage, as well as service consumption.¹⁰⁵

Ease of use for the target users is of paramount importance. Therefore, tools and methods should be developed in close collaboration with actively involved representative target users. Furthermore, tools and methods should be thoroughly tested and verified with a significant number of users before the end of the project. Financial support to third parties may be used to facilitate the engagement with users. The financial support to third parties can only be provided in the form of grants.

In order to facilitate the access for less well-equipped users, the developed software tools should to the extent possible be accessible online without requiring installation nor special or particularly powerful equipment. Also, the developed software tools should to the extent appropriate be designed to allow use and avoid loss of work in situations with unstable or limited connectivity.

Projects funded under this topic should demonstrate the potential of the developed tools and methods through representative case studies, conducted in collaboration with relevant users. These case studies should cover a significant share of the range of cultural heritage objects, materials and issues that the tools and methods intend to address. The results of these case studies should produce information that can serve as models for promoting the re-use of the tools and methods in other contexts and by other users within, and where appropriate beyond, the ECCCH.

Proposals should, furthermore, foresee appropriate resources to provide clear information and elaborate targeted training modules for users of the developed tools and methods.

The tools to be developed should be implemented using the low-level libraries established by the project funded under topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01. The tools developed should be compliant with the design of the ECCCH, and should be integrated with the ECCCH before the end of the project, together with proper documentation. All software and other related deliverables should be compliant with the data model and the software development guidelines elaborated by the project funded under topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01. If appropriate these tools should be developed with a view to a wider deployment, including in the Common European Data Space for Cultural Heritage, as well as, when appropriate, for reuse via the European Open Science Cloud. Furthermore, content produced by these tools for the ECCCH should be interoperable for sharing, when appropriate, via the Common European Data Space for Cultural Heritage and/or the European Open Science Cloud.

Proposals should furthermore make provisions to actively participate in the common activities of the ECCCH initiative. In particular, projects funded under this topic should coordinate

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This by no means imply that partners from such projects need to be part of the consortium.

technical work with projects funded under other call topics of the ECCCH initiative, and contribute to the activities and objectives of the project funded under the topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01. Proposals should include a budget for the attendance to regular joint coordination meetings, and may consider covering the costs of any other joint activities without the prerequisite to detail concrete joint activities at this stage.

Projects funded under this topic should moreover set up their project websites under the common ECCCH website, managed by the project funded under topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01.

Furthermore, the Commission expects projects funded under this topic to establish regular coordination mechanisms in order to ensure synchronised planning as well as synergy and/or complementarity of deliverables and outcomes.

The Commission recommends considering reporting periods of 12 months when elaborating proposals.

Please also refer to the Destination introduction text to consider some key characteristics of the vision for the ECCCH.

HORIZON-CL2-2024-HERITAGE-ECCCH-01-03: A European Collaborative Cloud for Cultural Heritage – Innovative tools for advanced data enrichment

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 5.00 and 6.00 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 12.00 million.
Type of Action	Innovation Actions
Admissibility conditions	The conditions are described in General Annex A. The following exceptions apply: The page limit of the application is 60 pages.
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).
Legal and financial set-up of the Grant	The rules are described in General Annex G. The following exceptions apply:

Agreements

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). ¹⁰⁶.

Beneficiaries may provide financial support to third parties to cultural heritage institutions, in take-up of tools, technologies and for populating and validating the relevant use cases through experiments. A maximum of 15% of the budget may be dedicated to financial support to third parties. The maximum amount to be granted to each third party is EUR 60 000.

Beneficiaries will be subject to these additional requirements on outputs:

All software developed should be open source, licensed under a CC0 public domain dedication or under an open-source licence as recommended by the Free Software Foundation¹⁰⁷ and the Open-Source Initiative¹⁰⁸. If the use of open source software components would require disproportional efforts or significantly diminish the quality or performance of the software, proprietary components may be used provided that: an open functional replacement is available; they do not introduce proprietary data formats or Application Programming Interfaces; a full user license free of charge for an unlimited period of time is granted to the consortium responsible for the ECCCH and all its users.

Expected Outcome: Projects should contribute to all of the following expected outcomes:

• The European Collaborative Cloud for Cultural Heritage (ECCCH) is widely used by European cultural heritage professionals and researchers¹⁰⁹ for metadata enrichment of digital cultural heritage objects¹¹⁰.

This <u>decision</u> is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision he en.pdf

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^{&#}x27;Cultural heritage professionals and researchers' should in the context of the ECCCH be interpreted as including all different professions and disciplines involved in the cultural heritage field, such as curators, conservators, researchers, art managers, educators, etc., that may develop their activities for instance at cultural heritage institutions, research organisations, higher education establishments or in the cultural and creative industries.

^{&#}x27;Cultural heritage objects' should in the context of the ECCCH be interpreted as including any form of cultural heritage that can be represented in a digital format: tangible, intangible, born digital; movable objects, buildings, documents, inscriptions, etc.

- Scientific and professional value as well as intellectual property and other associated rights are effectively embedded in the digital objects of the ECCCH throughout the digital content production chain, thus enabling and boosting cooperation, sharing and reuse.
- European cultural heritage professionals and researchers are aware and make use of new collaboration- and business models based on values and rights embedded in the digital objects throughout the multi-actor value chain.
- European cultural heritage professionals and researchers are provided with clear information as well as targeted training modules on the innovative tools and methods developed.

<u>Scope</u>: This topic aims at developing and implementing a set of innovative tools and methods on the European Collaborative Cloud for Cultural Heritage (ECCCH) for advanced data enrichment. Concrete applications of these tools and methods should be provided for at least the following uses:

- Metadata enrichment
- Embedding scientific and professional value as well as IP and other associated rights throughout the digital content production chain
- Collaboration- and business models based on the multi-actor value chain

Metadata enrichment

The last decades have seen a growing mass of uninterpreted or misinterpreted data related to cultural heritage assets. Innovative methods are needed to achieve a massive production of semantically enriched digital resources in the context of multidisciplinary research and professional activities.

To make cultural heritage content findable, accessible, interoperable, and reusable (FAIR), and facilitate discoverability, digital objects must be tagged with good quality metadata. This raises several issues that need to be considered in the design and use of the ECCCH, such as metadata models for different application domains, vocabularies and ontological structures, multilingualism, efficient interfaces for accessing and managing metadata and paradata, effective implementation and reuse of existing models for heterogeneous applications, as well as sustainable maintenance of metadata as the real world and its conceptualisations evolve over time.

For this use, projects funded under this topic should develop and test innovative tools for human-driven acquisition, categorisation and annotation of digital objects (e.g. texts, images, 3D models, sounds or videos) combined with new AI-based approaches, resulting in high-quality content and metadata. Methods building on citizen science like approaches may also be considered. The tools should foster the emergence of new collaborative data curation scenarios within a multidisciplinary and multisectoral framework. They should further support

innovative data interlinkage between cultural heritage objects and related actors, enabling a semi-automatic mutual enrichment process where data are completed and enhanced by detecting and integrating related sources of knowledge.

Embedding scientific and professional value as well as IP and other associated rights throughout the digital content production chain

With the digital transformation of the cultural heritage area, large amounts of digital resources are emerging. However, a considerable part of this data remains inaccessible in private repositories.

The ECCCH should support the transition from massive production of raw data related to activities on cultural heritage objects, to semantically rich and collectively produced digital resources (digital commons). In this context, a key to encourage data sharing is the adequate control of who may use the material created and/or curated, and of how it will be used.

For this use, projects funded under this topic should develop innovative tools and methods to turn the massive digitisation effort into an opportunity to record and share not only the digital resources (with basic metadata), but also the methods and processes that led to their creation (such as human skills, technological and cognitive processes, or scientific protocols). The tools should support cultural heritage researchers and professionals to record the key steps of their activities on cultural heritage objects, ranging from the historical knowledge to the conservation, restoration and dissemination areas. The tools should produce data chains able to represent the complex workflows - often composed of combinations of individual skills and collective decisions - that constitute the creation of digital resources, as well as their progressive enrichment, transformation and re-use. This information should be linked to any data type/data element. The data chains should also embed information for managing ownership and property rights, use rights, and effective re-use of digital resources, in order to enable and encourage contribution to and use of shared repositories. These tools should, to the extent appropriate, be able to deal correctly with the different cases of unclear or contested IPR that may be encountered. The full production and enrichment chain of digital resources should be encoded, as an implicit mechanism to unveil the value chains of multi-actor collaborative productions. Block chains or other methods may be used, able to encode a stream of changes, modifications and re-uses of the digital objects.

In order to encode this information, extensions to the ECCCH data model might be needed. If so, these extensions should be designed in cooperation with the ECCCH main consortium.

Collaboration- and business models based on the multi-actor value chain

Such encoded value chains should enable innovative business models in collaboration with for instance cultural and creative industries. For this use, projects funded under this topic should introduce and experiment with collaboration- and business models for the data objects stored in the ECCCH, as well as the required web-based infrastructure to allow commercial collaborations. Such actions should be subject to the explicit authorisation of the owner

institutions, and revenues shared with those institutions, based on the IPR information from the data value chains.

Particularly in the context of sharing and re-use of digital cultural resources, the Common European Data Space for Cultural Heritage, as well as the European Open Science Cloud, might be valuable resources. Developments under these initiatives should be taken into account, as appropriate, in order to explore potential synergies and ensure complementarity.

With a view to use resources efficiently and go beyond the state of the art, projects funded under this topic should, where appropriate, build on previous existing research, methods and solutions. Proposals should therefore ensure that existing tools and methods and their potential (re-)use are properly examined.

Projects funded under this topic may, as appropriate, exploit and contribute to the European Open Science Cloud cross-domain interoperability framework and build on work by previous large-scale projects like PARTHENOS and SSHOC¹¹¹, as well as on data enrichment tools and activities in the context of the Common European Data Space for Cultural Heritage. Furthermore, in order to exploit potential synergies, proposals should consider, when appropriate, to build on the work of the coordination project on the European Open Science Cloud Architecture and Interoperability Framework resulting from topic HORIZON-INFRA-2023-EOSC-01-05. ¹¹²

Ease of use for the target users is of paramount importance. Therefore, tools and methods should be developed in close collaboration with actively involved representative target users. Furthermore, tools and methods should be thoroughly tested and verified with a significant number of users before the end of the project. Financial support to third parties may be used to facilitate the engagement with users. The financial support to third parties can only be provided in the form of grants.

In order to facilitate the access for less well-equipped users, the developed software tools should to the extent possible be accessible online without requiring installation nor special or particularly powerful equipment. Also, the developed software tools should to the extent appropriate be designed to allow use and avoid loss of work in situations with unstable or limited connectivity.

Projects funded under this topic should demonstrate the potential of the developed tools and methods through representative case studies, conducted in collaboration with relevant users. These case studies should cover a significant share of the range of cultural heritage objects, materials and issues that the tools and methods intend to address. The results of these case studies should produce information that can serve as models for promoting the re-use of the tools and methods in other contexts and by other users within, and where appropriate beyond, the ECCCH.

This by no means imply that partners from such projects need to be part of the consortium.

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Proposals should, furthermore, foresee appropriate resources to provide clear information and elaborate targeted training modules for users of the developed tools and methods.

The tools to be developed should be implemented using the low-level libraries established by the project funded under topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01. The tools developed should be compliant with the design of the ECCCH, and should be integrated with the ECCCH before the end of the project, together with proper documentation. All software and other related deliverables should be compliant with the data model and the software development guidelines elaborated by the project funded under topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01. If appropriate these tools should be developed with a view to a wider deployment, including in the Common European Data Space for Cultural Heritage, as well as, when appropriate, for reuse via the European Open Science Cloud. Furthermore, content produced by these tools for the ECCCH should be interoperable for sharing, when appropriate, via the Common European Data Space for Cultural Heritage and/or the European Open Science Cloud.

Proposals should furthermore make provisions to actively participate in the common activities of the ECCCH initiative. In particular, projects funded under this topic should coordinate technical work with projects funded under other call topics of the ECCCH initiative, and contribute to the activities and objectives of the project funded under the topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01. Proposals should include a budget for the attendance to regular joint coordination meetings, and may consider covering the costs of any other joint activities without the prerequisite to detail concrete joint activities at this stage.

Projects funded under this topic should moreover set up their project websites under the common ECCCH website, managed by the project funded under topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01.

Furthermore, the Commission expects projects funded under this topic to establish regular coordination mechanisms in order to ensure synchronised planning as well as synergy and/or complementarity of deliverables and outcomes.

The Commission recommends considering reporting periods of 12 months when elaborating proposals.

Please also refer to the Destination introduction text to consider some key characteristics of the vision for the ECCCH.

HORIZON-CL2-2024-HERITAGE-ECCCH-01-04: A European Collaborative Cloud for Cultural Heritage – Innovative tools for high-value interactions with visitors and heritage objects

Specific conditions	
Expected EU	The Commission estimates that an EU contribution of between EUR
contribution per	3.00 and 4.00 million would allow these outcomes to be addressed

project	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 8.00 million.
Type of Action	Innovation Actions
Admissibility conditions	The conditions are described in General Annex A. The following exceptions apply: The page limit of the application is 60 pages.
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).
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). Beneficiaries may provide financial support to third parties to cultural heritage institutions, in take-up of tools, technologies and for populating and validating the relevant use cases through experiments. A maximum of 15% of the budget may be dedicated to financial support to third parties. The maximum amount to be granted to each third party is EUR 60 000. Beneficiaries will be subject to these additional requirements on outputs: All software developed should be open source, licensed under a CC0 public domain dedication or under an open-source licence as recommended by the Free Software Foundation 114 and the Open-Source Initiative 115. If the use of open source software components would

This <u>decision</u> is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

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require disproportional efforts or significantly diminish the quality or performance of the software, proprietary components may be used provided that: an open functional replacement is available; they do not introduce proprietary data formats or Application Programming Interfaces; a full user license free of charge for an unlimited period of time is granted to the consortium responsible for the ECCCH and all its users.

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- The European Collaborative Cloud for Cultural Heritage (ECCCH) is widely used by European cultural heritage professionals and researchers¹¹⁶ for creating, sharing and reusing interactive content for high-quality interactions with visitors and cultural heritage objects¹¹⁷.
- The ECCCH is widely used by European cultural heritage professionals and researchers in the planning, simulation and design of real and virtual exposition spaces.
- The ECCCH is widely used by European cultural heritage professionals and researchers in the analysis of the effective use of real and virtual exposition spaces, incorporating innovative virtual presentation tools and visitor tracking technologies.
- European cultural heritage professionals and researchers are provided with clear information as well as targeted training modules on the innovative tools and methods developed.

<u>Scope</u>: This topic aims at developing and implementing a set of innovative tools and methods on the European Collaborative Cloud for Cultural Heritage (ECCCH) for high-quality interactions with visitors and cultural heritage objects. Concrete applications of these tools and methods should be provided for at least the following uses:

- Creating, sharing and re-using interactive content
- Analysing, designing and testing interactions with visitors

Creating, sharing and re-using interactive content

Cultural heritage institutions regularly produce interactive content; for visitors to facilitate the comprehension of the exhibits on display, to entertain them or for research purposes. The platform used to deploy the content may be a simple interactive presentation device (e.g. a

^{&#}x27;Cultural heritage professionals and researchers' should in the context of the ECCCH be interpreted as including all different professions and disciplines involved in the cultural heritage field, such as curators, conservators, researchers, art managers, educators, etc., that may develop their activities for instance at cultural heritage institutions, research organisations, higher education establishments or in the cultural and creative industries.

^{&#}x27;Cultural heritage objects' should in the context of the ECCCH be interpreted as including any form of cultural heritage that can be represented in a digital format: tangible, intangible, born digital; movable objects, buildings, documents, inscriptions, etc.

PC, a tablet or a mobile app) or more sophisticated immersive devices (large screens, VR rooms, head-mounted displays, specific interaction languages and related devices, etc.).

The common practice in creating interactive content at cultural heritage institutions is single theme – single institution – no cooperation. This approach makes production costs high, often prohibitively high, since the content is designed from scratch and presented only to a limited audience.

The challenge is to popularise and democratise the production and use of interactive content for cultural heritage. Innovation based on the ECCCH should make this possible.

The tools and methods developed should include an easy-to-use authoring system, designed for a community of users which may not be able to master fully-fledged commercial authoring systems. Resources should be developed to facilitate the creation of content and the adoption of a cooperative approach that enables the reuse of components and previous productions. The tools developed should be capable of supporting the entire value chain, including for instance freelancers and small companies, educational institutions, non-profits, etc.

The tools should support creation of multimedia content on top of basic components by using digital data in the ECCCH and as appropriate from other platforms, such as the Common European Data Space for Cultural Heritage. Using existing components should reduce the digitisation costs of interactive media productions, since a considerable part of the required models and images will already be available.

The tools should allow re-using portions of content contributed to the ECCCH by other partners. The ECCCH support for explicit tracking of data (re-)use will be key. Data on provenance and reuse of the digital assets should be acknowledged and maintained.

The tools should also offer the capability to adapt the presentation to more sophisticated contexts, such as non-immersive systems mixing 3D models with high quality visual interfaces and metadata and videos, virtual reality settings providing a strong immersive experience, or virtual worlds/metaverse environments.

Produced content should be deployable seamlessly on interactive kiosks in exhibition spaces and on web-based platforms, allowing to break the physical walls of the institution and widening the potential audience. Its metadata should allow the produced content to be shared also on other European platforms and data spaces.

Analysing, designing and testing interactions with visitors

A common task in cultural heritage is to evaluate if the design of an exhibition – in a real or digital space – is functional and sufficiently impactful and meaningful for the audience. Common queries may include how people move around, which specific content they pay attention to, if they are able to appreciate the exhibits in a proper manner, which areas are most crowded, which points are of more or less interest, etc.

Also, designing an exhibition is a complex task encompassing many activities related to the 3D space and visitors' perceptions, such as subdivisions of the exposition space, planning the visiting path, distribution of the exhibits and of didactic materials, lighting setup, etc.

A 3D representation of the exposition space is a basic resource for both types of actions. While architectural CAD tools may in some cases provide support, these are often prohibitively complex and do not correspond well to the needs of the cultural heritage sector.

For this use, projects funded under this topic should develop tools and methods for designing and providing simulated and real data mapping over an exposition. Focus should be on the specific needs of cultural heritage professionals, and on the ease of use.

The tools should be capable of generating preliminary assessments based on digital mock-ups, and assessments based on real physical spaces. Digital mock-ups of an exposition space could be navigated with interactive or virtual reality equipment, while specific equipment would be needed to gather data on users' navigation and interaction with a real physical space.

The tools should also allow to design an exposition space, introducing separations, openings and pedestals etc. which allow creating a planned path, and smaller spaces inside larger physical exposition spaces, positioning the exhibits and setting a proper illumination.

The tools should support collaborative work and sharing of resources and results through the ECCCH.

With a view to use resources efficiently and go beyond the state of the art, projects funded under this topic should, where appropriate, build on previous existing research, methods and solutions. Proposals should therefore ensure that existing tools and methods and their potential (re-)use are properly examined.

Ease of use for the target users is of paramount importance. Therefore, tools and methods should be developed in close collaboration with actively involved representative target users. Furthermore, tools and methods should be thoroughly tested and verified with a significant number of users before the end of the project. Financial support to third parties may be used to facilitate the engagement with users. The financial support to third parties can only be provided in the form of grants.

In order to facilitate the access for less well-equipped users, the developed software tools should to the extent possible be accessible online without requiring installation nor special or particularly powerful equipment. Also, the developed software tools should to the extent appropriate be designed to allow use and avoid loss of work in situations with unstable or limited connectivity.

Projects funded under this topic should demonstrate the potential of the developed tools and methods through representative case studies, conducted in collaboration with relevant users. These case studies should cover a significant share of the range of cultural heritage objects, materials and issues that the tools and methods intend to address. The results of these case studies should produce information that can serve as models for promoting the re-use of the

tools and methods in other contexts and by other users within, and where appropriate beyond, the ECCCH.

Proposals should, furthermore, foresee appropriate resources to provide clear information and elaborate targeted training modules for users of the developed tools and methods.

The tools to be developed should be implemented using the low-level libraries established by the project funded under topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01. The tools developed should be compliant with the design of the ECCCH, and should be integrated with the ECCCH before the end of the project, together with proper documentation. All software and other related deliverables should be compliant with the data model and the software development guidelines elaborated by the project funded under topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01. If appropriate these tools should be developed with a view to a wider deployment, including in the Common European Data Space for Cultural Heritage, as well as, when appropriate, for reuse via the European Open Science Cloud. Furthermore, content produced by these tools for the ECCCH should be interoperable for sharing, when appropriate, via the Common European Data Space for Cultural Heritage and/or the European Open Science Cloud.

Proposals should furthermore make provisions to actively participate in the common activities of the ECCCH initiative. In particular, projects funded under this topic should coordinate technical work with projects funded under other call topics of the ECCCH initiative, and contribute to the activities and objectives of the project funded under the topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01. Proposals should include a budget for the attendance to regular joint coordination meetings, and may consider covering the costs of any other joint activities without the prerequisite to detail concrete joint activities at this stage.

Projects funded under this topic should moreover set up their project websites under the common ECCCH website, managed by the project funded under topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01.

Furthermore, the Commission expects projects funded under this topic to establish regular coordination mechanisms in order to ensure synchronised planning as well as synergy and/or complementarity of deliverables and outcomes.

The Commission recommends considering reporting periods of 12 months when elaborating proposals.

Please also refer to the Destination introduction text to consider some key characteristics of the vision for the ECCCH.

HORIZON-CL2-2024-HERITAGE-ECCCH-01-05: A European Collaborative Cloud for Cultural Heritage – Innovative tools for the study, conservation and restoration of heritage objects

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Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 3.00 and 4.00 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 8.00 million.
Type of Action	Innovation Actions
Admissibility conditions	The conditions are described in General Annex A. The following exceptions apply: The page limit of the application is 60 pages.
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).
Legal and financial set-up of the Grant	The rules are described in General Annex G. The following exceptions apply:
Agreements	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). ¹¹⁸ .
	Beneficiaries may provide financial support to third parties to cultural heritage institutions, in take-up of tools, technologies and for populating and validating the relevant use cases through experiments. A maximum of 15% of the budget may be dedicated to financial support to third parties. The maximum amount to be granted to each third party is EUR 60 000.
	Beneficiaries will be subject to these additional requirements on outputs:
	All software developed should be open source, licensed under a CC0 public domain dedication or under an open-source licence as recommended by the Free Software Foundation ¹¹⁹ and the Open-Source

¹¹⁸ This decision is available on the Funding and Tenders Portal, in the reference documents section for 'Simplified Horizon Europe, under costs decisions' through this link: or https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/lsdecision he en.pdf

¹¹⁹ https://www.gnu.org/licenses/license-list#SoftwareLicenses

Initiative ¹²⁰. If the use of open source software components would require disproportional efforts or significantly diminish the quality or performance of the software, proprietary components may be used provided that: an open functional replacement is available; they do not introduce proprietary data formats or Application Programming Interfaces; a full user license free of charge for an unlimited period of time is granted to the consortium responsible for the ECCCH and all its users.

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- The European Collaborative Cloud for Cultural Heritage (ECCCH) is widely used by European cultural heritage professionals and researchers ¹²¹ for the study of cultural heritage objects ¹²², supporting research, innovation and didactic purposes.
- The ECCCH is widely used by European cultural heritage professionals and researchers to support conservation and restoration works, both for planning, implementation and documentation.
- European cultural heritage professionals and researchers are provided with clear information as well as targeted training modules on the innovative tools and methods developed.

<u>Scope</u>: This topic aims at developing and implementing a set of innovative tools and methods on the European Collaborative Cloud for Cultural Heritage (ECCCH) based on the digital twins of cultural heritage objects stored in the ECCCH, for the study, conservation and restoration of cultural heritage objects. Concrete applications of these tools and methods should be provided for at least the following uses:

- Supporting the study of cultural heritage objects
- Supporting conservation and restoration works

Supporting the study of cultural heritage objects

For this use, projects funded under this topic should develop tools and methods which build on the digital twins of cultural heritage objects stored in the ECCCH to allow cultural heritage professionals and researchers to structure, encode, store and analyse all knowledge needed for the study of a cultural heritage object such as artworks, prints, drawings, etc. Such combined

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https://opensource.org/licenses

²¹ 'Cultural heritage professionals and researchers' should in the context of the ECCCH be interpreted as including all different professions and disciplines involved in the cultural heritage field, such as curators, conservators, researchers, art managers, educators, etc., that may develop their activities for instance at cultural heritage institutions, research organisations, higher education establishments or in the cultural and creative industries.

^{&#}x27;Cultural heritage objects' should in the context of the ECCCH be interpreted as including any form of cultural heritage that can be represented in a digital format: tangible, intangible, born digital; movable objects, buildings, documents, inscriptions, etc.

use of multiple types of digital visual and other data available on the ECCCH could revolutionise current methodologies in research, documentation and didactics related to the study of cultural heritage objects. The tools would enable visualisation and measurement, support analysis and documentation of the reasoning process (e.g. via annotations or metadata), and build on highly accurate digital representations of the object (2D, 3D, 4D) stored in the ECCCH. The tools should allow to access, interlink, enhance, enrich and archive all necessary knowledge. Search-by-similarity queries should be possible over the ECCCH, based on innovative AI solutions.

The focus is not only on documenting and archiving multiple heterogeneous documents, but also on identifying, storing and visualising connections among those assets. The digital twin of the cultural heritage object should be a spatial index for structuring and presenting all this knowledge. A cooperative approach should be enabled, with full control of who can access what.

Supporting conservation and restoration works

In the cultural heritage field, many different types of data are typically used to describe and monitor the condition of objects for conservation and restoration purposes, such as survey data, scientific imaging, reports, maps of degradation, photographic collections, historical archives, material sample analyses, etc. Many different professional disciplines are involved in data collection, processing and analysis (e.g. art history, architecture, conservation, materials science and engineering). Data collection, processing and analysis is an extremely complex task, performed both before and during restoration/conservation works.

For this use, projects funded under this topic should develop tools and methods to collect, manage and use data - with associated knowledge - for conservation and restoration purposes. These tools should build on the digital twins of cultural heritage objects stored in the ECCCH and enable users to structure, encode, store, and analyse all resources needed for conservation assessment, restoration planning, and for documentation of restoration results, within a well-defined and dynamic collaborative framework.

To cater to the needs of the wide range of professionals involved, the tools should address at least:

- Capture and management of information about material objects (including static and dynamic sensor networks), ensuring continuously updated digital twins in the ECCCH.
- Characterisation of the physical state of artefacts through analysis of material samples, scientific imaging, simulation of behaviours, etc.
- Efficient digital tools to assist users in analysis, diagnosis, and decision making.
- Evaluation and validation of documentation (including examination of diagnostic studies), to establish reproducible protocols for other (future) conservation and restoration efforts.

 Monitoring and archiving the conservation/restoration process over time with a longterm perspective, to prevent unnecessary degradation and plan for future restoration activities.

AI based methods have the potential to play a key role in developing improved methods for solving research questions or gaining insights about data, such as categorisation, segmentation, recognition, analysis, and understanding. The goal should be to semi-automate work-intensive activities that are common in conservation and restoration.

With a view to use resources efficiently and go beyond the state of the art, projects funded under this topic should, where appropriate, build on previous existing research, methods and solutions. Proposals should therefore ensure that existing tools and methods and their potential (re-)use are properly examined.

Ease of use for the target users is of paramount importance. Therefore, tools and methods should be developed in close collaboration with actively involved representative target users. Furthermore, tools and methods should be thoroughly tested and verified with a significant number of users before the end of the project. Financial support to third parties may be used to facilitate the engagement with users. The financial support to third parties can only be provided in the form of grants.

In order to facilitate the access for less well-equipped users, the developed software tools should to the extent possible be accessible online without requiring installation nor special or particularly powerful equipment. Also, the developed software tools should to the extent appropriate be designed to allow use and avoid loss of work in situations with unstable or limited connectivity.

Projects funded under this topic should demonstrate the potential of the developed tools and methods through representative case studies, conducted in collaboration with relevant users. These case studies should cover a significant share of the range of cultural heritage objects, materials and issues that the tools and methods intend to address. The results of these case studies should produce information that can serve as models for promoting the re-use of the tools and methods in other contexts and by other users within, and where appropriate beyond, the ECCCH.

Proposals should, furthermore, foresee appropriate resources to provide clear information and elaborate targeted training modules for users of the developed tools and methods.

The tools to be developed should be implemented using the low-level libraries established by the project funded under topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01. The tools developed should be compliant with the design of the ECCCH, and should be integrated with the ECCCH before the end of the project, together with proper documentation. All software and other related deliverables should be compliant with the data model and the software development guidelines elaborated by the project funded under topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01. If appropriate these tools should be developed with a view to a wider deployment, including in the Common European Data Space for Cultural Heritage, as

well as, when appropriate, for reuse via the European Open Science Cloud. Furthermore, content produced by these tools for the ECCCH should be interoperable for sharing, when appropriate, via the Common European Data Space for Cultural Heritage and/or the European Open Science Cloud.

Proposals should furthermore make provisions to actively participate in the common activities of the ECCCH initiative. In particular, projects funded under this topic should coordinate technical work with projects funded under other call topics of the ECCCH initiative, and contribute to the activities and objectives of the project funded under the topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01. Proposals should include a budget for the attendance to regular joint coordination meetings, and may consider covering the costs of any other joint activities without the prerequisite to detail concrete joint activities at this stage.

Projects funded under this topic should moreover set up their project websites under the common ECCCH website, managed by the project funded under topic HORIZON-CL2-2023-HERITAGE-ECCCH-01-01.

Furthermore, the Commission expects projects funded under this topic to establish regular coordination mechanisms in order to ensure synchronised planning as well as synergy and/or complementarity of deliverables and outcomes.

The Commission recommends considering reporting periods of 12 months when elaborating proposals.

Please also refer to the Destination introduction text to consider some key characteristics of the vision for the ECCCH.

DESTINATION: INNOVATIVE RESEARCH on SOCIAL and ECONOMIC TRANSFORMATIONS

Europe is being transformed by changes that impact the livelihoods and wellbeing of its citizens. Such changes present important opportunities for the EU to innovate and shape forward looking inclusive societies and economies, while avoiding the mistakes of the past and promoting an inclusive recovery that strengthens economic and social resilience. However, demographic changes, digitalisation, automation, new ways of working, environmental degradation, armed conflicts, energy dependency, the transition to a low carbon economy, health threats and globalisation all pose multidimensional, interconnected and complex social and economic challenges. At the same time, there has been an increase in inequality, poverty and social exclusion, a polarisation of skill needs in the labour market, and a slowdown in convergence in income and employment in most European countries. Inequalities, including housing inequalities, threaten social and territorial cohesion, economic growth and wellbeing. Moreover, the COVID-19 pandemic and the economic consequences of the Russian invasion of Ukraine have magnified the pervasive inequalities across European societies, with significant differences in the way losses and costs of these crises are distributed in society. To seize the opportunities emerging from socio-economic transformations, including the digital and green transitions, in a strongly connected and integrated world, these challenges need to be better understood and tackled.

Population ageing increases social protection spending on pensions, health and long-term care and restricts the capacity of the redistributive system to reduce inequality. Policies need to support a transition towards more environmentally-friendly ways of producing and providing private and public services, while ensuring all regions and individuals equally benefit from these transitions and that no one is left behind, in particular when it comes to employment and access to essential services. The European Pillar of Social Rights ¹²³ tries to pave the way towards fair and well-functioning labour markets and social protection systems. Access to social protection for those in need should be ensured, while making sure that everyone can participate in economic, social, political and cultural developments. Social protection supports individuals in emergencies that they can no longer cope with on their own and, in addition, protects them by means of long-term measures — whether in the event of illness, accident, disabilities, need for care (including childcare and long-term care), unemployment or old age. Moreover, mitigation and adaptation strategies are essential to make sure population movements shaped by these transitions are positive for all areas, and do not contribute to deepening the divide between regions or countries.

Education and training are key long-term factors in preventing and reversing inequalities and promoting equal opportunities, inclusion and social mobility. However, the educational outcomes of young people are still determined to a large extent by the socio-economic status of their parents rather than by their own potential. Without connecting to other social policies,

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https://ec.europa.eu/info/strategy/priorities-2019-2024/economy-works-people/jobs-growth-and-investment/european-pillar-social-rights/european-pillar-social-rights-20-principles_en

education and training systems may not be able to compensate for all societal inequality, however they have a vital role to play in breaking these patterns and creating a fair and inclusive society. In this context, it is important to reflect on the nature of economic growth and the need to better capture the different dimensions of social progress, including sustainable economic policy paradigms. It is increasingly important to distinguish between the different purposes of measurement: economic activity, social and cultural well-being and sustainability, and to develop relevant indicators. This is particularly the case as the pervasive effects of the COVID-19 pandemic has altered the economic performance and socioeconomic fabric of many countries in Europe, bringing also to the fore mental health related issues, loneliness and their socio-economic impacts affecting the well-being of citizens.

Migration has been a critical component of the makeup of European societies, requiring comprehensive and coordinated European responses in order to ripen its benefits, both inside and outside the EU. The task of research is to better understand migration in a global and EU context, assist in its governance, support security and help the socio-economic as well as civil-political inclusion of migrants in European societies. It can enhance policies, and in particular the EU's agenda on migration as it is expressed in the New Pact for Asylum and Migration¹²⁴.

The implementation of the research activities in the two calls of this Destination will contribute to a comprehensive and reflective European strategy for inclusive growth, including social, economic, ecological and historical dimensions. It will also contribute to promote research actions and outputs that help design, implement and monitor a socially just and inclusive green and digital transition, notably in relation to social and economic transformations, inclusiveness, skills development and sustainability. Furthermore, actions will deal with the long-term challenges in education and training, talent and labour market and the resilience of our societies. This will strengthen the resilience of the EU and of its citizens, and will ensure that no one is left behind, despite instability and in the face of old and new risks. It will equally support productivity gains and their fair distribution, as well as boosting social and economic resilience that is essential to face situations of unexpected crises such as in the case of COVID-19 or the Russian invasion of Ukraine. The overall knowledge generated, including a holistic understanding of societal well-being, will feed into the design of policy strategies in line with the above mentioned objectives and will facilitate the assessment of policy needs and outcomes in the field of the societal and economic transformations.

The Destination calls for proposals that may help in reaching these key strategic policy objectives in the EU. It invites proposals to do so by integrating feedback loops with stakeholders and policymakers that may help in developing suggestions and recommendations throughout their lifecycles. These proposals should take into consideration the stakeholders associated to the decisions that are suggested, and should also account for the context in which decisions are made. Therefore, in order to maximise and facilitate the uptake of groupsensitive recommendations in policy, they should include analyses of political and financial

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https://ec.europa.eu/info/publications/migration-and-asylum-package-new-pact-migration-and-asylum-documents-adopted-23-september-2020_en

trade-offs associated to the recommendations produced, reflecting also on contextual changes needed to implement proposals developed. Proposals are also invited to build upon previous research funded by Horizon 2020, valorising its experience and findings.

Expected impacts:

Proposals for topics under this Destination should set out a credible pathway to contributing to the following targeted expected impacts of the Horizon Europe Strategic Plan:

- Social and economic resilience and sustainability are strengthened through a better understanding of the social, ethical, political and economic impacts of drivers of change (such as technology, globalisation, demographics, mobility and migration) and their interplay.
- Inclusive growth is boosted and vulnerabilities are reduced effectively through evidencebased policies for protecting and enhancing employment, education, social fairness and tackling inequalities, including in response to the socio-economic challenges due to the COVID-19 pandemic.

The following call(s) in this work programme contribute to this destination:

Call	Budgets (EUR million)		Deadline(s)	
	2023	2024		
HORIZON-CL2-2023- TRANSFORMATIONS-01	80.00		14 2023	Mar
HORIZON-CL2-2024- TRANSFORMATIONS-01		96.00	07 2024	Feb
Overall indicative budget	80.00	96.00		

Call - Inclusiveness in times of change

HORIZON-CL2-2023-TRANSFORMATIONS-01

Conditions for the Call

Indicative budget(s)¹²⁵

Topics	Type of Action	Budgets (EUR million) 2023	Expected EU contribution per project (EUR million) ¹²⁶	Indicative number of projects expected to be funded
Opening: 14 Deadline(s): 1				
HORIZON-CL2-2023- TRANSFORMATIONS-01-01	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2023- TRANSFORMATIONS-01-02	CSA	4.00	2.00 to 3.00	1
HORIZON-CL2-2023- TRANSFORMATIONS-01-03	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2023- TRANSFORMATIONS-01-04	CSA	4.00	2.00 to 3.00	1
HORIZON-CL2-2023- TRANSFORMATIONS-01-05	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2023- TRANSFORMATIONS-01-06	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2023- TRANSFORMATIONS-01-07	RIA	9.00	2.00 to 3.00	3

The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.

The Director-General responsible may delay the deadline(s) by up to two months.

All deadlines are at 17.00.00 Brussels local time.

The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for years 2023, 2024 and 2025.

Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.

HORIZON-CL2-2023- TRANSFORMATIONS-01-08	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2023- TRANSFORMATIONS-01-09	RIA	9.00	2.00 to 3.00	3
HORIZON-CL2-2023- TRANSFORMATIONS-01-10	RIA	9.00	2.00 to 3.00	3
Overall indicative budget		80.00		

General conditions relating to this call			
Admissibility conditions	The conditions are described in General Annex A.		
Eligibility conditions	The conditions are described in General Annex B.		
Financial and operational capacity and exclusion	The criteria are described in General Annex C.		
Award criteria	The criteria are described in General Annex D.		
Documents	The documents are described in General Annex E.		
Procedure	The procedure is described in General Annex F.		
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G.		

Proposals are invited against the following topic(s):

HORIZON-CL2-2023-TRANSFORMATIONS-01-01: Remote working arrangements and their economic, social and spatial effects

Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.	

Type of Action Research and Innovation Actions	
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Expected Outcome: Projects should contribute to some of the following expected outcomes:

- Better understanding of the spatial implications of increased remote working and its challenges for different regions, including urban and rural areas.
- Increased understanding on the impact of remote working arrangements on the living and working conditions, including health and safety at work, work-life balance and consequences of cross-border working.
- Better understanding of the possible consequences to communal life and society.
- Recommendations to help urban and rural areas to shape the trends of remote working cope with the challenges and seize the opportunities.

<u>Scope</u>: Remote working arrangements have considerably increased during the COVID-19 pandemic, giving a new perspective to a long ongoing debate on a solution which before was primarily an opportunity to improve employees' work-life balance.

This phenomenon has the potential to decentralise jobs away from metropolitan areas creating opportunities for both urban and rural areas, including for the less favoured regions. For urban areas, it has, on one hand, the potential to alleviate housing prices and air quality. On the other hand, it can, at the same, change the urban landscape, notably regarding the occupation of buildings and their usage in areas where enterprises may switch completely to remote work arrangements. For rural areas, it can create more dynamism and attract necessary investments, including for essential services such as health care and transport. Moreover, rural areas tend to concentrate key sectors for the green transition, such as agriculture and clean energy production, for which attracting skilled, remote workers could affect particular challenges faced by rural areas, such as an ageing population and skills shortage. Simultaneously, increased attractiveness can also have a negative impact for the local community, for instance due to housing price increase and create pressure over existing infrastructure, as well as accelerate agricultural land take.

Not all workers can enjoy the benefits of working from home: it is estimated that only approximately 37% of EU-27 workers are in occupations that can be carried out from home. This could aggravate existing spatial segregation and inequalities. Moreover, remote work can significantly change working conditions and affect the health and safety of workers. In addition, employees whose workplace is in a different country than the place of employment may face complications regarding social security and taxation. Finally, the interlinkages of remote working with care duties can deteriorate the work-life-balance and possibly accentuate existing gender gaps.

Research should investigate how remote working arrangements can affect different spaces, focusing on the urban and rural divide and its impacts on the local communities, including on ethical and social aspects, employment, as well as on administration and infrastructures.

It should further research how remote working arrangements impact working conditions, notably health and safety of workers, the skills divide, working time, work-life balance and broader social impacts, including family and care arrangements, as well as mental health and loneliness.

Research activities should also evaluate the consequences of remote working on already existing inequalities, including gender inequality. They should forecast the development of the remote working trend and should identify populations benefitting and populations who run the risk of losing out.

As remote working is a phenomenon affecting societies on all levels, an outlook and policy recommendations should target policymakers on EU level as well as Member States', Associated Countries' and regional/local authorities.

Clustering and cooperation with other selected projects under this call and other relevant projects are strongly encouraged. Finally, the topic should contribute to the EU Rural Vision.

HORIZON-CL2-2023-TRANSFORMATIONS-01-02: Towards sustainable economic policy paradigms

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 4.00 million.
Type of Action	Coordination and Support Actions
Eligibility conditions	The conditions are described in General Annex B. The following exceptions apply: The Joint Research Centre (JRC) may participate as member of the consortium selected for funding.
Procedure	The procedure is described in General Annex F. The following exceptions apply: The granting authority can fund a maximum of one project.
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). ¹²⁷ .

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- An established network of relevant policymakers, academic experts, international organisations, non-governmental organisations, civil society organisations, fora and networks working on beyond GDP policy frameworks and measurement of multidimensional well-being, including National Statistical Offices (NSOs) or other national authorities in charge.
- An effective science-policy dialogue to increase the usability and acceptability of beyond GDP policy frameworks and well-being indicators.
- Policymakers, at European and national level, well informed about how to better incorporate well-being considerations into their work.
- Support and methodological guidance to EU Member States and Associated Countries, policymakers, national authorities, and experts on data collection and statistics for the measurement and monitoring of well-being.
- Well-working knowledge exchange and coordination on "beyond GDP" policy frameworks and well-being indicators among different stakeholders including through platforms, knowledge repositories, boards of experts, workshops and networking events.
- Links with ongoing policy priorities and initiatives, such as the European Green Deal, the 8th Environmental Action Plan (EAP), the European Pillar of Social Rights, the Resilience Dashboards, and the United Nation's Agenda 2030.

<u>Scope</u>: GDP is still the main macroeconomic indicator used around the world to quantify economic activity. However, the GDP indicator was never designed to measure human and planetary prosperity and well-being. Since more than a decade now¹²⁸, it is becoming clear that GDP on its own cannot reflect the real level of well-being and development of a society, or the damage done to the environment by certain economic activities and consumption choices¹²⁹. "Beyond GDP" policy frameworks and indicators such as the Eurostat Sustainable Development Goals reporting¹³⁰ are needed to measure progress against the global challenges

Important steps in this context were made by the 2009 manifesto by Stiglitz-Sen-Fitoussi, and the 2009 Commission Communication on "GDP and beyond: measuring progress in a changing world" and its 2013 follow-up "Progress on 'GDP and beyond' actions".

This <u>decision</u> is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision he en.pdf

See the ECFIN Discussion Pater "Economic Policy-Making Beyond GDP: An Introduction", Alessio Terzi https://ec.europa.eu/info/publications/economic-policy-making-beyond-gdp-introduction_en

Commission (Eurostat) publishes 2022 report on SDG (europa.eu) https://ec.europa.eu/commission/presscorner/detail/en/IP 22 3212

of the 21st century (such as climate change; demographic changes; changing world of work; digitalisation and technological change).

The transition to a well-being economy is embedded in the United Nation's 2030 Agenda and the related Sustainable Development Goals (SDGs), in the 8th EAP and enshrined in both the 2030 and 2050 priority objectives. Multidimensional "beyond GDP" indicators and policy frameworks are needed to monitor and measure, inform policymaking, improve communication, and promote target setting on social, economic, and environmental objectives. Such indicators are crucial to measure well-being and prosperity as well as environmental and social sustainability at individual, community, national level and international level, while accounting for the principle of "leaving no one behind" and capturing spill over effects of the EU's activities. Well-being indicators should be used to measure both objective and subjective dimensions, where the latter refers to individual behaviours, social preferences, values systems and social norms.

Over the past decade, several new well-being indicators have been developed, which have been embraced to various degrees by several governments and international organisations. At the current juncture, the challenge is twofold: 1) to overcome data gaps caused by lack of data collection and insufficient harmonisation and coordination across Member States, and 2) to bring "beyond GDP" policy frameworks and well-being indicators into more active policymaking in a sensible and clearer way. Initiatives under this call should provide tangible solutions to this challenge.

The goal of the proposals should be to help in particular policymakers and stakeholders, who are not familiar with beyond GDP policy frameworks and well-being indicators, but want to learn how to better incorporate well-being considerations into their work. The proposals should design concrete co-creation tools that support policymakers at the national, regional, local and city levels to develop and analyse policies and programmes with a well-being lens.

To this end, the proposals should shed light on the synergies between existing data sources, initiatives on beyond GDP, and results from previous funded projects. Proposals could cover actions that provide support and methodological guidance to the EU and Member States, policymakers, national authorities, and experts on data collection and statistics to measure and monitor well-being, sustainability, and resilience. By working together with the relevant policymakers and National Statistical Offices projects could assess, for example, the feasibility of scaling up existing knowledge on well-being, sustainability and resilience metrics by integrating it into more regular and standardised data collection exercises.

The proposals may also work towards establishing a European network that would help bring existing beyond GDP policy frameworks and well-being indicators into more active policymaking. Such a network should include a broad range of stakeholders representing diverse backgrounds and needs from all EU Member States, including policymakers, academic experts, international organisations, relevant fora and National Statistical Offices or other national authorities in charge, as well as social partners. Proposals are encouraged to also collaborate with the JRC.

Outputs should, where possible, feed into online learning content accessible to the public and various stakeholders in the form of platforms and knowledge repositories, and thereby open doors for mutual learning opportunities and exchanges of good practices. The proposals are encouraged to build strong networks and liaise with other stakeholders working on well-being through regular exchanges, in the form of, for example, boards of experts, workshops and networking events.

HORIZON-CL2-2023-TRANSFORMATIONS-01-03: Global Shortages and Skill Partnerships

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.
Type of Action	Research and Innovation Actions

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Enhance EU migration governance by matching analyses of skills shortages in the EU and in non-EU countries.
- Provide tools to decision-makers to navigate skill shortages in EU labour markets.
- Present an overview of the trade-offs of filling shortages with migrant workforce vis-à-vis other alternatives such as education/local and re upskilling/automation.

<u>Scope</u>: As the EU's workforce grows older, there is increasing political attention on how to recruit workers with the right skills for a changing labour market. The EU has proposed to develop 'Talent Partnerships'¹³¹ with third countries of origin, in order to train and recruit workers from outside of the EU. This type of international partnership based on skills, is premised on the idea that in many sectors shortages are global, and thereby one can develop training centres at lower cost outside of the EU, training people which may then spend their skills both in the origin countries, as well as in the EU. Research has started to look at this promising principle finding interesting practices¹³², yet attention is needed on a macro level to better understand causes and consequences of such shortages globally, in order to envisage scaling up such promising pilots and practices.

Firstly, research should focus on countries of destination, with a particular focus on the EU (at the national and regional level) in the context of an ageing population with a shrinking workforce and tax base. Proposals should focus on the shortage model that leads to

https://www.migrationpartnershipfacility.eu/labour-mobility

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https://ec.europa.eu/commission/presscorner/detail/en/FS 22 2656

recruitment of foreign workers through skill partnerships, and should assess their existence and their cause, with particular attention on how to define and measure them. This should shed light on the need to expand workforce by recruiting foreign labour, also by assessing viability and trade-offs of other alternatives. These could be, but are not limited to: raising wages, also considering incentives needed employers to do so vis-à-vis foreign worker recruitment; education and upskilling of local workforce, considering the possibility of matching supply and demand of labour depending on the sector and timeframe of the needs; automation, with a focus to investments and incentives needed to reach a level of automation of work in sectors which rely on migrant workforce. As such, proposals should assess causes and consequences of shortages in destination countries warranting the establishment of partnerships with third countries to recruit needed skills.

Proposals should then focus on third countries of origin, and go beyond single case studies keeping a macro and/or cross-case comparison perspective. Proposals should develop a way to evaluate labour markets and analyse matching needs and shortages compared to the EU. Proposals could combine labour market analyses with a focus on the education system and analyse structures in place for training people for those sectors in need, including spending attention on qualifications obtained in view of EU recognition, as well as on language skills as a factor for migrant integration. Proposals should also analyse the relation between investing in upskilling local workforce in view of recruiting a proportion of this, together with the creation of local human capital that could act as a driver for local development. This could be coupled with a survey in different countries with skilled (migrant) workers, in view of developing a database of microdata on the interaction of developing skills with local development processes. Proposals could take into account mobility patterns and retention initiatives as part of their analysis, as well as the ESCO classification ¹³³. Overall, such analyses should shed light on conditions which influence positively or negatively local development processes vis-à-vis foreign upskilling and recruitment, analysing conditions which lead domestic institutions to capitalise on the positive effects. Proposals may also include a historical perspective with comparisons with 'guest worker' programs of recruitment of foreign workers in the second half of the 20th century, to build on what has worked and what has not in the past. Proposals are encouraged to consider in their analyses in particular the pilot projects on legal migration carried out by the Mobility Partnership Facility¹³⁴, as well as other projects running in this area, inter alia the Flagship Technical Support topic 135, the European Training Foundation's 'Skills Lab' 136, THAMM project in North-Africa¹³⁷ and the MATCH project¹³⁸.

As such, proposals should consider both sides of 'skill partnerships' including the issues of brain drain and economic development of third countries, and assess the shortage model on

https://esco.ec.europa.eu/en/classification

https://ec.europa.eu/home-affairs/policies/international-affairs/mobility-partnership-facility-mpf en

EU budget for the future

https://www.etf.europa.eu/en/projects-campaigns/projects/skills-demand-analysis

https://ec.europa.eu/trustfundforafrica/region/north-africa/regional/towards-holistic-approach-labour-migration-governance-and-labour-en

https://belgium.iom.int/match

which they are premised both in destination and origin countries, looking at the distribution of benefits for destination countries, origin countries and migrants themselves.

Proposals are encouraged to consider contributing to the Global Gateway Strategy by increasing scientific knowledge and transferring best practices among partner countries. In order to achieve the expected outcomes, international cooperation is strongly encouraged. Clustering and cooperation with other selected projects under this call and other relevant projects are strongly encouraged, especially with the beneficiaries of topic 'HORIZON-CL2-2023-TRANSFORMATIONS-01-07: Tackling European skills and labour shortages' to ensure complementarities wherever relevant.

HORIZON-CL2-2023-TRANSFORMATIONS-01-04: Bridging the migration research to policy gap

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 4.00 million.
Type of Action	Coordination and Support Actions
Procedure	The procedure is described in General Annex F. The following exceptions apply: The granting authority can fund a maximum of one project.
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). ¹³⁹ .

Expected Outcome: Projects should contribute to all of the following expected outcomes:

• Strengthen EU migration governance by developing methodology and network to share research outputs with decision-makers and practitioners.

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This <u>decision</u> is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

- Valorise existing research and maximise outputs produced by distilling useful information for policymakers.
- Develop series of opportunities for mutual learning between policymakers, practitioners and the research community, based on research outputs and implemented through innovative methodologies and practices.

<u>Scope</u>: Proposals should build a rigorous method to bridge science to policy relations on migration, building from existing literature not exclusive to migration policy, including on decision-making, organisational studies, behavioural insights, human rights, gender and intersecting aspects (e.g. socioeconomic background, ethnic/minority background, disability) and public policy literature. It should therefore define a strategy towards informing policymaking on migration through evidence, taking into careful consideration all elements of the policy cycle, including: institutions involved, networks of actors and stakeholders, frames, perceptions and narratives that shape the context in which decisions are taken, information available to decision-makers, and finally the way in which policy choices are taken. This should also include consideration of cognition, values, human rights and biases and the role these play in distilling information available and deciding upon a course of action.

Having developed such a strategy specific to EU migration policymaking at its different levels (supranational, national, local), proposals should make a selection of migration research, and distil useful findings for policymakers. The specific topics on which to focus should be selected in synergy with practitioners and policymakers, identifying research consensus as well as knowledge gaps in the policy processes on which quick advice can be most useful. Proposals are encouraged to focus first on EU funded research and projects (funded through Horizon 2020/Europe, AMIF, ESFD+, EUTF, NDICI), but are also encouraged to look for further evidence available whenever necessary.

Finally proposals should apply the strategy for engaging with policymakers already from the beginning of their lifecycle to create opportunities for mutual learning between researchers and policymakers, on the topics identified in synergy with practitioners. This should not be limited to a normal dissemination strategy (policy briefs, presentations) aimed at feeding research into policy. It should also include innovative methodologies for exchange and learning, such as, but not limited to: case study analysis, scenario building, and other useful strategies that may help simulate how to manage disagreements and the intrinsic complexity of migration policy making. This should create a network that could for example include participants from EU institutions, Member States, International Organisations, partner Countries, NGOs and other stakeholders, with a view to be sustainable as a basis for exchange beyond the lifetime of the project. The proposals are strongly encouraged to seek ways to work in complementarity and coordination with existing migration networks at the EU level, notably the European Migration Network and the Knowledge Centre on Migration and Demography.

HORIZON-CL2-2023-TRANSFORMATIONS-01-05: Efficiency and effectiveness of investment in high-quality education and training

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.
Type of Action	Research and Innovation Actions

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Design, develop and use methodologies to evaluate the effectiveness and efficiency of specific policy measures or programmes in the field of education and training based on rigorous quantitative research methods, for example randomised controlled trials, natural experiments or other statistical techniques to perform causal evaluations.
- Gather evidence to assess costs and benefits to compare the efficiency of policy measures or programmes.
- Identify education and training policies ensuring an efficient use of public resources to improve learning outcomes, as well as measures of equity and inclusion of education and training systems.
- Develop policy recommendations to inform policy measures, programmes, future evaluations and actions in the field of education and training.

<u>Scope</u>: Effective and efficient investment in education and training at all educational levels and for all age groups is a prerequisite for enhancing quality and inclusiveness of the education and training systems, improving the education outcomes, meeting the European Education Area objectives and targets, as well as for driving sustainable growth, improving well-being, and building a more inclusive society¹⁴⁰. The Commission launched an <u>Expert Group on Quality Investment in Education and Training</u>¹⁴¹ focusing on teachers and trainers, digital education, education infrastructure and learning environments and equity and inclusion.

Investing effectively and efficiently in education and training has a potential to aid the recovery and contribute to the green and digital transitions of the education and training sector. However, most of the empirical evidence on the evaluation of education and training

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Council Resolution 2021/C 66/01: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=uriserv:OJ.C .2021.066.01.0001.01.ENG

https://ec.europa.eu/transparency/expert-groups-register/screen/expert-groups/consult?do=groupDetail.groupDetail&groupID=3759

policies comes from the United States or the United Kingdom. More analysis in EU Member States and Associated Countries is necessary to know if promising policies identified in the academic literature would be effective in a different local context. Moreover, a cost-benefit analysis of the policy measures evaluated is rarely available. Proposals should select education and training policy measures or programmes and assess their effectiveness to improve learning outcomes and measures of equity and inclusion in education and training systems, considering the situation of learners facing disadvantages, and including adult learning. Proposals could complement the quantitative research methods analysis with qualitative research methods. Proposals should also evaluate the costs associated with the policy measures or programmes analysed. Close cooperation with authorities responsible for the education and training policies analysed at the relevant level of Government is essential and should be ensured. Proposals should improve knowledge about the links between the outcomes of policy actions or programmes and their specific contexts, and about conditions for success to enhance the EU value-added. Clustering and cooperation with other selected projects under this call and other relevant projects are strongly encouraged.

HORIZON-CL2-2023-TRANSFORMATIONS-01-06: Mapping of longitudinal data and assessment of inequalities in education, training and learning achievements

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.
Type of Action	Research and Innovation Actions

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Map and collect existing regional or national longitudinal data allowing to follow individual cohorts of students over time and allowing to analyse their learning outcomes, and trends in educational inequalities.
- Provide policymakers with an analysis of the available literature and a selection of techniques used to assess inequalities in education, training and learning achievements over time.
- Identify the interventions that compensate inequalities in learning outcomes over time based on the analysis of longitudinal data.

<u>Scope</u>: Long-standing educational inequalities have been pervasive across the European Union and the disruptions related to the COVID-19 pandemic have further aggravated inequalities within and between countries. Despite the richness of analysis, existing initiatives and recommendations, longitudinal studies of individual student cohorts are rare, and it is

difficult to follow students, assess their learning outcomes over time and identify trends in education inequalities. It is even more difficult to examine any causal link between educational policies and inequalities in education achievements. Proposals should map and collect surveys with a longitudinal design, following the learning progress of students over time, and linking with information for example on students' achievement scores, socioeconomic background, language spoken at home, migration history, the school they attend, or whether they have attended early care and childhood education. Close cooperation with authorities and/or other institutions owning the data is essential and should be ensured. Proposals should enhance the knowledge base of what shapes the educational outcomes over time, how to best support the learning of all students and reduce education inequalities in the short, medium and long-term. Clustering and cooperation with other selected projects under this call and other relevant projects are strongly encouraged.

HORIZON-CL2-2023-TRANSFORMATIONS-01-07: Tackling European skills and labour shortages

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.
Type of Action	Research and Innovation Actions

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Policymakers are provided with a set of data at European level on skills and labour shortages.
- Citizens and policymakers can access to Europe wide sound indicators for skills and labour shortages, comparable across countries.
- Provide policymakers with viable pathways to reduce skills shortages and mismatch.

<u>Scope</u>: Well-functioning and balanced skills and labour market are a precondition for an inclusive society, low unemployment and inequalities, and a thriving economy.

Globalisation, demographic change and migration, technological change, green transition, and covid-19 crisis are reshaping European societies and economies, the labour market demand is changing at an unprecedented pace. This increases the risks of growing labour shortages, and related skills shortages if there are skills mismatches. Currently, accepted and comparable cross-country indicators on skills and labour shortages are lacking, hindering skills match, cross-country cooperation and supranational policies in order to reduce these issues.

Hence, research activities are expected to take stock, also building on existing literature and studies, of the current labour shortages across Europe, by sectors and occupational groups, based on a sound methodology and ensuring that data is comparable across countries. Afterwards, proposals should identify the main causes of the labour shortages, with a particular focus on skills needs and skills gaps. The causes may include working conditions (pay, working hours, occupational health and safety, well-being at work, etc.) on labour supply. The proposals should focus on the skills needed for the green and digital transitions with a focus on the "transferability" of existing skills from one sector/occupation to other sectors/occupations (e.g. what is the real gap in skills).

The proposals may:

- focus on shortages forecast;
- effect on changing tasks/educational profiles within jobs;
- have a regional dimension;
- Explore the impact on labour market polarisation and segmentation;
- Explore how big data and machine learning can complement conventional data (e.g. surveys and skills forecasts available, such as those of CEDEFOP or of the Pact for Skills)
- Explore the "determinants" of education choice and training choice: e.g., family background, local labour market, individual risk propensity, welfare, gender, etc.

Clustering and cooperation with other selected projects under this call and other relevant projects are strongly encouraged, especially with the beneficiaries of topic 'HORIZON-CL2-2023-TRANSFORMATIONS-01-04: Global Shortages and Skill Partnerships' to ensure complementarities wherever relevant.

HORIZON-CL2-2023-TRANSFORMATIONS-01-08: Integrated care solutions leading to better quality, person-centred long-term care and overcoming territorial inequalities in their provision

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.
Type of Action	Research and Innovation Actions

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Increased understanding of integrated care and support solutions (within formal and informal long-term care (LTC), but also between social and healthcare) to enhance the quality of the LTC services and of the impact on informal carers and the formal care workforce from the perspective of their skills development and needs.
- Promising policy practices in LTC, in particular the potential of ICT to support integrated, person-centred approaches, analysed and policy recommendations developed.
- Policymakers at EU/national/local level are provided with evidence on territorial inequalities (e.g. rural-urban) and interdependencies, particularly in relation to gender in the need and provision of LTC and the main drivers contributing to the challenge of regional and intersectional gaps between supply of and demand for formal LTC services.

<u>Scope</u>: The quality of LTC is affected by a number of factors, including funding, workforce, organisation, and technology. Concerning organisation, new models of integrated care have started to emerge, which aim to structure care services around personal needs to improve user satisfaction, psychological health, and well-being.

Within many EU Member States and Associated Countries, LTC is typically funded from various sources and organised at different levels. In terms of regulation, funding and service provision, the provision of LTC services may be closely interlinked with (or be part of) policies such as those in healthcare, social care, housing and housing support services, and for people with disabilities. This horizontal division may hamper the co-ordination of care and even service provision. LTC is especially strongly interlinked with the provision of healthcare, as people with LTC needs often have healthcare needs due to multiple chronic conditions or co-morbidities. The provision of integrated care, where different professionals work closely together to address people's healthcare and LTC needs, is thus essential. Technology can help improve the quality of LTC provision, for instance by personalising service provision, increasing users' independence, supporting quality-assurance efforts through monitoring of service provision, remote care management, etc.

Recent reforms include establishing new services, as well as measures reinforcing the integrated delivery of care. The latter measures mostly tackle sectoral disparities between healthcare and social care by setting up co-ordination structures. They are also aimed at improving local and regional management and enhancing co-operation between different providers of homecare.

In the context of ageing societies, a key challenge is to provide adequate, accessible, and affordable formal LTC services of high quality to those who need it. The availability of formal LTC services differs greatly among EU Member States. With a large increase in demand ahead, already today many people in need of LTC services cannot access or afford them. Among the barriers to ensuring equal access to adequate LTC are geographical disparities or even shortages in supply. Differences in the use of care reflect personal preferences and differences in family structures and socioeconomic backgrounds, as well as the availability and affordability of formal LTC services. For example, effective access to care

is often hindered in rural and remote areas. However, data on regional differences of LTC provision is scarce.

The role of social economy as an important player in innovative practices in care provision is often highlighted. Proposals should identify best innovative practices, including in new and emerging areas, such as platform cooperativism in the field of LTC and in regularising undeclared workers in LTC.

The call is expected to contribute to the EU Rural Vision and EU Care Strategy. Clustering and cooperation with other selected projects under this call and other relevant projects are strongly encouraged.

HORIZON-CL2-2023-TRANSFORMATIONS-01-09: Addressing housing inequalities in a sustainable, inclusive and affordable way

Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 9.00 million.	
Type of Action	Research and Innovation Actions	

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Provide guidance on effective measures that can increase the socio-economic integration of marginalised communities, migrants, refugees and disadvantaged groups by reducing housing inequalities and improving access to quality housing.
- Provide policymakers with a comprehensive overview of how income and wealth
 polarisation affect the housing market against the background of changing interest rates
 and inflation.
- Support policymakers in better understanding how the green and digital transition could affect housing inequalities and how "supply-side" land use policies as well as social innovation could help address such inequalities in a sustainable way.
- Provide local and regional policymakers with guidance based on best practices to support the development of affordable and inclusive housing facilities, including energy efficient housing.

<u>Scope</u>: Access to affordable and social housing as well as homelessness remain challenges to foster social inclusion and tackle entrenched poverty across Europe. Energy poverty affects nearly 34 million Europeans who are unable to afford keeping their homes warm. Housing

prices have been steadily growing every year and faster than disposable income. Housing is now the highest item of expenditure for European citizens.

The top 1% wealth shares have risen again recently in Europe, and the gap between asset owners and pure income earners and social transfer recipients is increasing further. During the COVID, high-income workers suffered limited income losses and often increased their savings compared to low-income workers for which the opposite holds. These trends are likely to bring about house purchases (sales) from high-income (low-income) households, reinforcing wealth inequalities in the housing component. Research may provide a mapping of recent household wealth dynamics and their segregation implications.

The European Green Deal will affect housing markets notably through the Renovation wave and its Affordable Housing Initiative as well as through the revision of the Energy Efficiency and the Energy Performance of Buildings Directives. Increasing the energy efficiency of buildings helps tackling energy-poverty. Research may inform policy measures that ensure energy efficiency and affordable housing go hand in hand and are accessible to all socioeconomic groups. Interlinks between housing inequalities and carbon inequalities as well as mobility poverty are of interest too. Research may focus on the relation between housing inequalities and the labour mobility from regions facing job losses to regions generating new jobs in the context of the twin transition. With regard to social and affordable housing, research may shed light on the role social, green and digital innovations can play in addressing housing inequalities.

Interlinkages between the digital and green transition, sustainable spatial planning, economic regeneration and housing inequalities merit more attention. Links between workplace and housing inequality are multidimensional, with structural conditions, working conditions and family conditions playing important roles. Housing inequalities should not lead to new forms of discrimination in labour markets. Research may inform policy actions to ameliorate the organisation of work from home, notably for vulnerable households. New forms of work could also impact preferences for rental housing compared to homeownership. Research may also look at the role of social economy actors in addressing housing inequalities while stimulating inclusion, economic and social development.

Research should make a granular assessment of these issues for different geographical areas, degrees of urbanisation, tenure statuses and different household's compositions. The gender and intergenerational dimensions are essential. Clustering and cooperation with other selected projects under this call and other relevant projects are strongly encouraged.

HORIZON-CL2-2023-TRANSFORMATIONS-01-10: Tackling inequalities in the green and digital transitions

Specific conditions		
Expected EU contribution per	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 million would allow these outcomes to be addressed	
	appropriately. Nonetheless, this does not preclude submission and	

project	selection of a proposal requesting different amounts.
Indicative budget	The total indicative budget for the topic is EUR 9.00 million.
Type of Action	Research and Innovation Actions

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Policymakers at EU/national/local level are provided with a comprehensive view of the risks of widening existing inequalities or create new ones as a result of the twin transition.
- Policymakers at EU/national/local level are provided with policy options that could address existing inequalities and mitigate potential negative socio-economic effects of the twin transitions.

<u>Scope</u>: The next decades will be defined by the twin green and digital transitions. The twin transitions have be just and socially fair. To achieve this, policymakers need to both recognise existing inequalities and vulnerabilities and take duly into account the possible distributional impacts of new/revised policies (e.g. the Green Deal and its Fit for 55 Package), against (updated) baseline scenarios. While some aspects of the transitions are subject to (distributional) impact assessment and have been scrutinised by policymakers and relevant stakeholders, the twin transitions might fail to address or, worse, widen existing inequalities and/or create new ones. For this reason, research under this action should:

- Extensively investigate areas where the twin transitions separately and jointly and their driving policies aggravate existing inequalities and vulnerabilities and/or risk increasing inequalities, including dedicated explorations where the effects of the two transitions (and potentially implemented policies) mutually reinforce or mitigate each other.
- Put dedicated focus on gender, the age distribution (incl. old age and in particular also young people and their specific challenges), spatial aspects (incl. rural areas and degree of urbanisation), education and skill proficiencies (incl. individuals who are not in education, employment, or training (NEET)), migration backgrounds, income, labour.
- Market dimensions (incl. labour market attachment and sectoral affiliation of individuals), and other key-covariates of (financial as well as skill) vulnerabilities.
- Identify mitigation measures to counter such inequalities, including the underlying time frames and (temporal as well as spatial) order of implementation.
- Inform policymaking of the research findings with the double objective of i) reducing ex-ante the possibly negative socio-economic/distributional effects of green and digital policies and ii) promoting corrective policies/action aimed at reducing existing inequalities.

The proposals may be a forward-looking exercise, possibly making use of scenario building.

In as far as possible, research may also lay out the dedicated factors driving inequalities, and possibly explore them in more detail. This may include factors such as, but not limited to:

- The role of the financial sector e.g. via green financing and the fintech-sector.
- Digital language equity and the general (English) language proficiency.

Clustering and cooperation with other selected projects under this call and other relevant projects are strongly encouraged.

Call - A sustainable future for Europe

HORIZON-CL2-2024-TRANSFORMATIONS-01

Conditions for the Call

Indicative budget(s)¹⁴²

Indicative **Topics** Type Budgets Expected EU of (EUR number Action million) contribution of per project projects 2024 (EUR expected million)¹⁴³ to be funded Opening: 04 Oct 2023 Deadline(s): 07 Feb 2024 **CSA** 3.00 Around 1 HORIZON-CL2-2024-TRANSFORMATIONS-01-01 3.00 HORIZON-CL2-2024-**RIA** 10.00 2.00 to 3.00 3 TRANSFORMATIONS-01-02 HORIZON-CL2-2024-RIA 10.00 2.00 to 3.00 3

TRANSFORMATIONS-01-03

HORIZON-CL2-2024-

The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for years 2023, 2024 and 2025.

RIA

10.00

2.00 to 3.00

3

The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.

The Director-General responsible may delay the deadline(s) by up to two months.

All deadlines are at 17.00.00 Brussels local time.

Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.

TRANSFORMATIONS-01-04				
HORIZON-CL2-2024- TRANSFORMATIONS-01-05	RIA	10.00	2.00 to 3.00	3
HORIZON-CL2-2024- TRANSFORMATIONS-01-06	RIA	10.00	2.00 to 3.00	3
HORIZON-CL2-2024- TRANSFORMATIONS-01-07	CSA	3.00	Around 3.00	1
HORIZON-CL2-2024- TRANSFORMATIONS-01-08	RIA	10.00	2.00 to 3.00	3
HORIZON-CL2-2024- TRANSFORMATIONS-01-09	RIA	10.00	2.00 to 3.00	3
HORIZON-CL2-2024- TRANSFORMATIONS-01-10	RIA	10.00	2.00 to 3.00	3
HORIZON-CL2-2024- TRANSFORMATIONS-01-11	RIA	10.00	2.00 to 3.00	3
Overall indicative budget		96.00		

General conditions relating to this call		
Admissibility conditions	The conditions are described in General Annex A.	
Eligibility conditions	The conditions are described in General Annex B.	
Financial and operational capacity and exclusion	The criteria are described in General Annex C.	
Award criteria	The criteria are described in General Annex D.	
Documents	The documents are described in General Annex E.	
Procedure	The procedure is described in General Annex F.	
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G.	

Proposals are invited against the following topic(s):

HORIZON-CL2-2024-TRANSFORMATIONS-01-01: Policy recommendations from socio-economic impacts of loneliness in Europe

Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of around EUR 3.00 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 3.00 million.	
Type of Action	Coordination and Support Actions	
Eligibility conditions	The conditions are described in General Annex B. The following exceptions apply: The Joint Research Centre (JRC) may participate as member of the consortium selected for funding.	
Procedure	The procedure is described in General Annex F. The following exceptions apply: The granting authority can fund a maximum of one project.	
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). 144.	

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Contribution to behavioural changes for a more resilient and just society.
- Information on key aspects of the impacts of loneliness in Europe by pooling of socioeconomic data to existing data.
- Evidence-based recommendations for social and economic policies to prevent, counter, and manage loneliness in Europe at individual and population levels.
- Creation of a framework to monitor loneliness in the long-term.

This <u>decision</u> is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

 Formation of a representative network of experts, stakeholders and policymakers involved in research and policy actions addressing the socio-economic impacts of loneliness.

<u>Scope</u>: Loneliness is becoming an urgent public health issue that calls for effective policy interventions. In 2016, 12% of EU citizens felt lonely. With the COVID-19 pandemic and social distancing, the figures have increased to 25%. Although loneliness affects citizens from all age groups, its prevalence is uneven in the Member States. The effects of loneliness are harmful for health, but also have significant impacts on social cohesion and community trust.

Several EU research projects and initiatives, such as the Pilot Project on Loneliness run by the JRC in collaboration with DG EMPL, already focus on loneliness and proposals submitted under this topic should ideally synergise with these and capitalise on available data to support the pooling of socio-economic data to existing data on individual and societal loneliness.

This effort should capitalise on available data to identify commonly agreed socio-economic and geographical risk factors, drivers and trends of loneliness within and across Member States including of specific populations (such as teenagers, unemployed, recently retired people, third country nationals who legally reside in the EU and people with disabilities), as well as gender and intersecting aspects (e.g. socioeconomic background, ethnic/minority background) and provide recommendations to design effective loneliness policies as well as develop tools for the long term monitoring of loneliness at the individual and population levels.

Work is also expected to nurture the public debate on loneliness and in particular on the stigma that is associated to it.

The approach will be based on a FAIR¹⁴⁵ data-sharing culture and will promote the use of new technologies to quantify and assess the social and economic effects of loneliness in Europe.

HORIZON-CL2-2024-TRANSFORMATIONS-01-02: Strengthen economic fairness and resilience of active labour market policies and address high unemployment

Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 10.00 million.	
Type of Action	Research and Innovation Actions	

Data need to meet the FAIR principles: findable, accessible, interoperable and reusable.

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Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Improved understanding of macro effects of labour market policies on general equilibrium including displacement and substitution effects;
- Improved skills strategies and skill development, also at sectoral level, during periods of economic downturn benefitting from lower opportunity costs;
- Improving policy design to increase labour market participation and employment in a
 context of high unemployment and high number of job vacancies, notably in low and
 high skilled jobs.

<u>Scope</u>: Active labour market policies are widely used by European countries to improve the functioning of their labour markets by addressing skill mismatches, labour market segmentation, and by promoting the integration in the labour market of those facing difficulties in accessing it. Policies aimed at skill development could be effective in periods of low economic activity at the macroeconomic level, given that the opportunity cost of training programmes is lower in times of recession. These policies could facilitate the reallocation of labour, prepare the ground for a fair economic recovery, and facilitate transitions towards the green and digital sectors.

However, there have been studies post the 2007 recession arguing that training programmes have so far had only a modest effect in generating post-programme employment. Furthermore, researchers found that responses of adult learning and training to the business cycle are different for employed and not employed workers, with the participation of the latter group diminishing in times of economic downturn due to credit constraints preventing them from investing in education.

In light of such studies, more research is needed to survey the different types of active labour market policies enacted by the Member States, especially in the area of skills development during economic downturns, and their effects on people facing economic challenges, e.g. people at risk of poverty or workers whose job is at risk of automation or at risk of transformation due to transition to a decarbonised economy. Proposals should focus on the ways in which active labour market policies can be strengthened to provide economic fairness and resilience.

Research activities may focus on the response of public authorities to the COVID-19 crisis and estimate their effectiveness including displacement and substitution effects. Alternatively, research could also focus on the participation of persons coming from a vulnerable socioeconomic background or from regions with a high degree of unemployment (e.g. people at risk of poverty, people coming from rural communities) to active labour market policies with an aim to mapping barriers and policy responses to increase their participation. Research could also focus on the impact of active labour market policies while incorporating a gender dimension. Another research avenue could be analysing the role of active labour market policies within broader exercises to rethink employment and income protection with an aim of

underpinning synergies that enhance their effect, e.g. the interplay between active labour market policies and housing allowances in the housing first approach.

Where relevant, activities should build upon existing research, draw lessons from recent policy interventions in a contextual and transdisciplinary manner and propose adjustment measures, or test them through social innovation experiments. Clustering and cooperation with other selected projects under this call and other relevant projects are strongly encouraged.

HORIZON-CL2-2024-TRANSFORMATIONS-01-03: Minimise costs and maximise benefits of job creation and job destruction

Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 10.00 million.	
Type of Action	Research and Innovation Actions	

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Effective management of processes of job creation and job destruction triggered by macro drivers of change;
- Different socio-demographic groups and regions are favourably affected by the creation of new green jobs and new industries;
- The negative effects associated with the destruction of some jobs in carbon-intensive activities are mitigated so that nobody is left behind as a result of the reallocation of jobs across regions and sectors;
- Reskill and upskill older workers and/or unskilled workers to ensure a smooth transition to the emerging jobs/sectors.

<u>Scope</u>: Globalisation, technological change, demographic change, green transition and other macro drivers of change are accelerating the processes of job creation and job destruction. These have profound socioeconomic effects. On the one side, they lead to changes in the status of people (e.g. from unemployed to employed); working lives are more fragmented, with less stable working relationships. On the other side, they reshape the economic landscapes and ecosystems of different sectors, often linked with technological, social and business innovation. All of these impacts underscore the need to develop effective policies to minimise costs and maximise benefit. The topic should identify the best ways to train refugees, immigrants, women, older and younger people, people affected by disabilities,

unemployed and inactive, medium and low skilled employees, low and medium educated people, individuals living in rural areas, NEETs (not in education, employment, or training), since these people have fewer resources to cover transition spells.

The proposals may investigate the following issues:

- How should the reallocation of labour within and across sectors take place to ensure social integration and that nobody is left behind?
- How do we reskill and upskill older workers and/or unskilled workers to ensure a smooth transition to the emerging jobs/sectors?
- What are the upskilling/re-skilling programs that work the best (maximising the benefits while minimising the costs)?
- What are the impacts of the green transition on labour market opportunities of different and disadvantaged socio-economic groups, across economic sectors, green-vs.-brown job decompositions, and income brackets?
- Given the pre-crisis trend of constant increase of labour market participation, how could we increase the labour market participation of under-utilised workforce?

Clustering and cooperation with other selected projects under this call and other relevant projects are strongly encouraged. International cooperation is encouraged, especially with EU Neighbourhood and candidate countries.

HORIZON-CL2-2024-TRANSFORMATIONS-01-04: Social services: economic and social returns and value added

Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 10.00 million.	
Type of Action	Research and Innovation Actions	

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Well-founded evidence on the social and economic returns of social services, including interlinkages between child poverty and gaps in access to social services, and interlinkages in access to employment and access to social services.
- Improved understanding of the channels through which social services may foster and accelerate a fair green and digital transition.

• Identification and use of the best methodology to capture and measure the value added of the provision of social services, including informal social services, in the EU Member States and Associated Countries in different geographical areas (rural and urban).

Scope: Social services have a fundamental role in our society, safeguarding and promoting the welfare and well-being of vulnerable groups (e.g. migrants, people with disabilities, homeless, youth at risk, and more in general, unemployed people, low-income and poor households and women). The proposals should consider social services in a broad manner, including both universal social services of general interest such as healthcare, education, as well as other social services childcare, employment services, long-term care and social inclusion services for persons at risk of poverty and social exclusion (including counselling, coaching, mentoring, crisis centres or shelters, housing support services). The proposals should also take into account the unequal availability of social services between rural and urban areas. A special attention should also be given to the different roles of social services in the context of the fair green and digital transition (e.g. supporting working-age adults with caring responsibilities to take up good quality jobs, which contribute to the twin transitions in particular in the regions most affected by the transition from fossil fuel or carbon intensive industries).

Concerning the economic and social returns of these services, the proposals should focus on estimating the impacts from a life course perspective (including through age-dependent models), on children (development in their childhood and also into adulthood),on the employment and income situation of adults of investments in healthcare and education, including childcare and extracurricular activities for the children, but also other services such as housing and nutrition and long term care for the elderly. Such impacts should in particular be estimated in terms of employment outcomes and household incomes.

More generally, linked with the "beyond GDP" approach, it is important to analyse how to better measure the actual value added of the provision of public social services, primarily in terms of monetary valuation. Currently the value added of the public provision of social services is considered into national accounts at production prices (when there are no price associated to the related services) or also sometimes at the (reduced) price the related services are financed.

However, the actual added value of the provision of these services is meant to be higher than the production costs (or related reduced prices). It would be useful to reflect on the main channels to be accounted for in this respect in ensuring a better accounting of the actual level of the value added provided by public social services. Moreover, some actual estimates of the actual added value of the provision of public social services should be provided, reflecting in a more accurate way in particular both the short term impact (such as stabilisation function on the economy) and the longer term impact. These can be related to structural positive impact on employment and incomes, or savings allowed in terms of preventing adverse impacts, such as in terms of preventing permanent adverse spells – such as health outcomes or early school leaving – or transitory periods such as unemployment or inactivity of social services provided. Clustering and cooperation with other selected projects under this call and other relevant

projects are strongly encouraged, especially with HORIZON-CL2-2023-TRANSFORMATIONS-01-02: Towards sustainable economic policy paradigms.

HORIZON-CL2-2024-TRANSFORMATIONS-01-05: Social dialogue in the new world of work

Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 10.00 million.	
Type of Action	Research and Innovation Actions	

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Assessing the impact of trade unions and employers' organisations on employment and social outcomes.
- Analysis of the distributional costs related to the activities of social partners for their members.
- Improving representation forms available to non-standard workers in the social dialogue by involving social partners.

<u>Scope</u>: Social dialogue plays a crucial role in the functioning of the European social market economic model. Through constructive negotiation between employers and employees, social dialogue can deliver a more competitive economy while also improving working conditions and access to social protection. However, the profound changes in the world of work kick-started by digitalisation, globalisation, and the proliferation of non-standard forms of work raise a number of constraints that hinder the ability of social dialogue to effectively steer the labour markets through economic and social transformations. Some of these constraints deal with the current legislative framework while others are tied to the deterioration of the employer-employee relationship on which social dialogue was first built.

There is an acute need for more innovative research that investigates the impact of the transforming world of work on the capacity of social actors to engage in social dialogue, as well as its effectiveness. Moreover, innovative research is needed to highlight opportunities arising from digitalisation that social partners need to seize in order to deliver positive socioeconomic outcomes.

Research activities should focus on the interplay between non-standard forms of work (temporary employment; temporary agency work, part-time work, platform work, and other forms of non-standard employment) and social dialogue. Alternately, they can investigate

legislative barriers prohibiting social partners from engaging in dialogue, such as competition law in the case of self-employed workers. Research proposals should also investigate if the current legal framework remains fit for purpose and the ways in which it can be adapted to respond to the changing realities of the world of work. Proposals should analyse the outcomes of social dialogue in industries where non-standard forms of work are proliferated and where in-work poverty is present. Furthermore, they should investigate new innovative ways in which social partners have surmounted the previously mentioned barriers. Lastly, proposals should analyse the role of social dialog in defining the digital and green transition. Research activities should also focus on the specific national or regional circumstances in which social dialogue developed and how these are affecting its effectiveness today, and its ability to respond to the changes in the evolving world of work.

Where relevant, activities should build upon existing research, draw lessons from recent policy interventions in a contextual and transdisciplinary manner and propose adjustment measures, or test them through social innovation experiments. Clustering and cooperation with other selected projects under this call and other relevant projects are strongly encouraged.

HORIZON-CL2-2024-TRANSFORMATIONS-01-06: Beyond the horizon: A human-friendly deployment of artificial intelligence and related technologies

Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 10.00 million.	
Type of Action	Research and Innovation Actions	

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Understanding and awareness raising about successful existing deployment of AI and the
 impact they have on European economy and society, providing a reality check of
 capabilities/benefits, but also limitations of current AI solutions, and how the latter are
 currently addressed.
- On the basis of lessons from successful deployment, analysis of the implementation of the ethics principles for trustworthy AI.
- Structurally enhanced capacities to foresee, evaluate and manage the future and longer term opportunities and challenges associated with artificial intelligence and related technologies.

- Well founded and prioritised recommendations for European policy on R&I and in other key areas aimed at:
 - o Ensuring that Europe is prepared to exploit the opportunities for the benefit of citizens and society, and at the same time face the challenges raised by potential developments and deployments of artificial intelligence and related technologies based on science and evidence as well as human rights and European values, and
 - o Reinforcing Europe's capacity to guide the development and deployment of these technologies in ways aligned to human rights and European values.

Scope: The history of "artificial intelligence" technologies (AI) is marked by great optimism and expectation, sometimes followed by disappointment. However, we have recently seen a sustained upsurge in interest and the successful uptake and application of AI in a variety of significant areas such as drug discovery, autonomous vehicles, social media, industrial robotics, and logistics, to name a few. We have witnessed significant successes in the development and deployment of machine learning, particularly for tasks normally associated with human perception¹⁴⁶. We have also seen significant successes in symbolic and logicdriven AI for problems that require reasoning about constraints, automated reasoning, planning, etc. 147 AI has had significant impact in the arts and humanities, and AI-based methods and tools are becoming more widely used in the cultural arena. 148

Nevertheless, today the collection of computer technologies commonly labelled artificial intelligence, along with related technologies for instance in the fields of data science, neuroscience and biotechnology, already show the potential to disrupt and impact the rights of individuals and the wellbeing of societal structures. For example, there have been many documented case studies where AI-based applications have exhibited undesired gender and racial bias 149. AI systems have been (mis-)used to micro-target and influence voters in elections as well as in the creation and dissemination of disinformation ¹⁵⁰, and otherwise impact on human agency and autonomy. Many ethical issues arise in the development of AI systems, such as their use in medical devices, brain-computer interfaces, reasoning about human mental and emotion state, etc. 151

Concerns are often raised that AI technologies may imply major societal disruptions such as massive job displacements due to the increasing use of AI-drive automation and robotics, while research show that AI can also help filling gaps in workforce 152153.

china-signals-it-has-no-interest-in-workers-privacy/

146

https://www.mygreatlearning.com/blog/deep-learning-applications/ 147 https://venturebeat.com/2022/02/11/symbolic-ai-the-key-to-the-thinking-machine/ 148 https://doi.org/10.1038/s41586-022-04448-z 149 https://www.internationalwomensday.com/Missions/14458/Gender-and-AI-Addressing-bias-inartificial-intelligence 150 https://il.boell.org/en/2022/01/27/ai-and-elections-observations-analyses-and-prospects 151 See for example https://www.technologyreview.com/2018/04/30/143155/with-brain-scanning-hats-

¹⁵² https://www.mckinsey.com/featured-insights/future-of-work/the-future-of-work-in-europe 153 The Global Health Care Worker Shortage: 10 Numbers to Note | Project HOPE

In 2018, the European Commission established the High Level Expert Group on Artificial Intelligence (HLEG-AI), which was tasked with developing a set of ethics guidelines for Europe that would help ensure that AI systems be human-centric and trustworthy. The importance of a human-centric approach to AI has been a cornerstone of EU policymaking in the field for several years and is the clearly articulated position of the EU. The European Commission published a pioneering draft AI Act in April 2021, the first legal framework on AI in Europe, which addresses the potential risks of using AI¹⁵⁴. The Horizon Europe work programme under Cluster 4 is funding related research and innovation actions under the header 'Leadership in AI based on trust'.

The common principle across all of these EU initiatives are seven key requirements for trustworthy AI¹⁵⁵, as proposed by the HLEG-AI and adopted by the European Commission, as well as the importance of protecting the fundamental rights of individuals¹⁵⁶.

Against this backdrop, before being faced with a 'fait-accompli' in terms of potentially undesirable influence of AI on the European society and economy and to make sure that all the beneficial potential of AI deployment is fully realised, we should anticipate and prepare for possible and high impact scenarios.

The proposal should cover all the following aspects:

- Decisive contributions to develop a sound European capacity building on the future and long term human and societal implications of AI, building, as appropriate, on previous work of the HLEG-AI, ADRA¹⁵⁷, and current development of the AI Act or other relevant European and national AI initiatives.
- A solid scientific approach, providing an in-depth analysis of successful existing deployment of AI and the impact they have on European economy and society. Such analysis should also significantly contribute to awareness raising of such deployments, providing a reality check of capabilities/benefits, but also limitations of current AI solutions, and how the latter are currently addressed.
- Scenario based analysis of future and long term potential benefits to citizens and societies, as well as an analysis of related challenges and threats.
- Based on this, proposals for development and deployment of AI, should ensure a broad support and appropriate involvement of other relevant AI initiatives, taking into account guiding ethics principles and the current development of the AI Act.
- Proposals need to take a multi-disciplinary and cross-sectorial approach, and engage with a wide set of stakeholders, including research organisations, enterprises, citizens 158,

https://digital-strategy.ec.europa.eu/en/library/proposal-regulation-laying-down-harmonised-rules-artificial-intelligence

https://ec.europa.eu/futurium/en/ai-alliance-consultation/guidelines/1.html

https://digital-strategy.ec.europa.eu/en/policies/european-approach-artificial-intelligence

Home - Ai Data Robotics Partnership (ai-data-robotics-partnership.eu)

of different age groups incl. children and young people as well as elderly people

policymakers, public private partnerships in particular the AI, Data and Robotics Partnership, and other relevant EU projects and initiatives around AI.

• European policy actions should be proposed in a priority order, notably in the area of research and innovation but not excluding other important policy areas, that would serve to strengthen European preparedness and resilience in the face of future developments within AI and related emerging technologies as well as to guide the development and deployment of these technologies in a desirable direction.

Proposals should build on existing knowledge, activities and networks, such as the HLEG-AI and other initiatives funded by the European Union. Funded proposals should also take into account existing EU policy in the area, such as the development of the AI Act and the Excellence and trust in artificial intelligence under A Europe fit for the digital age ¹⁵⁹. Furthermore, the proposals should seek synergies with closely related actions, such as relevant R&I actions funded by Horizon Europe or Horizon 2020¹⁶⁰.

HORIZON-CL2-2024-TRANSFORMATIONS-01-07: Methodologies for teamworking of researchers – reinforcing transversal collaborative skills, behavioural and implementation sciences

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of around EUR 3.00 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 3.00 million.
Type of Action	Coordination and Support Actions
Procedure	The procedure is described in General Annex F. The following exceptions apply: The granting authority can fund a maximum of one project.
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
	under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the

See further

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Such as the Networks of AI excellence centres funded under H2020 and Horizon Europe, the AI on Demand Platform as well as projects funded under Destination 6 (Leadership in AI based on trust) of Cluster 4 of the HE Work Programme.

	Research and Training Programme of the European Atomic Energy	
	Community (2021-2025). 161.	

<u>Expected Outcome</u>: Projects should deliver results that are directed towards and contributing to all of the following expected outcomes:

- Map, evaluate and develop elements for promoting teamwork in researchers' curricula and professional updating, including for enhancing careers and jobs paths.
- Produce evidence on the impacts of teamwork, outreach activities, communication and dissemination skills for systemic thinking and researchers/stakeholders' relationships and their connection with wider society.
- Provide collaborative, participatory and co-creative methodologies to include behavioural and implementation sciences for improving teamwork among researchers.
- Produce recommendations and toolkits for Universities and research Institutions on how
 to enhance teamwork, co-creation and teambuilding to tackle global challenges and
 produce changes in societies.

<u>Scope</u>: As acknowledged by UNESCO, 'Transversal skills are increasingly in high demand for learners to successfully adapt to changes and to lead meaningful and productive lives.'

To maximise impact and incite societal changes, the following elements should be considered:

- to further develop, promote and demonstrate methodologies that transfer relevant and proven concepts from for example, the behavioural and implementation sciences, management science, and professional development, in order to equip researchers for effective teamworking and maximise research impact on social and economic transformation through collaborative interactions and co-creation
- to design methodologies for training of researchers in transversal skills, such as communication, cross-sectoral teamwork and research involving collaborating with stakeholders
- to develop cultural competence that enables researchers to work productively and meaningfully in teams that span countries, sectors, disciplines and other cultural divides
- to promote interdisciplinary research teams around key societal challenges

Proposals under this topic should therefore combine communication, management and collaborative skills with behavioural sciences and implementation sciences for the lifelong training of researchers in 'transferrable' skills, in the course of their curricula or as part of the

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This <u>decision</u> is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

updating of their professional careers. A focus on teamworking will be an asset in the career and job paths and will gradually lead to achieve and maximise impact on and in our societies, economies and democracies.

Efforts should be directed to identify, evaluate and suggest methodologies for training of researchers in behavioural and implementation sciences and transversal skills, in the course of their curricula or as part of the updating of their professional careers. Work should also concentrate on the practical aspects of teamworking.

HORIZON-CL2-2024-TRANSFORMATIONS-01-08: Arts and cultural awareness and expression in education and training

Specific conditions	cific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 10.00 million.	
Type of Action	Research and Innovation Actions	

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Develop and apply methods to support the use of arts in education and interventions to foster cultural awareness and expression and to assess their impacts on the development of competences and inclusion of all children and young people.
- Inform policies, programmes and actions using arts in education and contributing to foster cultural awareness and expression, identify existing gaps and effective actions to reach most children and young people and develop recommendations.

<u>Scope</u>: Arts in education and developing cultural awareness and expression - one of the key competences for lifelong learning learning have value in themselves. They are also used to develop creativity, innovation, critical and design thinking, communication, collaboration and intercultural skills and, more broadly, for inclusive education and training systems, democracy and civic engagement, but stronger evidence is needed to better understand and assess these impacts. Research evidence is also missing on whether, and how, education and training systems have capacity to support learners in developing cultural awareness and expression.

Proposals should support policymakers and professional development providers in identifying effective actions and gaps in their systems, and better understanding how their investments could be improved. Proposals should include a lifelong learning perspective (early childhood

European Commission, Directorate-General for Education, Youth, Sport and Culture, *Key competences for lifelong learning*, Publications Office, 2019, https://data.europa.eu/doi/10.2766/291008

education and care, school, vocational education and training and higher education, non-formal learning), and assess national, regional and local support for partnerships, for example between education institutions and arts and cultural heritage organisations.

Proposals are expected to contribute to the New European Bauhaus (NEB) initiative ¹⁶³ by interacting with the NEB Community, NEBLab and other relevant actions of the NEB initiative through sharing information, best practice, and, where relevant, results. Clustering and cooperation with other selected projects under this call and other relevant projects are strongly encouraged. International cooperation is encouraged, especially with EU Neighbourhood and accession countries.

HORIZON-CL2-2024-TRANSFORMATIONS-01-09: The role of social economy in addressing social exclusion, providing quality jobs and greater sustainability

Specific conditions	pecific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 10.00 million.	
Type of Action	Research and Innovation Actions	

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Address challenges of the policy and legal frameworks that hinder the thriving of social economy and the scaling up of its successful activities.
- Better integrate the role and weight of social economy organisations in addressing social exclusion and providing quality jobs in multilevel policymaking.
- Contribute to improve the working conditions in social economy organisations, including in the care sector.

<u>Scope</u>: Almost 3 million social economy entities in Europe offer concrete and innovative solutions to key challenges EU society faces e.g. they create quality jobs, contribute to equal opportunities and socioeconomic inclusion of disadvantaged groups (including people with disabilities), they also play an important role in Europe's welfare systems and help revitalise Europe's rural and depopulated areas, therefore contributing to the Long-term vision for the EU's rural areas.

The social economy can also help implement the principles of the European Pillar for Social Rights and deliver on its 2021 Action Plan and the 2030 headline targets e.g. by increasing the

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https://europa.eu/new-european-bauhaus/index_en

employment rate and the reduction of the number of people at risk of poverty and social exclusion.

There is an uneven development of the social economy within the EU and a major untapped economic and job creation potential for the social economy in several Member States and regions. The Social Economy Action Plan 164, adopted in December 2021 puts forward measures to help further mobilise the potential of the Social Economy.

The proposals should provide a comprehensive analysis of the extent to which social economy contributes to countering social exclusion in the EU, in Associated Countries and in Third Countries, what services it provides, and compare efficiency, cost and quality aspects of services provided by the social economy with those of other providers. The proposals can tackle (one or more) different angles of socioeconomic exclusion. For instance, the role of social economy as an important player in innovative practices in care provision is often highlighted. Research could identify best innovative practices, including in new and emerging areas in the field of care provisions.

As the availability and use of formal care services differ significantly between Member States and regions, research should investigate the role of social economy between different countries and the drivers of these differences in order to design effective long-term care and social economy policies. Residents in rural areas in particular can suffer with limited access to long-term care services, while social economy organisations are often motivated to provide services based on local needs and can play a revitalising role in the economies of rural regions.

Research should also investigate what are the working conditions in social economy organisations, including in the care sector.

Proposals should aim to provide policymakers with recommendations in the field of social economy support.

Clustering and cooperation with other selected projects under this call and other relevant projects (such as HORIZON-CL6-2023-COMMUNITIES-01-1: Enhancing social inclusion in rural areas: focus on people in a vulnerable situation and social economy) are strongly encouraged. International cooperation is encouraged, especially with EU Neighbourhood and candidate countries.

HORIZON-CL2-2024-TRANSFORMATIONS-01-10: Effective education and labour market transitions of young people

Specific conditions	
Expected EU	The Commission estimates that an EU contribution of between EUR
contribution per	2.00 and 3.00 million would allow these outcomes to be addressed

164 COM(2021) 778 final content/EN/TXT/PDF/?uri=CELEX:52021DC0778&from=EN

https://eur-lex.europa.eu/legal-

project	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 10.00 million.
Type of Action	Research and Innovation Actions

<u>Expected Outcome</u>: Projects should contribute to the expected outcomes described in the first and second bullet points, or to the expected outcomes described in the third and fourth bullet points:

- Provide quantitative and qualitative evidence of what determines participation and completion rates in upper secondary and tertiary education, including the long-term impact of the Covid-19 crisis and the role of policies and investments to promote equity and inclusion in education and training.
- Enhanced knowledge base about which policies and practices can promote betterinformed and more effective educational choices at all levels, including the role of vocational education and training.
- Improved understanding of the long-term impact of the Covid-19 crisis on the transition from education to (vocational) training or from education and training to the labour market of young people across the EU, including through foresight.
- Informed policies and programmes aiming to help the transition from education to (vocational) training or from education and training to the labour market, including in the area of student and graduate international mobility.

<u>Scope</u>: Effective educational transitions, in particular participation and completion rates in upper secondary and tertiary education, are prominent in the <u>European Education Area</u>¹⁶⁵, which includes targets ¹⁶⁶ on early school leaving and tertiary educational attainment. Promoting successful transitions from education to the labour market has been one of the core European Commission policy activities since the outburst of the Great Recession. The COVID-19 crisis has made educational and labour market transitions more challenging, especially for disadvantaged young people. This may lead to worsening inequalities, which could become persistent unless education and training policies and investments tackle them appropriately.

Proposals should use quantitative and qualitative methods to analyse transitions between educational levels (including between general education and vocational training) and/or between education/training and the labour market and improve the evidence base for policy decisions by addressing several interrelated research questions, such as: what are the determinants of participation and completion rates in upper secondary and tertiary education and how can they evolve in the post-COVID world? What are the implications of COVID-19

https://education.ec.europa.eu/

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=uriserv:OJ.C_.2021.066.01.0001.01.ENG

on learning mobility and on graduates' labour market outcomes? How do education outcomes interact with sources of disadvantage in defining labour market outcomes of young people? How can vocational education and training institutions adapt to the future of education and work, including the digital transition? Proposals should also include the voice of young people and other relevant stakeholders as part of the data collection. Clustering and cooperation with other selected projects under this call and other relevant projects are strongly encouraged.

HORIZON-CL2-2024-TRANSFORMATIONS-01-11: Assessing and strengthening the complementarity between new technologies and human skills

Specific conditions	cific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.00 and 3.00 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 10.00 million.	
Type of Action	Research and Innovation Actions	

Expected Outcome: Projects should contribute to all of the following expected outcomes:

- Deepened our understanding on the potential and impact of new technologies such as artificial intelligence technologies and robotics to substitute or complement human skills and in performing job tasks.
- Development and deployment of technologies that complement and enhance human skills, and development of the corresponding skills in the workforce.

<u>Scope</u>: Recent research highlights that new technologies may increase or reduce overall employment opportunities: they tend to increase them in the presence of strong productivity gains or if they create new tasks that are best carried out using human skills (possible example: a nurse using medical machines to perform checks previously carried out by a doctor), but can reduce them if the substitution of labour by machines dominates (possible example: self-service supermarket counters). However, there is still a limited understanding of which types of technologies and technology applications are particularly promising from the perspective of *enhancing* rather than *displacing* human skills and of creating employment opportunities as well as decent working conditions.

Some authors argue that recent technological change has been biased towards automation and has focused insufficiently on creating new tasks where labour can be productively employed, with associated declining labour shares in national income, rising inequality and lower productivity growth. This highlights the need to better understand the complementarity between new technologies and skills that can serve as basis for policy recommendations that complement and enhance human skills, such as targeting investment subsidies. Policy may for

instance want to prioritise public investment support in areas where innovation is more complementary to existing skills (possible examples: education and healthcare as opposed to pattern recognition "across the board"), including of people without high formal qualifications (or for other disadvantaged groups, e.g. those affected by disabilities), or it may want to support the development of skills complementary to emerging technologies with targeted education and training programmes. Both types of policy interventions could improve the impacts of new technologies on employment prospects, decent working conditions and social inclusion, but their design requires opening the "black box" of technology-skill demand complementarity.

Examples of research activities carried out under this topic include the development of criteria to assess the complementarity of specific new technologies with human skills and vice versa. This could include an analysis of specific applications of new technologies (such as artificial intelligence technologies and robotics), possibly with a sectoral or occupational focus. It could also include the development of policy recommendations to support technologies and skills/training courses that are conducive to a digital transition that creates more good jobs. Clustering and cooperation with other selected projects under this call and other relevant projects are strongly encouraged.

Grants to identified beneficiaries

1. Presidency event (ES) – Conference 'Cultural and creative industries, cities and citizens and their role in the New European Bauhaus'

Europe's cultural heritage is the result of the interaction between people and their environment and cities, and it plays an important role of the social dimension of democracy and sustainability. Besides that, cultural and creative industries (CCIs) are an important source of growth and job creation in the European economy. Moreover, CCIs play a key role in shaping culture, values, and perceptions across the European Union¹⁶⁷, and beyond.

In this regard, the New European Bauhaus (NEB) initiative, launched in autumn 2020, could bring the European Green Deal to life in an attractive, innovative, and human-centred way through CCIs. The project expresses the EU's ambition to create beautiful, sustainable, and inclusive places, products, and ways of living. This interdisciplinary initiative creates a space of encounter to design future ways of living, located at the crossroads between art, culture, social inclusion, science and technology with its own aesthetics, sustainability, and inclusiveness. The aim is to build a sustainable and inclusive future, beautiful to the Europeans eyes, minds, and souls.

<u>Expected Outcome</u>: The project is expected to contribute to all the following expected outcomes:

- Support a people-centred perspective and places of cultural heritage at the very heart of the European economy and its sustainable development, fostering new business models that help to create new markets.
- Foster cross-sectoral collaboration to consolidate the role of CCIs as key players in innovation ecosystems, delivering innovative technologies that will increase CCIs production and distribution capacity.
- Help to increase the use of innovative technologies by cultural and creative industries (CCIs) in order to create beautiful, sustainable, and inclusive places, products, and ways of living.
- Promote sustainable cities, neighbourhood spaces and environment through innovation, art, creativity, and culture.
- Strengthen the innovation capacity of the cultural and creative industries, and their capability to act as innovation engines and profitable business models.
- Adapt Europe's cultural heritage and its cultural and creative industries to climate change and mobilise resources to support European citizens and societies for an inclusive, socially, and culturally sustainable climate transition in cities.

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As for example, The Next Renaissance publication shows near 40 different initiatives that shows the certainty of such statement. ISBN: 978-2-4150-0199-5

Focus on protecting the Intellectual Property Rights of the CCIs and cultural heritage, as
well as new business models to create and promote CCIs as a relevant industrial sector
and market.

<u>Expected Impact:</u> The proposal should set out a credible pathway to contributing to the following impact of the Horizon Europe Strategic Plan:

The full potential of cultural heritage, arts, and cultural and creative sectors as a driver of sustainable innovation and a European sense of belonging is realized through a continuous engagement with society, citizens, and economic sectors, as well as through better protection, restoration, and promotion of cultural heritage.

<u>Scope</u>: This conference should promote the European way of life, contribute to achieving the Europe's Green Deal goals and support an economy that works for people. The conference topics will contribute to the New European Bauhaus initiative, to realise the UN Sustainable Development Goals and to build a stronger, more participatory, and crisis-resilient society and economy. Moreover, it must embrace the whole European ecosystem of CCIs innovation by including the shortly launched EIT-Culture and Creativity.

As the NEB is an initiative focused on achieving societal impact, the conference should reflect the full potential of cultural heritage, the arts, and cultural and creative sectors as a driver of sustainable innovation and a European sense of belonging. It will be achieved through a continuous engagement and co-creation with society, citizens, and economic sectors as well as through better protection, restoration, and promotion of cultural heritage.

The Cluster 2 Spanish Presidency conference will put in relief the contribution of SSH disciplines and scholars, in co-creation with other disciplines and scientific communities, to the successful deployment of the new European Bauhaus initiative. The event should bring together architects, artists, students, engineers, designers, researchers, cultural and heritage industries, and professionals, among others, including as well, persons with disabilities, children, young and older citizens and enable their work in translating the European Green Deal objectives into tangible applications, and inclusive and accessible experiences for citizens and stakeholders. It is expected the participation of national, regional, and local authorities that could play a relevant role in the development of future pilots developing territorial transition plans aligned with the NEB objectives and philosophy.

This grant will be awarded without a call for proposals according to Article 195(e) of the Financial Regulation and Article 20 of the Horizon Europe Framework Programme and Rules for Participation.

Legal entities:

Fundación Española para la Ciencia y la Tecnología (FECYT), Calle Pintor Murillo 15 – 28100 Alcobendas (Madrid) Spain.

Form of Funding: Grants not subject to calls for proposals

<u>Type of Action</u>: Grant to identified beneficiary according to Financial Regulation Article 195(e) - Coordination and support action

The general conditions, including admissibility conditions, eligibility conditions, award criteria, evaluation and award procedure, legal and financial set-up for grants, financial and operational capacity and exclusion, and procedure are provided in parts A to G of the General Annexes.

Indicative timetable: Second semester 2023

<u>Indicative budget</u>: EUR 0.30 million from the 2023 budget

2. Presidency event (BE) - Conference 'Combining SSAH and STEM expertise in evidence-informed policymaking'

<u>Expected Outcome:</u> the project is expected to contribute to all of the following expected outcomes:

- Discuss contemporary challenges and opportunities for evidence-based and evidence-informed policymaking, encompassing policy research/science advice, policy evaluation (ex post and ex ante), foresight studies, and monitoring and data gathering and processing for the purpose of informing policymaking;
- Since the societal challenges policymakers are currently facing do not limit themselves
 to disciplinary borders, discuss the mechanisms behind the joint contribution of SSAH
 (social sciences, arts and humanities) and STEM to generate impact on policymaking through evidence-based and evidence-informed policymaking -, in an interdisciplinary
 perspective;
- Consider interdisciplinarity within the SSAH fields, as well as between SSAH, STEM and other domains of research and innovation;
- By tackling the issue of evidence-based and evidence-informed policymaking from a
 Cluster II perspective systematically include the SSH and the arts in the discussion,
 while at the same time avoiding to limit the discussion to the SSAH stakeholders,
 favouring exchanges of thoughts and practices between SSAH and other disciplines or
 areas of expertise;
- So doing, break the silos between SSH and other disciplinary expertise, considered in the
 perspective of their complementary impact on policymaking at regional, national and EU
 level;
- Consider disciplinary borders in the context of those other borders that must be crossed in order to generate relevant evidence for policymaking, such as geographical, societal or governmental borders (as societal challenges are not limited by these borders, neither should policy/research aimed at facing these challenges);

- Build or reinforce bridges with a diversity of stakeholders across these divides, building
 on existing initiatives, with a focus on the particular contribution of the SSAH
 stakeholders;
- Emphasise organisational and institutional arrangements that enable and foster the efficiency and trustworthiness of the impact of research produced by a diversity of disciplinary fields on policymaking, at regional, national and EU level;
- Consider the role of research assessment, science diplomacy and science communication, among other relevant topics, in relation to the provision of evidence-based or evidence-informed policymaking.

<u>Expected Impact</u>: the proposal should set out a credible pathway to contributing to the following impact of the Horizon Europe Strategic Plan:

- Democratic governance is reinvigorated by improving the accountability, transparency, effectiveness and trustworthiness of rule-of-law based institutions and policies, and through the expansion of active and inclusive citizenship empowered by the safeguarding of fundamental rights.
- Inclusive growth is boosted and vulnerabilities are reduced effectively through evidencebased policies for protecting and enhancing employment, education, social fairness and tackling inequalities, including in response to the socio-economic challenges due to the COVID-19 pandemic.

<u>Scope:</u> Facing the complexities of the societal challenges of our times, policymakers have to benefit from the expertise and the relevant evidence coming from a diversity of scientific disciplines, combining, whenever relevant, information coming from the SSAH with evidence from other fields of research and expertise. Particularly, in the context of Horizon Europe missions, there is a need to promote further the interdisciplinary dimension of the scientific expertise that is provided to policymakers.

Furthermore the impact of interdisciplinary research on policymaking has to be (re)considered in the context of the so-called quadruple helix. The impact of research on policymaking is not only produced via interactions between policymakers and researchers, but also involves the industry and the citizens (notably but not exclusively through social media or citizen science initiatives). The Covid-19-crisis clearly showed that the interdisciplinary impact of research on policymaking is not yet to be taken for granted. On the one hand, policymakers are not used to relying on a diversity or combination of expertise from multiple disciplines. On the other hand, researchers themselves seemed to lack structural or institutional spaces to discuss the interdisciplinary implication of their work on policymaking and combine in an efficient way the diversity of their disciplinary insight.

Engaging in interdisciplinary provision of evidence to policymakers, citizens and industry requires particular skills in science communication (inside and outside of academia) and team science. Science communication contributes notably to build trust in research and

policymaking, while countering fake news. The conference hence will pay due attention to the training that is needed to implement an efficient interdisciplinary impact on policymaking, both for policymakers and for researchers. Furthermore researchers are not yet rewarded adequately to engage into interdisciplinary research and contribute to evidence informed or based policymaking. The conference will provide the opportunity to assess the impact of current reforms of research assessment within the ERA in this regard.

The conference is in line with the work of JRC, different aspects of Evidence-Informed Policymaking (EIPM) being taken into account, such as policy research, policy evaluation and foresight with data and monitoring as an underlying layer.

Other relevant topics that will be connected to the main thematic are: science diplomacy, legislative science advice, multi-layered governance context and science communication. The 2 day conference will bring together policymakers and researchers from a broad diversity of fields. To accompany this an international interdisciplinary scientific committee will be set up and made of experts from the SSAH and the STEM.

<u>Procedure:</u> The evaluation committee will be composed fully by representatives of EU institutions.

Legal entities:

BELSPO - Belgian Science Policy , WTC III, Simon Bolivarlaan 30 bus 7, Boulevard Simon Bolivar 30 bte 7, 1000 Brussels Belgium

Form of Funding: Grants not subject to calls for proposals

<u>Type of Action</u>: Grant to identified beneficiary according to Financial Regulation Article 195(e) - Coordination and support action

The general conditions, including admissibility conditions, eligibility conditions, award criteria, evaluation and award procedure, legal and financial set-up for grants, financial and operational capacity and exclusion, and procedure are provided in parts A to G of the General Annexes.

Indicative timetable: First semester 2024

Indicative budget: EUR 0.30 million from the 2023 budget

3. Presidency event (HU) - Conference 'Skills development for smart specialisation'

<u>Expected Outcome</u>: the project is expected to contribute to the following expected outcomes:

- Conceptual framework of skills development for smart specialisation
- Identification of skills/training methods and target groups which can foster the implementation of smart specialisation at European and national level.

- Identification of differences between Member States and regions concerning the future directions of skills development in smart specialisation
- Best practices among Member States concerning their related, ERDF-funded projects launched between 2021 and 2027.

<u>Expected Impact:</u> the project should aim to contribute to the following impacts in line with Horizon Europe Strategic Plan, the European Skills Agenda, the Strategic Foresight Report 2022 as well as with EC's Cohesion Policy's objective 1:

- develop innovative approaches to training to emerging social and labour market needs in support of EU education, employment and sustainability policies;
- enhancing research and innovation capacities and the uptake of advanced technologies;
- reaping the benefits of digitisation for citizens, companies and governments;
- enhancing growth and competitiveness of SMEs;
- having the rights skills for jobs, fostering entrepreneurial and transversal skills;
- improving the enabling framework to unlock Member States' and private investments in skills;
- developing skills for smart specialisation, industrial transition and entrepreneurship
- strengthening social and economic cohesion along the twin transitions (green and digital) to address the profound shifts in the EU labour market and related skills.

<u>Scope:</u> Developing the skills of workers to adapt to industrial change is of paramount importance, as the competitiveness of industry depends to a large extent on the knowledge, skills, competences and creativity of the workforce. Potential gaps in skills development and mismatches between labour supply and demand directly limit job creation opportunities. Skills need to be adapted to the new socio-economic reality, education and training has to ensure that citizens are equipped with the skills they need to handle green-digital technologies.

In the present programming period, the European Commission pays particular attention to skills development related to smart specialisation. It is reflected by the fact that the ERDF provides funding for this specific objective, while the training and education-related projects have been funded so far mainly by the European Social Fund (ESF).

For evidence-based policymaking it is essential to apply the multidisciplinary approach of social sciences. This Cluster 2 conference under the Hungarian presidency can also contribute to deepen the dialogue between policymakers of regional/cohesion policy and SSH experts.

Potential goals and topics of the conference:

- Defining a framework of skills development for smart specialisation, conceptual delimitation by experts
- Identifying the challenges and bottlenecks (e.g.: green transition, industrial transition, digitalisation) that may affect the directions and expected goals of skills development
- Identifying the types of skills that could support industrial transformation in Europe by providing adequate resources
- Identifying the target groups and other stakeholders of skill development related to smart specialization

<u>Procedure:</u> The evaluation committee will be composed fully by representatives of EU institutions.

<u>Legal entities</u>:

National Research, Development and Innovation Office, Kéthly Anna tér 1., 1077 Budapest, Hungary

Form of Funding: Grants not subject to calls for proposals

<u>Type of Action</u>: Grant to identified beneficiary according to Financial Regulation Article 195(e) - Coordination and support action

The general conditions, including admissibility conditions, eligibility conditions, award criteria, evaluation and award procedure, legal and financial set-up for grants, financial and operational capacity and exclusion, and procedure are provided in parts A to G of the General Annexes.

Indicative timetable: second semester 2024

<u>Indicative budget</u>: EUR 0.30 million from the 2024 budget

4. Presidency event (PL) – Conference 'Europe and mobilities: challenges and opportunities for socio-economic transformations'

Expected Outcome: the project is expected to:

- Facilitate dialogue between the research and policy sectors regarding the future of the European Union, and Europe more broadly, taking into consideration the positive and negative experiences of transformations the EU and its regions have been undergoing. This will be done by bringing together the most reputed scholars of social sciences and humanities and policymakers (including strategic thinkers from the EU and think tanks).
- Stimulate public discussions on topics which are important and up to date in the EU and the Central and Eastern European region, such as, among others, social inequalities, demographic and migration challenges, energy, technological and labour market transformations, and the digital revolution.

<u>Expected Impact</u>: the proposed conference should contribute to the following expected impact of the Horizon Europe strategic and operational objectives:

- It will generate knowledge and facilitate knowledge exchange regarding social and other transformations to support more effective Union policies on issues such as social inclusion, migration management and integration of migrants, the promotion of fundamental rights for all, and integrating technology and social science knowledge to create sustainable solutions.
- It will improve the visibility and understanding of scientific knowledge on social issues, which should lead to better-informed choices and increased involvement of the public in policymaking.
- It will stimulate the mobility and cooperation of researchers in the social sciences, humanities and technology.

<u>Scope:</u> In a period of rapid transformations in Europe, including demographic, migration-related, and technological ones, it is necessary to discuss the social and economic effects of these changes. As we have witnessed, unmitigated transformations put pressure on individual countries of the European Union and the whole European project. The conference will offer a venue for discussions between top European academics and policymakers regarding ways to mitigate the negative effects of changes, such as excessive social inequalities, and profit from the related opportunities. Particular focus will be put on the experiences of Central and Eastern European countries, which face some of these changes, including a demographic decline and migration transition, at an accelerated speed.

The 3-day conference will be organized into sessions around the following themes [preliminary list to be updated in the future]:

- 1. Demographic change in European countries: opportunities, challenges and possible solutions
- 2. Social inequalities related to gender, race, and immigration history. Social mobility in Europe
- 3. Economic inequalities: drivers and mitigation options
- 4. Socio-economic effects of migrations for receiving countries
- 5. The migration transition in Central and Eastern European countries
- 6. The developmental outcomes of migrations for sending and receiving countries
- 7. Refugee policy vs. practice in the European Union: towards a new European/global asylum system

<u>Procedure:</u> The evaluation committee will be composed fully by representatives of EU institutions.

<u>Legal entities</u>:

University of Warsaw (Centre of Excellence in Social Sciences & Centre of Migration Research), Krakowskie Przedmieście 26/28, 00-927 Warsaw, Poland

Form of Funding: Grants not subject to calls for proposals

<u>Type of Action</u>: Grant to identified beneficiary according to Financial Regulation Article 195(e) - Coordination and support action

The general conditions, including admissibility conditions, eligibility conditions, award criteria, evaluation and award procedure, legal and financial set-up for grants, financial and operational capacity and exclusion, and procedure are provided in parts A to G of the General Annexes.

Indicative timetable: First semester 2025

Indicative budget: EUR 0.30 million from the 2024 budget

5. Presidency event (DK) - conference "Addressing the potentials of Human values by SSH designs to achieve human-centred sustainability".

Expected Outcome:

The project is expected to contribute to all the following expected outcomes:

- Discuss contemporary challenges and opportunities within the four different angles of human values in
- 1. A post- and/or trans-human world (personhood)
- 2. Sustainable consumption
- 3. A globalized world
- 4. Integration of Human based values in Research and Innovation
- Identify future Research and Innovation needs in the above-mentioned areas
- Identify areas of research which can concretely contribute to strengthening the respect for Human values for citizens in and beyond the EU.
- Contribute to discussions at the intersection of Human values, technology, and globalization, emphasizing the need for comprehensive dialogue to shape the future path of Europe.

Expected Impact:

The proposal should set out a credible pathway to contributing to the following impact of the Horizon Europe Strategic Plan:

- Social and economic resilience and sustainability are strengthened by SSH designs of Human values.
- Inclusive growth is boosted and/or vulnerabilities are reduced effectively by achieving trans-human-centred personhood.
- Acknowledgement of Human values as a core value in the European Union that thus should be a seminal element in the upcoming framework program for research and innovation (FP10).

Scope:

Conference Focus: Exploring Human values in the era of advancing technologies, globalization, and environmental concerns. *Human values* are tentatively defined as values that we all recognize as important in life (e.g., achievement, security, benevolence, self-direction)¹⁶⁸. Acknowledging these shared values thus implies respecting how individuals and groups prioritize them and tolerating individual and group-based differences in prioritization. Related concepts include *Value-sensitive design*¹⁶⁹ arguing that values emerge from the tools that we build and how we choose to use them, and *post/trans-human-centred sustainability* that attempts to change the way most people think about and value humans and humanity in relation to sustainability¹⁷⁰.

The conference aims to explore the potentials of Human values to contribute to societal and cultural development through SSH designs to achieve human-centred sustainability, with a specific focus on four key dimensions that warrant critical attention. Below we explain the four key dimensions.

- Personhood in the Age of Post- and/or Transhumanism: This topic investigates the evolving landscape of human identity in the age of transhumanism where human cognitive and physical abilities is expanded beyond biological constraints. It explores the potential enhancements, both physical and mental, facilitated by advancements in big data, artificial intelligence and e.g., genetic manipulation. Furthermore, it discusses the ethical implications and societal considerations associated with the augmentation of human capabilities and with the advance of posthumanism where the notion of personhood is expanded to non-human actors.
- Sustainable Consumption Practices: This topic examines the imminent threats posed by contemporary consumption practices, particularly regarding food and clothing. It addresses the attitude-behaviour gap, wherein positive attitudes towards sustainable consumption do not necessarily translate into corresponding behavioural changes. Therefore, research strategies to bridge this gap will be proposed, emphasizing the need

Schwartz, Shalom H. "Basic human values: Theory, measurement, and applications." Revue française de sociologie 47.4 (2007): 929.

Friedman, Batya. "Value-sensitive design." *interactions* 3.6 (1996): 16-23.

Dedeoğlu, Çağdaş, and Nikoleta Zampaki. "Posthumanism for Sustainability: A Scoping Review." Journal of Posthumanism 3.1 (2023): 33-57.

for scientific knowledge, policy interventions, and behavioural insights to foster

sustainable consumer practices.

• Human Values in a Globalized World: This topic analyses the impact of globalization on different societal groups, distinguishing between winners and losers in the process. it

highlights the reconfiguration of conflicts, both economic and cultural, within Western societies, particularly the dynamics between elites and masses. The aim is to discuss

ways to address disparities and promote inclusivity, considering the role of human

values in shaping a fair and just globalized world.

• Human values and Horizon Europe: This topic engages in fostering a broader perspective on research beyond conventional skill development. It emphasizes the role of

integrated human values and Social Sciences and Humanities (SSH) in addressing challenges across all six clusters in Horizon Europe. The purpose is to stress the need for

a well-conceived framework program to enable the effective integration of human values

into research agendas and work programs.

This grant will be awarded without a call for proposals according to Article 195(e) of the

Financial Regulation and Article 20 of the Horizon Europe Framework Programme and Rules

for Participation.

Procedure: The evaluation committee will be composed fully by representatives of EU

institutions.

Legal entities:

Aalborg University (AAU), Frederik Bajers Vej 7K, 9220 Aalborg Ø, Denmark CVR:

29102384

Form of Funding: Grants not subject to calls for proposals

Type of Action: Grant to identified beneficiary according to Financial Regulation Article

195(e) - Coordination and support action

The general conditions, including admissibility conditions, eligibility conditions, award criteria, evaluation and award procedure, legal and financial set-up for grants, financial and

operational capacity and exclusion, and procedure are provided in parts A to G of the General

Annexes.

Indicative timetable: Second semester 2025

Indicative budget: EUR 0.30 million from the 2024 budget

Other budget implementation instruments

1. Expertise for the design, implementation and evaluation of Cluster 2, Culture, Creativity and Inclusive Society

This action will support the provision of independent expertise for advising and assisting the Commission services with the design, implementation and evaluation of EU research and innovation policies in the thematic areas covered by Cluster 2. Individual experts will work in the following policy and thematic areas:

- Democracy and governance
- Cultural heritage, cultural and creative sectors and industries
- Social and economic transformations
- Migration, refugee and asylum policies
- Social sciences and humanities, including their integration in Horizon Europe programme parts
- Inter-, multi- and transdisciplinarity; impact assessment

The tasks of individual experts would include:

Portfolio analysis of projects funded under Horizon Europe or previous European research and innovation programmes; analysis of the state-of-the-art at European and international level; participation in international symposia organised by Commission services, including the drafting of reports; assistance for setting-up a research and innovation strategy for selected domains; policy recommendations and options assisting Commission services in elaborating evidence-based and scientifically sound policy proposals.

The advice provided by each individual expert will focus on specific areas and policy relevant projects' results and how results and outcome could be used for policymaking and policy follow-up initiatives. These activities will not duplicate past or ongoing Commission work and will be essential to enable Commission services to support the policymaking process in the above-mentioned policy areas.

The individual experts' tasks will include attending bilateral meetings with Commission services, presentations at workshops and symposia, remote drafting and preparatory work. The experts will be highly qualified and specialised, and will be selected on the basis of their knowledge and experience.

A special allowance of EUR 450/day will be paid to the experts appointed in their personal capacity who act independently and in the public interest.

Form of Funding: Other budget implementation instruments

Type of Action: Expert contract action

Indicative timetable: in 2023

Indicative budget: EUR 0.20 million from the 2023 budget

2. Expertise for the design, implementation and evaluation of Cluster 2, Culture, Creativity and Inclusive Society

This action will support the provision of independent expertise for advising and assisting the Commission services with the design, implementation and evaluation of EU research and innovation policies in the thematic areas covered by Cluster 2. Individual experts will work in the following policy and thematic areas:

- Democracy and governance
- Cultural heritage, cultural and creative sectors and industries
- Social and economic transformations
- Migration, refugee and asylum policies
- Social sciences and humanities, including their integration in Horizon Europe programme parts
- Inter-, multi- and transdisciplinarity; impact assessment

The tasks of individual experts would include:

Portfolio analysis of projects funded under Horizon Europe or previous European research and innovation programmes; analysis of the state-of-the-art at European and international level; participation in international symposia organised by Commission services, including the drafting of reports; assistance for setting-up a research and innovation strategy for selected domains; policy recommendations and options assisting Commission services in elaborating evidence-based and scientifically sound policy proposals.

The advice provided by each individual expert will focus on specific areas and policy relevant projects' results and how results and outcome could be used for policymaking and policy follow-up initiatives. These activities will not duplicate past or ongoing Commission work and will be essential to enable Commission services to support the policymaking process in the above-mentioned policy areas.

The individual experts' tasks will include attending bilateral meetings with Commission services, presentations at workshops and symposia, remote drafting and preparatory work. The experts will be highly qualified and specialised, and will be selected on the basis of their knowledge and experience.

A special allowance of EUR 450/day will be paid to the experts appointed in their personal capacity who act independently and in the public interest.

Form of Funding: Other budget implementation instruments

Type of Action: Expert contract action

Indicative timetable: in 2024

Indicative budget: EUR 0.42 million from the 2024 budget

3. Expertise for the design, implementation and evaluation of Cluster 2, Culture, Creativity and Inclusive Society

This action will support the provision of independent expertise for advising and assisting the Commission services with the design, implementation and evaluation of EU research and innovation policies in the thematic areas covered by Cluster 2. Individual experts will work in the following policy and thematic areas:

- Democracy and governance
- Cultural heritage, cultural and creative sectors and industries
- Social and economic transformations
- Migration, refugee and asylum policies
- Social sciences and humanities, including their integration in Horizon Europe programme parts
- Inter-, multi- and transdisciplinarity; impact assessment

The tasks of individual experts would include:

Portfolio analysis of projects funded under Horizon Europe or previous European research and innovation programmes; analysis of the state-of-the-art at European and international level; participation in international symposia organised by Commission services, including the drafting of reports; assistance for setting-up a research and innovation strategy for selected domains; policy recommendations and options assisting Commission services in elaborating evidence-based and scientifically sound policy proposals.

The advice provided by each individual expert will focus on specific areas and policy relevant projects' results and how results and outcome could be used for policymaking and policy follow-up initiatives. These activities will not duplicate past or ongoing Commission work and will be essential to enable Commission services to support the policymaking process in the above-mentioned policy areas.

The individual experts' tasks will include attending bilateral meetings with Commission services, presentations at workshops and symposia, remote drafting and preparatory work. The experts will be highly qualified and specialised, and will be selected on the basis of their knowledge and experience.

A special allowance of EUR 450/day will be paid to the experts appointed in their personal capacity who act independently and in the public interest.

<u>Form of Funding</u>: Other budget implementation instruments

Type of Action: Expert contract action

Indicative timetable: in 2025

<u>Indicative budget</u>: EUR 0.20 million from the 2025 budget

4. External expertise

This action will support the use of appointed independent experts for the monitoring of running actions (grant agreement, grant decision, public procurement actions, financial instruments) funded under Horizon Europe and previous Framework Programmes for Research and Innovation and where appropriate include ethics checks, as well as compliance checks regarding the Gender Equality Plan eligibility criterion.

<u>Form of Funding</u>: Other budget implementation instruments

Type of Action: Expert contract action

Indicative budget: EUR 0.35 million from the 2023 budget

5. External expertise

This action will support the use of appointed independent experts for the monitoring of running actions (grant agreement, grant decision, public procurement actions, financial instruments) funded under Horizon Europe and previous Framework Programmes for Research and Innovation and where appropriate include ethics checks, as well as compliance checks regarding the Gender Equality Plan eligibility criterion.

Form of Funding: Other budget implementation instruments

Type of Action: Expert contract action

Indicative budget: EUR 0.57 million from the 2024 budget

6. External expertise

This action will support the use of appointed independent experts for the monitoring of running actions (grant agreement, grant decision, public procurement actions, financial instruments) funded under Horizon Europe and previous Framework Programmes for Research and Innovation and where appropriate include ethics checks, as well as compliance checks regarding the Gender Equality Plan eligibility criterion.

Form of Funding: Other budget implementation instruments

Type of Action: Expert contract action

<u>Indicative budget</u>: EUR 0.59 million from the 2025 budget

7. Mobilisation of research funds in case of Emergencies 2023

This action will only be used in case of exceptional and duly substantiated emergencies as described in the scope section of the action.

Expected Impact: Proposals should set out a credible pathway to contributing to one or several expected impacts of the 3 destinations of Cluster 2 'Culture, Creativity and Inclusive Society'.

Expected Outcome: Projects should contribute to all of the following expected outcome: Allow the Union to respond to emergencies in the field of:

- Democracy and governance, especially in the field of the rule of law and foreign interference to democratic processes of the EU, its Member States, EU Neighbourhood and Candidate countries:
- Cultural heritage, cultural and creative sectors and industries, especially the protection of cultural heritage, provenance research and fight of illicit trafficking of cultural goods;
- Social and economic transformations, especially economic and financial shocks and unprecedented pressures on global supply chains, labour markets and social protection systems;
- Migration, refugee and asylum policies, especially unforeseen humanitarian crises caused by sudden migration and refugee flows and displacement of civil population.

Scope: In case of emerging future emergencies, such as potential further, currently unknown consequences of the unprovoked military aggression and invasion of Ukraine by Russia, condemned on a global scale by the overwhelming majority of United Nations Member States in the Resolution of the UN General Assembly of 2 March 2022 (UN GA Resolution ES 11/1) and addressed by European Commission Communications COM(2022) 107 final and COM(2022) 131 final, and requiring the urgent mobilisation of Cluster 2 Research and Innovation stakeholders in order to assist European policy and decision-making with evidence, analysis and policy options, funding will be mobilised for:

• The award of grants without a call for proposals according to Article 195 (b) of the EU Financial Regulation¹⁷¹ in exceptional and duly substantiated emergencies. At that time, the Funding & Tenders Portal will open a dedicated section where proposals can be submitted. This will be communicated to the National Contact Points. The invitation to apply for funding will be open to all eligible entities or be limited to targeted entities, taking into account the need to achieve the underlying objectives in a quick and efficient manner considering the exceptional circumstances.

Article 195 (b) of the Financial Regulation 2018/1046 "Grants may be awarded without a call for proposals only in the following cases: [...] (b) in other exceptional and duly substantiated emergencies;".

The standard eligibility and admissibility criteria, evaluation criteria, thresholds, weighting for award criteria, maximum funding rate and conditions for providing financial support to third parties, are provided in the General Annexes.

The following derogations to the evaluation procedure described in General Annexes D and F apply to open invitations to submit applications:

- In order to ensure a balanced portfolio covering, grants will be awarded to applications not only in order of ranking, but also to those projects that enhance the quality of the project portfolio through synergies between projects and avoidance of overlaps, provided that the applications attain all thresholds.
- The action may also include justified derogations from the standard limits to financial support to third parties. Where applicable, the relevant grant agreement options will be applied.

Form of Funding: Grants not subject to calls for proposals

<u>Type of Action</u>: Grant awarded without call for proposals according to Financial Regulation Article 195 (b)

The general conditions, including admissibility conditions, eligibility conditions, award criteria, evaluation and award procedure, legal and financial set-up for grants, financial and operational capacity and exclusion, and procedure are provided in parts A to G of the General Annexes.

<u>Indicative timetable</u>: Will depend on the emergency

Indicative budget: EUR 3.20 million from the 2023 budget

8. Mobilisation of research funds in case of Emergencies 2024

This action will only be used in case of exceptional and duly substantiated emergencies as described in the scope section of the action.

Expected Impact: Proposals should set out a credible pathway to contributing to one or several expected impacts of the 3 destinations of Cluster 2 'Culture, Creativity and Inclusive Society'.

Expected Outcome: Projects should contribute to at least one of the following expected outcomes: Allow the Union to respond to emergencies in the field of:

- Democracy and governance, especially in the field of the rule of law, extremism, racism and/or foreign interference to democratic processes of the EU, its Member States, EU Neighbourhood and Candidate countries;
- Cultural heritage, cultural and creative sectors and industries, especially the protection of cultural heritage, provenance research and fight of illicit trafficking of cultural goods;

- Social and economic transformations, especially economic and financial shocks and unprecedented pressures on global supply chains, labour markets and social protection systems;
- Migration, refugee and asylum policies, especially unforeseen humanitarian crises caused by sudden migration and refugee flows and displacement of civil population.

Scope: In case of emerging future emergencies, such as potential further, currently unknown consequences of the unprovoked military aggression and invasion of Ukraine by Russia, condemned on a global scale by the overwhelming majority of United Nations Member States in the Resolution of the UN General Assembly of 2 March 2022 (UN GA Resolution ES 11/1) and addressed by European Commission Communications COM(2022) 107 final and COM(2022) 131 final, or consequences of other conflicts in Europe and its vicinity. Such emergencies require the urgent mobilisation of Cluster 2 Research and Innovation stakeholders in order to assist European policy and decision-making with evidence, analysis and policy options, therefore funding will be mobilised for:

• The award of grants without a call for proposals according to Article 195 (b) of the EU Financial Regulation¹⁷² in exceptional and duly substantiated emergencies. At that time, the Funding & Tenders Portal will open a dedicated section where proposals can be submitted. This will be communicated to the National Contact Points. The invitation to apply for funding will be open to all eligible entities or be limited to targeted entities, taking into account the need to achieve the underlying objectives in a quick and efficient manner considering the exceptional circumstances.

The standard eligibility and admissibility criteria, evaluation criteria, thresholds, weighting for award criteria, maximum funding rate and conditions for providing financial support to third parties, are provided in the General Annexes.

The following derogations to the evaluation procedure described in General Annexes D and F apply to open invitations to submit applications:

- In order to ensure a balanced portfolio covering, grants will be awarded to applications not only in order of ranking, but also to those projects that enhance the quality of the project portfolio through synergies between projects and avoidance of overlaps, provided that the applications attain all thresholds.
- The action may also include justified derogations from the standard limits to financial support to third parties. Where applicable, the relevant grant agreement options will be applied.

Form of Funding: Grants not subject to calls for proposals

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Article 195 (b) of the Financial Regulation 2018/1046 "Grants may be awarded without a call for proposals only in the following cases: [...] (b) in other exceptional and duly substantiated emergencies;".

<u>Type of Action</u>: Grant awarded without call for proposals according to Financial Regulation Article 195 (b)

The general conditions, including admissibility conditions, eligibility conditions, award criteria, evaluation and award procedure, legal and financial set-up for grants, financial and operational capacity and exclusion, and procedure are provided in parts A to G of the General Annexes.

<u>Indicative timetable</u>: Will depend on the emergency

<u>Indicative budget</u>: EUR 3.00 million from the 2024 budget

$Budget^{173}$

	Budget line(s)	2023 Budget (EUR million)	2024 Budget (EUR million)	2025 Budget (EUR million)
Calls				
HORIZON-CL2-2023- DEMOCRACY-01		75.00		
	from 01.020220	75.00		
HORIZON-CL2-2024-			95.00	
DEMOCRACY-01	from 01.020220		95.00	
HORIZON-CL2-2023- HERITAGE-01		78.00		
	from 01.020220	78.00		
HORIZON-CL2-2023- HERITAGE-ECCCH-01		35.00		
	from 01.020220	35.00		
HORIZON-CL2-2024- HERITAGE-01			65.00	
	from 01.020220		65.00	
HORIZON-CL2-2024- HERITAGE-ECCCH-01			48.00	
	from 01.020220		48.00	
HORIZON-CL2-2023- TRANSFORMATIONS-01		80.00		
	from 01.020220	80.00		
HORIZON-CL2-2024-			96.00	
TRANSFORMATIONS-01	from		96.00	

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The budget figures given in this table are rounded to two decimal places.

The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for years 2023, 2024 and 2025.

	01.000000			
	01.020220			
Contribution from this part		2.18		
to call HORIZON-MISS- 2023-SOIL-01 under Part 12 of the work programme	from 01.020220	2.18		
Contribution from this part		0.94		
to call HORIZON-MISS- 2023-CIT-01 under Part 12 of the work programme	from 01.020220	0.94		
Contribution from this part		0.92		
to call HORIZON-MISS- 2023-CLIMA-CITIES-01 under Part 12 of the work programme	from 01.020220	0.92		
Contribution from this part		2.46		
to call HORIZON-MISS- 2023-CANCER-01 under Part 12 of the work programme	from 01.020220	2.46		
Contribution from this part			2.47	
to call HORIZON-MISS- 2024-CIT-01 under Part 12 of the work programme	from 01.020220		2.47	
Contribution from this part			0.44	
to call HORIZON-MISS- 2024-NEB-01 under Part 12 of the work programme	from 01.020220		0.44	
Contribution from this part			3.12	
to call HORIZON-MISS- 2024-SOIL-01 under Part 12 of the work programme	from 01.020220		3.12	
Contribution from this part			1.33	
to call HORIZON-MISS- 2024-OCEAN-02 under Part 12 of the work programme	from 01.020220		1.33	
Contribution from this part			0.06	
to call HORIZON-MISS- 2024-CROSS-01 under Part	from		0.06	

12 of the work programme	01.020220			
Contribution from this part			0.37	
to call HORIZON-MISS- 2024-CROSS-02 under Part 12 of the work programme	from 01.020220		0.37	
Contribution from this part			0.08	
to call HORIZON-MISS- 2024-CIT-02 under Part 12 of the work programme	from 01.020220		0.08	
Contribution from this part		0.12		
to call HORIZON-MISS- 2023-CIT-02 under Part 12 of the work programme	from 01.020220	0.12		
Contribution from this part		0.33		
to call HORIZON-MISS-2023-OCEAN-SOIL-01 under Part 12 of the work	from 01.020220	0.33		
programme Contribution from this part		2.14		
Contribution from this part to call HORIZON-MISS-	from	2.14		
2023-OCEAN-01 under Part 12 of the work programme	01.020220	2.14		
Contribution from this part		0.32		
to call HORIZON-MISS- 2023-CLIMA-OCEAN- SOIL-01 under Part 12 of the work programme	from 01.020220	0.32		
Contribution from this part		1.89		
to call HORIZON-MISS- 2023-CLIMA-01 under Part 12 of the work programme	from 01.020220	1.89		
Contribution from this part			3.12	
to call HORIZON-MISS- 2024-CLIMA-01 under Part 12 of the work programme	from 01.020220		3.12	
Contribution from this part			1.37	
to call HORIZON-MISS- 2024-OCEAN-01 under Part	from		1.37	

12 of the work programme	01.020220			
Contribution from this part			3.00	
to call HORIZON-MISS- 2024-CANCER-01 under Part 12 of the work programme	from 01.020220		3.00	
Other actions				
Grant to identified		0.60	0.90	
beneficiary according to Financial Regulation Article 195(e)	from 01.020220	0.60	0.90	
Expert contract action		0.55	0.99	0.79
	from 01.020220	0.55	0.99	0.79
Grant awarded without a call		3.20	3.00	
for proposals according to Financial Regulation Article 195	from 01.020220	3.20	3.00	
Contribution from this part		0.02	0.06	0.01
to Expert contract action under Part 12 of the work programme	from 01.020220	0.02	0.06	0.01
Contribution from this part		0.21	0.82	
to Indirectly managed action under Part 12 of the work programme	from 01.020220	0.21	0.82	
Contribution from this part			0.14	
to Public procurement under Part 12 of the work programme	from 01.020220		0.14	
Contribution from this part			0.41	
to Grant awarded without a call for proposals according to Financial Regulation Article 195 under Part 12 of the work programme	from 01.020220		0.41	

Contribution from this part		0.99	0.25	
to Specific grant agreement under Part 12 of the work programme	from 01.020220	0.99	0.25	
Contribution from this part			0.06	
to Service Level Agreement under Part 12 of the work programme	from 01.020220		0.06	
Contribution from this part			0.05	
to Provision of technical/scientific services by the Joint Research Centre under Part 12 of the work programme	from 01.020220		0.05	
Estimated total budget		284.88	326.03	0.80