

## SEZNAM AKTUALNIH RAZPISOV

Naslov razpisa	Objavljeno	Rok	Shema/Financer	Raziskovalno področje
<a href="#">Projektno delo za pridobitev praktičnih izkušenj in znanj študentov v delovnem okolju 2022/23</a>	01. 07. 2022	<b>26. 09. 2022 do 12.00</b>	Ministrstvo za izobraževanje, znanost in šport	VSA raziskovalna področja
<a href="#">Implementing digital services to empower neuroscience research for health and brain inspired technology via EBRAINS</a>	01. 06. 2022	<b>21. 09. 2022 do 17:00</b>	Evropska komisija	Zdravje in umetna inteligenca
<a href="#">Better understanding of citizens' behavioural and psychological reactions in the event of a disaster or crisis situation</a>	30. 06. 2022	<b>23. 11. 2022 do 17:00</b>	Evropska komisija	Zdravje in umetna inteligenca
<a href="#">AI for human empowerment (AI, Data and Robotics Partnership) (RIA)</a>	16. 06. 2022	<b>16. 11. 2022 do 17:00</b>	Evropska komisija	Družboslovje in humanistika, umetna inteligenca
<b>Marie Skłodowska-Curie Action:</b> <a href="#">MSCA Doctoral Networks 2022</a>	03. 05. 2022	<b>15. 11. 2022 do 17:00</b>	Evropska komisija	VSA raziskovalna področja
<a href="#">Javni razpis za sofinanciranje priključitve organizacij k izbranim projektom – HOP ON shema</a>	27. 01. 2022	<b>10. 11. 2022 do 17:00</b>	Evropska komisija	

**Projekti, ki iščejo partnerje za vključitev v okviru HOP ON sheme:**

1. [Risk and Resilience in Developmental Diversity and Mental Health](#)
2. [Reducing the impact of major environmental challenges on mental health](#)
3. [Clinical validation of Artificial Intelligence for providing a personalized motor clinical profile assessment and rehabilitation of upper limb in children with unilateral Cerebral Palsy](#)
4. [HUMAN-ROBOT SENSORIMOTOR AUGMENTATION - WEARABLE SENSORIMOTOR INTERFACES AND SUPERNUMERARY ROBOTIC LIMBS FOR HUMANS WITH UPPER-LIMB DISABILITIES](#)
5. [CoreSense: A Hybrid Cognitive Architecture for Deep Understanding](#)

Duševno zdravje

Duševno zdravje

Fizioterapija in umetna inteligenca

Fizioterapija in umetna inteligenca

Fizioterapija in umetna inteligenca

## PODROBNEJŠA PREDSTAVITEV AKTUALNIH RAZPISOV

**Razpisi, ki štejejo kot pogoj za pridobitev stabilnega financiranja (iz ZZrID) so navedeni v Programu HORIZON EUROPE.**

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# Ministrstvo za izobraževanje, znanost in šport

## 1. Projektno delo za pridobitev praktičnih izkušenj in znanj študentov v delovnem okolju 2022/23

### **PREDMET JAVNEGA RAZPISA**

**Predmet** javnega razpisa je sofinanciranje izvedbe projektov, s katerimi se krepi sodelovanje in povezovanje visokošolskega sistema z gospodarstvom ter z negospodarskim in neprofitnim sektorjem v lokalnem/regionalnem okolju. V projektne aktivnosti se bodo vključili študenti pod mentorstvom pedagoških mentorjev, delovnih mentorjev oziroma strokovnih sodelavcev iz lokalnega/regionalnega okolja.

Javni razpis je razdeljen na dva sklopa:

**Sklop A: izvajanje projektne aktivnosti visokošolskih zavodov v sodelovanju z gospodarstvom (v nadaljnjem besedilu: Sklop A), ki vključuje:**

- izvedbo projektne aktivnosti študentov in pedagoških mentorjev iz visokošolskih zavodov, v sodelovanju z ostalimi udeleženci: s partnerji iz delovnega okolja (delovni mentorji iz gospodarstva). Sofinancirani bodo projekti, v okviru katerih se bodo izvajale projektne aktivnosti v skupinah od šest do deset študentov. Študenti se bodo v okviru projekta pod vodstvom vsaj enega pedagoškega mentorja in vsaj enega delovnega mentorja iz gospodarstva, seznanili z izzivi in proučevali problematiko v gospodarskem okolju, pri čemer mora biti poudarek na prednostnih področjih Slovenske strategije pametne specializacije (S4)<sup>1</sup>. V okviru projektov se spodbuja vključitev študentov iz različnih študijskih stopenj in smeri, kar bo prispevalo k mreženju študentov različnih disciplin in strok ter delovnih mentorjev iz gospodarstva.

**Sklop B: izvajanje projektne aktivnosti visokošolskih zavodov v sodelovanju negospodarskim in neprofitnim sektorjem v lokalnem/regionalnem okolju (v nadaljnjem besedilu: Sklop B), ki vključuje:**

- izvedbo projektne aktivnosti študentov in pedagoških mentorjev iz visokošolskih zavodov v sodelovanju z ostalimi udeleženci: s partnerji iz delovnega okolja (strokovnimi sodelavci iz negospodarskega in neprofitnega sektorja v lokalnem/regionalnem okolju). Sofinancirani bodo projekti, v okviru katerih se bodo izvajale projektne aktivnosti v skupinah od štiri do osem študentov. Študenti se bodo v okviru projekta pod vodstvom vsaj enega pedagoškega mentorja in vsaj enega strokovnega sodelavca iz lokalnega/regionalnega okolja seznanili z izzivi in proučevali problematiko negospodarskega in neprofitnega sektorja v lokalnem/regionalnem okolju. V okviru projektov se spodbuja vključitev študentov iz različnih študijskih stopenj in smeri, kar bo prispevalo k mreženju študentov različnih disciplin in strok ter strokovnih sodelavcev iz lokalnega/regionalnega okolja.

Univerza ali samostojni visokošolski zavod (v nadaljnjem besedilu: prijavitelj), ki kandidira na javni razpis, se mora obvezno prijaviti na Sklop A, medtem ko je prijava na Sklop B izbirna.

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<sup>1</sup> Slovenska strategija pametne specializacije (S4), ki jo je Vlada RS potrdila dne 20.9.2015, Evropska Komisija pa dne 3.11.2015. Spremembo S4 je Vlada RS sprejela dne 21. 12. 2017.  
<http://www.eu-skladi.si/sl/ekp/kljucni-dokumenti>  
<https://www.gov.si/zbirke/projekti-in-programi/izvajanje-slovenske-strategije-pametne-specializacije/>.

## **NAMEN JAVNEGA RAZPISA**

Namen javnega razpisa je spodbujanje krepitve sodelovanja in povezovanja visokošolskega sistema z okoljem (gospodarstvo ter negospodarstvo in neprofitni sektor v lokalnem in regionalnem okolju) in izvajanje prožnih oblik učenja.

Na ta način se bo mladim omogočalo pridobivanje konkretnih, praktičnih izkušenj že med izobraževanjem, razvoj znanj za neposredno udejstvovanje pri uresničevanju idej in pridobivanju izkušenj, razvoj podjetnosti, inovativnosti, kreativnega razmišljanja, ustvarjalnosti ipd. za večjo zaposljivost in lažji prehod v delovno okolje.

Z javnim razpisom se naslavlja tudi druge izzive visokega šolstva kot npr. sistemsko uvajanje prenosa znanja med visokošolskimi zavodi in delovnim okoljem, večja fleksibilnost in prilagajanje študijskih programov potrebam trga dela ter vzpostavitev dolgoročnega sodelovanja med visokošolskimi zavodi in delovnim okoljem. Omogočen bo prispevek k vzpostavitvi institucionalnega okvirja za zagotavljanje odprtega in inovativnega visokošolskega prostora.

Namen javnega razpisa je skladen tudi s Slovensko strategijo pametne specializacije (S4), v kateri so opredeljena za Slovenijo ključna gospodarsko prebojna razvojna področja. Med njimi so posebej opredeljeni tudi človeški viri in znotraj teh področij »Mlada in ustvarjalna Slovenija«, kjer je ena od prioritet spodbujanje ustvarjalnosti, inovativnosti in podjetnosti mladih, razvijanje nadarjenosti in izboljšanje njihovih ključnih kompetenc v vseh fazah izobraževalnega procesa. Znotraj posameznih področij je kot konkreten primer opredeljeno tudi spodbujanje možnosti preizkušanja in izvedbe konkretnih zamisli študentov v praksi ter povezovanje z gospodarstvom ter z negospodarskim in neprofitnim sektorjem v lokalnem/regionalnem okolju; v okviru slednjega, tam kjer relevantno, tudi z vzpostavitvijo mostu oziroma kontinuiranega, dolgoročnejšega sodelovanja, med strukturami upravljanja S4 – Strateško- razvojnimi inovacijskimi partnerstvi- SRIP<sup>2</sup>, oblikovanimi okrog razvojnih prednostnih področij Slovenije opredeljenih v S4 in visokošolskimi zavodi oziroma njihovimi študenti.

## **CILJ JAVNEGA RAZPISA**

Cilj javnega razpisa je spodbujanje prožnih oblik učenja za izboljšanje kompetenc potrebnih za ustvarjanje delovnih mest in omogočanje lažjega prehoda iz izobraževanja v zaposlitev.

### **Regija izvajanja**

Operacije se bodo izvajale v Kohezijski regiji Zahodna Slovenija (v nadaljnjem besedilu: KRZS) in v Kohezijski regiji Vzhodna Slovenija (v nadaljnjem besedilu: KRVS) ob upoštevanju sedeža upravičenca, ki bo izvajal operacijo. Sredstva se delijo v razmerju:

- 67 % za KRZS in
- 33 % za KRVS.

### **Ciljna skupina**

Ciljna skupina javnega razpisa so študenti na dodiplomski in podiplomski stopnji ter učitelji, pri čemer imajo učitelji podporno vlogo.

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<sup>2</sup> SRIP: Mreže za prehod v krožno gospodarstvo: <https://srip-krozno-gospodarstvo.si/>.

## POGOJI ZA KANDIDIRANJE NA JAVNEM RAZPISU

### Pogoji za prijavo

Prijavitelj mora za kandidiranje na javnem razpisu izpolnjevati pogoje, s katerimi izkazuje ustreznost ter sposobnost za izvedbo operacije ter predložiti dokazila, s katerimi izkazuje njihovo izpolnjevanje:

	Na javni razpis se lahko prijavi prijavitelj, ki izpolnjuje naslednje pogoje:	Dokazila
1.	je na dan odpiranja vloge vpisan v Evidenčni in analitski informacijski sistem visokega šolstva v Republiki Sloveniji (v nadaljnjem besedilu: eVŠ) in izvaja javno veljavne študijske programe, vpisane v eVŠ.	Izpolnjevanje pogoja bo ministrstvo preverilo v eVŠ.
2.	ima v študijskem letu 2021/2022 <sup>3</sup> vpisane študente v javnoveljavnih študijskih programih.	Izpolnjevanje pogoja bo ministrstvo preverilo v eVŠ.
3.	za upravičene stroške, ki so predmet sofinanciranja v okviru tega javnega razpisa ni pridobil in ne bo pridobil, ter ni v postopku pridobivanja sredstev iz drugih javnih virov, t. j. iz javnih finančnih sredstev evropskega, državnega ali lokalnega proračuna (prepoved dvojnega financiranja).	Izjave prijavitelja (Prijavni obrazec točka E.).
4.	ima skladno z veljavno zakonodajo poravnane vse davke, prispevke in druge dajatve oziroma vrednost neplačanih zapadlih obveznosti ne znaša 50,00 EUR ali več. Potrdilo o tem mora biti izdano na datum v okviru zadnjih 30 dni pred dnevom oddaje vloge ali na dan oddaje vloge na javni razpis.	Potrdilo FURS-a <sup>4</sup> , Izjave prijavitelja (Prijavni obrazec točka E.).
5.	mu ni bila, vključno njihovi odgovorni osebi, izrečena pravnomočna sodba, ki ima elemente kaznivih dejanj, taksativno naštetih v prvem odstavku 75. člena Zakona o javnem naročanju (Uradni list RS, št. 91/15,14/18, 121/21, 10/22, 74/22 – odl. US). Potrdilo o tem mora biti izdano na datum v okviru zadnjih 30 dni pred dnevom oddaje vloge ali na dan oddaje vloge na javni razpis.	Potrdilo Ministrstva za pravosodje o nekaznovanosti oziroma Pooblastilo za pridobitev potrdila iz kazenske evidence (Priloga 4 javnega razpisa) <sup>5</sup> .

<sup>3</sup> Podatki o vpisanih študentih so razvidni iz Priloge 11 javnega razpisa: Seznam števila vpisanih študentov na slovenskih visokošolskih zavodih na dan 30. 10. 2021. Podatki so zajeti iz eVŠ za študijsko leto 2021/2022.

<sup>4</sup> Če prijavitelj ne bo predložil potrdila FURS o plačanih obveznostih ali bo potrdilo starejše od 30 dni pred oddajo vloge, ga bo pridobilo ministrstvo po uradni dolžnosti iz uradnih evidenc, v tem primeru se bo izpolnjevanje pogoja preverjalo na dan oddaje vloge. Za ta namen prijavitelj podpiše izjavo, ki je opredeljena v točki E. Prijavnega obrazca.

<sup>5</sup> Potrdilo ne sme biti starejše od 30 dni pred oddajo vloge. Če prijavitelj ne bo predložil potrdila Ministrstva za pravosodje o nekaznovanosti ali bo potrdilo starejše od 30 dni pred oddajo vloge, ga bo pridobilo ministrstvo po uradni dolžnosti iz uradnih evidenc, zaradi česar mora prijavitelj v tem primeru priložiti izpolnjeno in podpisano Prilogo 4: Pooblastilo za pridobitev potrdila iz kazenske evidence. V tem primeru se bo izpolnjevanje pogojev pod številko 5 preverjalo na dan oddaje vloge.

Komisija za izvedbo postopka javnega razpisa, ki jo je imenovala ministrica za izobraževanje, znanost in šport (v nadaljnjem besedilu: komisija) bo preverila, če prijavitelj izpolnjuje pogoje za prijavo in bo postopala skladno s točko 7 Navodil za pripravo vloge na javni razpis.

V primeru, da prijavitelj ne bo izpolnjeval kateregakoli od pogojev iz točke 3.1 *Pogoji za prijavo*, se vloga s sklepom zavrne.

### **Okvirna višina sredstev, ki so na razpolago za javni razpis**

Skupna okvirna vrednost razpoložljivih sredstev za javni razpis znaša največ do **3.500.000,00 EUR**, od tega je predvidena vrednost sofinanciranja po posameznih programskih območjih in po posameznih proračunskih letih naslednja:

- **za proračunsko leto 2022: 1.050.000,00 EUR, od tega:**
  - za kohezijsko regijo Vzhodna Slovenija 346.500,00 EUR, od tega:
  - za kohezijsko regijo Zahodna Slovenija 703.500,00 EUR, od tega:
  
- **za proračunsko leto 2023: 2.450.000,00 EUR, od tega:**
  - za kohezijsko regijo Vzhodna Slovenija 808.500,00 EUR, od tega:
  - za kohezijsko regijo Zahodna Slovenija 1.641.500,00 EUR, od tega:

Ministrstvo si pridržuje pravico, da glede na razpoložljiva sredstva po posameznih proračunskih letih, izbranim prijaviteljem predlaga prilagoditev dinamike sofinanciranja. Če se izbrani prijavitelj ne strinja s predlogom ministrstva, se šteje, da odstopa od vloge.

Izvedba postopka javnega razpisa je vezana na proračunske zmogljivosti ministrstva.

### **Delitev sredstev po sklopih**

Z namenom enakomerne in pravične razporeditve ter skladno z OP EKP 2014–2020 se skupna višina razpoložljivih sredstev na javnem razpisu v višini **3.500.000,00 EUR** deli glede na sedež univerze oziroma samostojnega visokošolskega zavoda kot je opredeljeno v točki 2.4 javnega razpisa, pri čemer se:

#### - za Sklop A nameni:

- sredstva v višini 80 % od skupne višine razpoložljivih sredstev na javnem razpisu oziroma sredstva v višini 2.800.000,00 EUR. Od tega se za:
  - KRZS nameni 67 % oziroma sredstva v višini 1.876.000,00 EUR in
  - KRVS 33 % oziroma sredstva v višini 924.000,00 EUR;

#### - za Sklop B nameni:

- sredstva v višini 20 % od skupne višine razpoložljivih sredstev na javnem razpisu oziroma sredstva v višini 700.000,00 EUR. Od tega se za:
  - KRZS nameni 67 % oziroma sredstva v višini 469.000,00 EUR in
  - KRVS 33 % oziroma sredstva v višini 231.000,00 EUR.

### **Obdobje, v katerem morajo biti porabljena dodeljena sredstva (predvideni datum začetka in konca črpanja sredstev)**

Ministrstvo bo sofinanciralo le upravičene stroške nastale od 1. 10. 2022 do dne 31. 8. 2023. Rok za dokončanje operacije (zaključek aktivnosti) je najkasneje do 31. 8. 2023.

Obdobje upravičenosti izdatkov (datum plačila računov oziroma verodostojnih knjigovodskih listin) je

od 1. 10. 2022 do dne 30. 9. 2023.

### Upravičeni stroški, način financiranja in predplačila

V skladu s pravili evropske kohezijske politike in zakonodaje s področja javnih financ se financiranje operacije izvaja po principu povračil za nastale in plačane stroške. Upravičenec bo prejel sredstva sofinanciranja na osnovi pravilno izdanih in popolnih zahtevkov za izplačila za upravičene stroške izvajanja operacije, ki so nastali in bili plačani v preteklem (in upravičenem) obdobju. Izjema so predplačila in izjeme, določene v skladu z veljavnim zakonom, ki ureja izvrševanje proračuna Republike Slovenije. Upravičenec lahko uveljavlja stroške, ko je posamezen projekt v celoti zaključen (velja za Sklop A in Sklop B).

### Upravičeni stroški predmetnega javnega razpisa za Sklop A in za Sklop B so:

- pavšalni znesek v skladu s 67. členom Uredbe (EU) št. 1303/2013 (»lump sum«), za **Sklop A:** izvedba projektnih aktivnosti visokošolskih zavodov v sodelovanju s partnerji iz delovnega okolja (gospodarstvo) in z vključenimi študenti **v višini 20.600,00 EUR** (v nadaljnjem besedilu: **lump sum A**) za en izveden projekt;
- pavšalni znesek v skladu s 67. členom Uredbe (EU) št. 1303/2013 (»lump sum«), za **Sklop B:** izvedba projektnih aktivnosti visokošolskih zavodov v sodelovanju s partnerji iz delovnega okolja (negospodarstvo in neprofitni sektor v lokalnem/regionalnem okolju) in z vključenimi študenti **v višini 10.500,00 EUR** (v nadaljnjem besedilu: **lump sum B**) za en izveden projekt.

Ministrstvo je dne 26. 5. 2022 sprejelo Metodologijo za določitev višine pavšalnega zneska za izvedbo Javnega razpisa Projektno delo za pridobitev praktičnih izkušenj in znanj študentov v delovnem okolju 2022/2023, št. 303-41/2021-21, na podlagi katere je bil izračunan in opredeljen pavšalni znesek za izvedbo projektnih aktivnosti (Sklop A in Sklop B), ki predstavlja pretežno stroške pedagoškega mentorja, podpornega osebja na visokošolskem zavodu, partnerja iz delovnega okolja, stroške študentskega dela za vključene študente in posredne stroške.

Dokazila za upravičenost stroškov operacije za lump sum A in lump sum B na ravni posameznega projekta so:

LUMP SUM	AKTIVNOST/REZULTATI	DOKAZILA
Lump sum A	<b>Uspešno izveden projekt, ki pomeni naslednje:</b>	
	Izvedba načrtovanih aktivnosti posameznega projekta: kot uspešno izveden projekt se šteje vključitev najmanj šest do deset študentov, ki so ves čas trajanja projekta vpisani na javno veljavni študijski program, najmanj enega pedagoškega mentorja in najmanj enega delovnega mentorja iz gospodarstva. Vsi vključeni partnerji (pedagoški mentor, delovni mentor iz gospodarstva in študenti) morajo v obdobju trajanja projekta (do pet	- Poročilo upravičenca o izvedenem projektu; - Poročilo pedagoškega mentorja in partnerja iz delovnega okolja o izvedenem projektu; - Poročilo študenta o izvedenem projektu (dokazilo o statusu študenta za celotno obdobje trajanja projekta: ministrstvo preveri v svojih evidencah eVŠ po zaključenem projektu v procesu poročanja (oddan



	<p>mesecev) opraviti skupaj najmanj 1450 ur.</p>	<p>zahtevk za izplačilo upravičenca)).</p>
	<p>Analiza rezultatov in ugotovitev projekta, ki prispevajo k dodani vrednosti za npr. vključitev v študijske vsebine, v študijski proces, za delovno okolje ipd. v prihodnje (najmanj ena).</p>	<p>- Vsebinska analiza rezultatov, iz katerega so razvidne vsebinske ugotovitve, izsledki, rezultati analize ipd. (v okviru Poročila upravičenca o izvedenem projektu).</p>
	<p>Izvedena vsaj ena promocijska aktivnost za izmenjavo izkušenj, rezultatov in dobrih praks na regionalni in nacionalni ravni kot odziv izobraževalnega sistema za potrebe trga dela in pričakovanj mladih.</p>	<p>- Poročilo upravičenca o izvedenem projektu: upravičenec kot dokazilo za izvedbo aktivnosti posameznega zaključenega projekta obvezno priloži (kot prilogo) npr. gradiva, izdelki, priročniki, zloženke, izvedeni promocijski dogodki, delavnice, vzpostavljena spletna stran, aplikacija, objave/prispevki na družbenih omrežjih, člankih in druge medijske objave ipd. relevantna dokazila, ki dokazujejo, da so bile aktivnosti zaključene in izvedene.</p>
<b>Lump sum B</b>	<p><b>Uspešno izveden projekt, ki pomeni naslednje</b></p>	<p><b>DOKAZILA</b></p>
	<p>Izvedba načrtovanih aktivnosti posameznega projekta: kot uspešno izveden projekt se šteje vključitev najmanj štirih in največ osem študentov, ki so ves čas trajanja projekta vpisani na javno veljavni študijski program, najmanj enega pedagoškega mentorja in najmanj enega strokovnega sodelavca iz lokalnega/regionalnega okolja. Vsi vključeni partnerji (pedagoški mentor, strokovni sodelavec iz lokalnega/regionalnega okolja in</p>	<p>- Poročilo upravičenca o izvedenem projektu;</p> <p>- Poročilo pedagoškega mentorja in partnerja iz delovnega okolja o izvedenem projektu;</p> <p>- Poročilo študenta o izvedenem projektu (dokazilo o statusu študenta za celotno obdobje trajanja projekta: ministrstvo preveri v svojih evidencah eVŠ po zaključenem projektu v procesu poročanja (oddan</p>

	študenti) morajo v obdobju trajanja projekta (do tri mesece) opraviti skupaj najmanj 645 ur.	zahtevek za izplačilo upravičenca)).
	Analiza rezultatov in ugotovitev projekta, ki prispevajo k dodani vrednosti za npr. vključitev v študijske vsebine, v študijski proces, za delovno okolje ipd. v prihodnje (najmanj ena).	- Vsebinska analiza rezultatov, iz katerega so razvidne vsebinske ugotovitve, izsledki, rezultati analize ipd. (v okviru Poročila upravičenca o izvedenem projektu).
	Izvedena vsaj ena promocijska aktivnost za izmenjavo izkušenj, rezultatov in dobrih praks na regionalni in nacionalni ravni kot odziv izobraževalnega sistema za potrebe trga dela in pričakovanj mladih.	- Poročilo upravičenca o izvedenem projektu: upravičenec kot dokazilo za izvedbo aktivnosti posameznega zaključenega projekta obvezno priloži npr. gradiva, izdelki, priročniki, zloženke, izvedeni promocijski dogodki, delavnice, vzpostavljena spletna stran, aplikacija, objave/prispevki na družbenih omrežjih, člankih in druge medijske objave ipd. relevantna dokazila, ki dokazujejo, da so bile aktivnosti zaključene in izvedene.

Upravičenec v okviru Poročila upravičenca o izvedenem projektu ministrstvu poroča o skupnem številu izvedenih ur vseh vključenih partnerjev na projektu (pedagoški mentor, partner iz delovnega okolja in študenti) in skupnem številu ur za posamezne partnerje. Upravičenec mora zagotoviti, da so izvedene ure vsakega od vključenih partnerjev, o katerih poroča v okviru Poročila upravičenca o izvedenem projektu, ustrezno dokumentirane in pisno potrjene s strani vključenega partnerja ter jih mora pri sebi hraniti kot dokazila, ki so lahko predmet preverjanja na kraju samem.

Upravičenec bo v okviru poročanja o izvajanju aktivnosti na operaciji moral ministrstvu med drugim predložiti tudi:

- analizo rezultatov in ugotovitev projekta, ki se predloži po zaključku posameznega izvedenega projekta v okviru poročila (Obrazec 1 Poročilo upravičenca o izvedenem projektu se predloži v procesu poročanja (oddan zahtevek za izplačilo upravičenca)). Upravičenec bo v okviru analize rezultatov in ugotovitev vključil ugotovitve, izsledke, rezultate ipd. izvedenega projekta vključenih partnerjev, ki lahko prispevajo k dodani vrednosti za npr. vključitev v študijske vsebine, v študijski proces, za delovno okolje ipd. v prihodnje;

- zaključno analizo rezultatov in ugotovitev operacije, ki prispevajo k dodani vrednosti za vse izvedene projekte, ki se predloži po zaključku operacije skupaj s končnim poročilom. V okviru zaključne analize rezultatov in ugotovitev operacije upravičenec navede ugotovitve, izsledke ter pripravi skupno analizo projektov, ipd. in poroča o pričakovanih in dejanskih učinkih, rezultatih o izvedenih projektnih aktivnosti za visokošolski zavod, ki prispevajo k dodani vrednosti za npr. za oblikovanje obstoječih in novih študijskih programov za večjo skladnost glede na potrebe trga dela). V zaključni analizi hkrati predstavi ugotovljene prednosti in pomanjkljivost pri izvajanju projektnih aktivnosti operacije ter poda predloge za izboljšave (npr. za krepitev sodelovanja in povezovanja visokošolskega sistema z

gospodarstvom ter z negospodarskim in neprofitnim sektorjem v lokalnem/regionalnem okolju) v prihodnje;

- dokazilo o izvedeni najmanj eni promocijski aktivnosti, ki se predloži po zaključku posameznega izvedenega projekta v okviru poročila (Obrazec 1 Poročilo upravičenca o izvedenem projektu se predloži v procesu poročanja (oddan zahtevek za izplačilo upravičenca)).

Pravice in obveznosti, ki izhajajo iz sodelovanja v projektne aktivnosti vključenih partnerjev, so izključno stvar dogovora med upravičencem in v projektne aktivnosti vključenih partnerjev (pedagoških mentorjev, partnerjev iz delovnega okolja in študentov), ki ga uredijo z npr. dogovorom o sodelovanju in se jih ne prilaga kot dokazilo.

Način uveljavljanja upravičenih stroškov z navedenimi dokazili za posamezne stroške mora biti skladen s točko 3 in 4 Navodil Ministrstva za izobraževanje, znanost in šport za izvajanje operacij evropske kohezijske politike v programskem obdobju 2014-2020, ki so del razpisne dokumentacije, in s točko 2 Navodil organa upravljanja o upravičenih stroških za sredstva evropske kohezijske politike v obdobju 2014-2020, dostopnih na spletni strani <http://www.eu-skladi.si/sl/ekp/navodila>. Spremljanje in poročanje ter način financiranja je opisano tudi v točki 10 Navodil za pripravo vloge za javni razpis, ki je sestavni del razpisne dokumentacije kot Priloga 6.

Ministrstvo in izbrani prijavitelj bosta s pogodbo o sofinanciranju podrobneje dogovorila obseg in dinamiko sofinanciranja operacije na osnovi načrtovanih aktivnosti, podanih v vlogi na javni razpis.

V skladu z določili Zakona o izvrševanju proračunov Republike Slovenije za leti 2022 in 2023 lahko ministrstvo upravičencu za namen izvajanja operacije izplača predplačilo v višini do 30 % od vrednosti predvidenih izplačil sredstev, na osnovi predloženega zahtevka za izplačilo predplačila s strani upravičenca. Upravičene prejemnike in pogoje za izplačilo predplačila določa veljavni zakon, ki ureja izvrševanje proračuna Republike Slovenije. Predplačila se izvajajo po sistemu izplačila večkratnih predplačil pri izvajanju operacije, s sprotnim poračunavanjem vsakega posameznega predplačila v celoti. Upravičenec bo v primeru prejetega predplačila dolžan ministrstvu predložiti zahtevek/e za izplačilo z obveznimi dokazili v višini izplačanega predplačila skladno s pogodbo o sofinanciranju v povezavi z vsakokrat veljavnim zakonom, ki ureja izvrševanje proračuna Republike Slovenije. To pomeni, da se bodo predplačila iz proračuna Republike Slovenije izplačevala največ v višini kot je v prihodnjem s pogodbo o sofinanciranju določenem obdobju dejansko potrebno za izvajanje operacije, pri čemer višina posameznega predplačila ne sme presegati odstotka, določenega v veljavnem zakonu, ki ureja izvrševanje proračuna Republike Slovenije. Po celotnem poročilu predhodnega predplačila upravičenec lahko pridobi novo predplačilo za pokrivanje izdatkov za prihodnje obdobje, določeno s pogodbo o sofinanciranju. Za vsako predplačilo v višini nad 100.000,00 EUR je treba pred podpisom pogodbe o sofinanciranju oziroma pred podpisom aneksa k pogodbi o sofinanciranju v primeru uveljavljanja več predplačil nad 100.000,00 EUR, pridobiti soglasje ministra, pristojnega za finance. Soglasje se izda pod pogoji, navedenimi v veljavnem zakonu, ki ureja izvrševanje proračuna Republike Slovenije (pogoji, ki jih mora izpolnjevati prejemnik predplačila so: pozitivno poslovanje v preteklem letu, poravnane davčne obveznosti in solventnost v preteklih treh mesecih). Izbrani prijavitelj, ki želi uveljavljati predplačilo v višini nad 100.000,00 EUR, bo hkrati s sklepom o izboru pozvan k predložitvi ustreznih dokazil.

## NAČIN IN ROK ZA PREDLOŽITEV VLOG ZA DODELITEV SREDSTEV

**Rok za oddajo vlog za dodelitev sredstev je 26. 9. 2022 do 12.00 ure.**

Vloga z zahtevano vsebino, kot je določena v točki 8 tega javnega razpisa, mora v enem pisnem (tiskanem) izvodu in v enem elektronskem izvodu (na CD ali USB ključku, v obliki Word oziroma Excel kot tudi optično prebrana – »skenirana« po zaključenem podpisovanju), v zaprti ovojnici, opremljena z vidno oznako »NE ODPIRAJ – prijava na JAVNI RAZPIS: **PROJEKTNO DELO ZA PRIDOBITEV PRAKTIČNIH IZKUŠENJ IN ZNANJ ŠTUDENTOV V DELOVNEM OKOLJU 2022/2023**« št. 303-41/2021, z navedbo polnega naziva in naslova pošiljatelja, prispeti na naslov: Ministrstvo za izobraževanje, znanost in šport, Masarykova cesta 16, 1000 Ljubljana.

Za pravilno opremo oziroma oznako ovojnice se lahko uporabi ali Priloga 5: Obrazec za oddajo vloge, ki je del razpisne dokumentacije ali lastnoročno napisani obvezni podatki iz prejšnjega odstavka.

V primeru neskladnosti podatkov v tiskani in elektronski obliki se šteje, da je za presojo pomembna tiskana oblika.

Kot pravočasne bodo upoštevane vloge, ki bodo v določenem roku, **ne glede na način dostave**, prispеле v vložišče ministrstva.

Vložišče je na lokaciji Ministrstva za izobraževanje, znanost in šport, Masarykova 16, 1000 Ljubljana, kjer se sprejema in oddaja vso papirno pošto. Vložišče je vhodna točka ministrstva za pisno vlaganje prijave, spremembe in umike vlog ter izdajo ustreznih potrdil o oddaji.

Neustrezno označene in nepravočasno prispеле vloge se ne bodo obravnavale, s sklepom bodo zavržene in vrnjene prijavitelju.

Javni razpis objavljen na: <https://www.gov.si/zbirke/javne-objave/projektno-delo-za-pridobitev-prakticnih-izkusenj-in-znanj-studentov-v-delovnem-okolju-20222023/>

## PROGRAM HORIZON EUROPE:

### 1. Implementing digital services to empower neuroscience research for health and brain inspired technology via EBRAINS

TOPIC ID: HORIZON-INFRA-2022-SERV-01-01

#### General information

Programme

**Horizon Europe Framework Programme (HORIZON)**

Call

[Research infrastructure services to support health research and accelerate the digital transformation \(2022\) \(HORIZON-INFRA-2022-SERV-01\)](#)

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Type of action

**HORIZON-RIA HORIZON Research and Innovation Actions**

Type of MGA

**HORIZON Action Grant Budget-Based [HORIZON-AG]**

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Deadline model

**single-stage**

Planned opening date

**01 June 2022**

Deadline date

**21 September 2022 17:00:00 Brussels time**

#### Topic description

Expected Outcome:

Project results are expected to contribute to all the following outcomes:

- integrated multi-disciplinary collaborative tools and services widely serving the European neuroscientific community, providing them with FAIR data indexing and archival, multilevel data mining and modelling/simulation of brain functions, and empowering workflows for reproducible research;
- a rich collection of multilevel human brain models, atlases and workflows, directly supporting the research and development for personalised brain medical treatments e.g. target binding drugs, precise neuro-stimulation positioning and guided surgery, regarding brain diseases such as epilepsy, Parkinson, consciousness disorders, or rare or multi-factor diseases;

- a comprehensive set of cognitive brain model scaffolds and associated modular / large-size neuromorphic and neurorobotic facilities for assisting the design and validation of applicative cognitive technologies benefitting from neurosciences latest knowledge, as enablers for autonomous and adaptive robotics approaches that use fast sensory processing and decision-making capabilities;
- supplementary population of EBRAINS facilities with multidisciplinary services/applications that answer well-identified new neuroscience related S&T needs, in correlation with national and European research priorities for neuroscience, brain medicine and cognitive-technologies;
- integration of EBRAINS with EOSC and linkage with common European data spaces in the life science and health sector;
- better-aligned national investments in neuroscience across Europe, building on the Member States' and Associated Countries' specialised competence centres, which in turn will help creating additional synergies and enabling further research activities around the EBRAINS services.

### Scope:

Building on the EBRAINS architecture and base facilities developed under Horizon 2020, the scope of this action is to:

1. To implement a user-friendly service infrastructure along the principles of Infrastructure as a Service (IaaS) and Platform as a Service (PaaS) to widely serve the research communities in neurosciences, brain medicine and brain-inspired cognitive technologies. This includes the following dimensions:

- Enabling the EBRAINS research infrastructure digital facilities supporting neuroscience dedicated tools and services, with a high quality of service including robustness, security, scalability, flexibility, usability and user-centricity. This includes a sustainable system for allocation and management of data capacities and of simulation and computing service resources.
- Establishing in-depth collaboration with teams from other European research and testing infrastructures and of EOSC, in order to ensure efficiency and harmonisation, e.g. regarding Authorisation, Authentication and Identification (AAI), Persistent Identifiers (PID), discovery ontologies and API for both services and data.
- Directly interfacing with the European HPC capacities towards exascale, deployed in EuroHPC and capitalising on the FENIX[1] developments for big-data integration and interactive use.
- Delivering an efficient Europe-wide service to researchers, based on promoting excellence and innovation, and supporting users' digital experiments with the assistance of high-level support teams and feedback mechanisms, and guiding communities in developing novel software solutions that build on the EBRAINS base offering.
- Deploying an open metrics framework to assess the EBRAINS performances reached, the efficiency of the facilities offered in particular regarding the human-based services, and the uptake especially regarding the enabled science excellence and related results and the medical and technological innovation empowerment.

2. To develop, integrate in EBRAINS, and operate:

- Constantly improving open science services/applications that respond to up-to-date and upcoming identified needs of the neuroscientific community, with a co-design approach and in-depth engagement with scientific, medical and industrial stakeholders and the

establishment of an appropriate and transparent prioritisation mechanism. This includes ensuring openness to other research groups and new applications; reaching out to scientific and industrial communities, including with tailored training and skills development programmes.

- The deployment of complementary S&T services from regional or national competence nodes, supporting and enriching the cloud-based deliveries and facilitating the sharing of produced data and use of national resources.

In addition to the above, EBRAINS should open its approaches to other communities, going beyond neuroscience, for example by supporting compute-intensive simulation to identify candidate drugs addressing new disease targets in other explicit medical domains where this approach is justified.

The financial support to third parties mechanism (see specific call conditions) can be used to design and develop new services (under item 2) and/or to facilitate the co-design approaches and/or the targeted involvement of broader stakeholders, user communities and competence nodes.

## 2. Better understanding of citizens' behavioural and psychological reactions in the event of a disaster or crisis situation

TOPIC ID: HORIZON-CL3-2022-DRS-01-04

### General information

Programme

**Horizon Europe Framework Programme (HORIZON)**

Call

[Disaster-Resilient Society 2022 \(HORIZON-CL3-2022-DRS-01\)](#)

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Type of action

**HORIZON-RIA HORIZON Research and Innovation Actions**

Type of MGA

**HORIZON Action Grant Budget-Based [HORIZON-AG]**

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Deadline model

**single-stage**

Planned opening date

**30 June 2022**

Deadline date

**23 November 2022 17:00:00 Brussels time**

## **Topic description**

Expected Outcome:

Project results are expected to contribute to some of the following expected outcomes:

- Qualitative and quantitative analyses on the behaviour of diverse society groups affected by a natural and man-made disaster or crisis situation, during and after an event occurs, based on real cases and testimonies, lessons learned from past disasters or crisis and recommendations from citizens and local authorities. Examine how this analysis could be integrated into preparedness plans and processes to include cultural, historical, and ethical perspectives on what defines disasters and how they are responded to.
- Analyses of human behaviour as triggering or cascading factors of disasters or crisis situations, and transformation of qualitative data into quantitative information to improve vulnerability and exposure analyses.
- Development of community-centred (vis-à-vis victim- or patient-centred) approaches and corresponding preparedness plans: in view of limited emergency response capacities and threat of systems collapses (e.g. health system, food distribution, supply chains) in large-scale disaster scenarios, analyse what community practices and communication strategies can help mitigate the latter and enable the public to be a capable partner in emergency planning and response.
- Specific measures to better address the needs and requirements of most vulnerable groups (chronic sufferers, persons with disabilities, children, elderly persons, economically and social deprived persons, refugees and irregular migrants in emergency planning and recovery measures.
- Analyses of the nature and scope of mental health issues of the affected populations and of first-responders arising during and following natural or man-made disasters or crisis situations and their implications for response and recovery, and options to address these issues, including through social and health services such as emergency psycho-social support.
- Analyses of mechanisms and factors that can lead to false alarms and misdirected actions, and of the direct consequences on both population and decision-makers.

Scope:

Human actions and behaviour may strongly influence the effects and dynamics of a disaster or crisis situation and on the response, potentially modifying the vulnerability of the population. For example, inadequate design of technological systems may favour cascading consequences due to limited consideration of human performance, and insufficient planning. Linked to this, due to extreme time pressure, crisis managers are often forced to make decisions on the basis of inadequate information. The behaviour of the general public, mostly influenced by demographic factors (e.g. gender, age, income, education, risk-tolerance, social connectivity etc.) and the perception of risks, depends on the availability, form and access to information about the crisis and management of trade-offs (e.g. efficiency and thoroughness trade-offs). Social media play an important role here being a means of disinformation and misinformation.



Recent disasters related either to natural causes (including climate-related and geological hazards), man-made causes (including industrial accidents or terrorist attacks) or the COVID-19 pandemic crisis have shown the lack of sufficient knowledge in the way citizens react in case of disasters or crisis situations, with implications on policy design and implementation for example in the form of preparedness plans. In this respect, taking into account the knowledge gathered by projects funded in Horizon 2020 and ensuring complementarity, behavioural and psychological research on how citizens behave in the event of a disaster or crisis situation is needed to better understand how to best raise awareness in the population and develop tools to facilitate this.

It is hence necessary to better investigate how historical, cultural and emotional factors (e.g. anxiety, panic etc.) during a disaster or a crisis influence rational actions, evaluations of options and information seeking. In addition, the impact of disasters on health also requires looking into the short and long-term consequences of exposure to high stress/threat levels bears, in particular for mental health.

### 3. AI for human empowerment (AI, Data and Robotics Partnership) (RIA)

TOPIC ID: HORIZON-CL4-2022-HUMAN-02-01

#### **General information**

Programme

**Horizon Europe Framework Programme (HORIZON)**

Call

[\*\*A HUMAN-CENTRED AND ETHICAL DEVELOPMENT OF DIGITAL AND INDUSTRIAL TECHNOLOGIES 2022 \(HORIZON-CL4-2022-HUMAN-02\)\*\*](#)

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Type of action

**HORIZON-RIA HORIZON Research and Innovation Actions**

Type of MGA

**HORIZON Action Grant Budget-Based [HORIZON-AG]**

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Deadline model

**single-stage**

Planned opening date

**16 June 2022**

Deadline date

**16 November 2022 17:00:00 Brussels time**

## **Topic description**

Expected Outcome:

Proposal results are expected to contribute to at least one of the following expected outcomes:

- Truly mixed human-AI initiatives for human empowerment
- Trustworthy hybrid decision-support systems

Scope:

Build the next level of **perception, visualisation, interaction and collaboration** between humans and AI systems working together as partners to achieve common goals, sharing mutual understanding and learning of each other's abilities and respective roles.

Innovative and promising approaches are encouraged, including human-in the loop approaches for truly mixed human-AI initiatives combining the best of human and machine knowledge and capabilities, tacit knowledge extraction (to design the next generation AI-driven co-creation and collaboration tools embodied e.g. in industrial/working spaces environments).

Each proposal will focus on one of the two following research objectives, and clearly identify it:

1. Reach truly mixed human-AI initiatives for human empowerment. The approaches should combine the best of human and machine knowledge and capabilities including shared and sliding autonomy in interaction, addressing reactivity, and fluidity of interaction and making systems transparent, fair and intuitive to use, which will play a key role in acceptance. The systems should adapt to the user rather than the opposite, based on analysis, understanding and anticipation about human behaviour and expectations.
2. Trustworthy hybrid decision-support, including approaches for mixed and sliding decision-making, for context interpretation, for dealing with uncertainty, transparent anticipation, reliability, human-centric planning and decision-making, interdependencies, and augmented decision-making. Transparency, fairness, technical accuracy and robustness will be the key, together with validation strategies assessing also the quality of the decision of the AI supported socio-technical system.

All proposals should adopt a human-centred development of trustworthy AI and investigate and optimise ways of human-AI interaction, key for acceptance and democratisation of AI, to allow any user to take full advantage of the huge benefits such technology can offer, regardless of their age, race, gender or capabilities. This includes development of methods to improve transparency, in particular for human users, in terms of explainability, expected levels of performance which are guaranteed/verifiable and corresponding confidence levels, accountability and responsibility, as well as perceived trust and fairness. AI could also be used to empower humans in supporting them to improve responsible behaviours, where appropriate, but this should be done in full respect of the requirements ensuring trustworthy AI, including human autonomy.

Innovative scientific approach towards human-centric approaches will require multidisciplinary and trans-disciplinary approaches paying particular attention to intersectional factors (gender, ethnicity, age, socioeconomic status, disability) including SSH<sup>[1]</sup> and other disciplines relevant to stimulate novel research avenues, and eventually improve user-acceptance. Collaborative design and evaluation with users involvement should also be considered.

As a pilot activity, proposals in this topic will dedicate part of their activities on investigating novel ways of engagement by citizens or citizen representatives with AI development, with a view of optimising experience towards improving usability and experience for citizens (both at professional or daily life environment).

All proposals should contribute to build the next level of perception, visualisation, interaction and collaboration, and understanding between humans and AI systems working together as partners to achieve common goals, sharing mutual understanding of each other's abilities and respective roles.

All proposals are expected to embed mechanisms to assess and demonstrate progress (with qualitative and quantitative KPIs, benchmarking and progress monitoring, as well as illustrative application use-cases demonstrating concrete potential added value), and share results with the European R&D community, through the AI-on-demand platform<sup>[2]</sup>, a public community resource, to maximise re-use of results, either by developers, or for uptake, and optimise efficiency of funding. Activities are expected to achieve TRL 4-5 by the end of the project.

This topic implements the co-programmed European Partnership on AI, Data and Robotics.

All proposals are expected to allocate tasks to cohesion activities with the PPP on AI, Data and Robotics and funded actions related to this partnership, including the CSA HORIZON-CL4-2021-HUMAN-01-02.

Specific Topic Conditions:

Activities are expected to start at TRL 2-3 and achieve TRL 4-5 by the end of the project – see General Annex B.

Cross-cutting Priorities:

[Co-programmed European Partnerships](#)

Artificial Intelligence

Digital Agenda

Social sciences and humanities

## 4. Marie Skłodowska-Curie Action: MSCA Doctoral Networks 2022

TOPIC ID: HORIZON-MSCA-2022-DN-01-01

### General information

Programme

**Horizon Europe Framework Programme (HORIZON)**

Call

**[MSCA Doctoral Networks 2022 \(HORIZON-MSCA-2022-DN-01\)](#)**

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Type of action

**HORIZON-TMA-MSCA-DN HORIZON TMA MSCA Doctoral Networks**

Type of MGA

**HORIZON Unit Grant [HORIZON-AG-UN]**

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Deadline model

**single-stage**

Planned opening date

**03 May 2022**

Deadline date

**15 November 2022 17:00:00 Brussels time**

**Topic description**

Expected Outcome:

Project results are expected to contribute to the following outcomes:

For supported doctoral candidates

- New research and transferable skills and competences, leading to improved employability and career prospects within and outside academia;
- New knowledge allowing the conversion of ideas into products and services, where relevant;
- Enhanced networking and communication capacities with scientific peers, as well as with the general public that will increase and broaden the research and innovation impact.

For participating organisations

- Improved quality, relevance and sustainability of doctoral training programmes and supervision arrangements;
- Enhanced cooperation and transfer of knowledge between sectors and disciplines;
- Increased integration of training and research activities between participating organisations;
- Boosted R&I capacity;
- Increased internationalisation and attractiveness;
- Regular feedback of research results into teaching and education at participating organisations.

Scope:

MSCA Doctoral Networks will implement doctoral programmes, by partnerships of universities, research institutions and research infrastructures, businesses including SMEs, and other socio-economic actors from different countries across Europe and beyond. MSCA Doctoral Networks are indeed open to the participation of organisations from third countries, in view of fostering strategic international partnerships for the training and exchange of researchers.

These doctoral programmes will respond to well-identified needs in various R&I areas, expose the researchers to the academic and non-academic sectors, and offer training in research-related, as well as transferable skills<sup>[1]</sup> and competences relevant for innovation and long-term employability (e.g. entrepreneurship, commercialisation of results, Intellectual Property Rights, communication). Proposals for doctoral networks can reflect existing or planned research partnerships among the participating organisations.

The selection procedure for doctoral candidates must be open, transparent and merit-based, in line with the Code of Conduct for the Recruitment of Researchers. The vacancy notice (to be widely advertised internationally, including on the EURAXESS<sup>[2]</sup> website) must include the gross salary (not including employer's social contributions) offered to the researcher.

MSCA Doctoral Networks are encouraged to lead to Industrial or Joint Doctorates.

#### *Industrial Doctorates*

Through Industrial Doctorates, doctoral candidates will step outside academia and develop skills in industry and business by being jointly supervised by academic and non-academic organisations, both of which can be established in the same EU Member State or Horizon Europe Associated Country.

#### *Joint Doctorates*

Joint Doctorates represent a highly integrated type of international, inter-sectoral and multi/interdisciplinary collaboration in doctoral training. They lead to the delivery of joint, double or multiple doctoral degrees<sup>[3]</sup> recognised in at least two EU Member States or Horizon Europe Associated Countries.

#### *Steering Board*

Each MSCA Doctoral Network should have a clearly identified steering board co-ordinating network-wide training and research activities and establishing continuous communication and exchange of best practice among the participating organisations to maximise the benefits of the partnership.

#### *Training activities*

MSCA Doctoral Networks should exploit complementarities between participating organisations and foster sharing of knowledge and networking activities for example through the organisation of workshops and conferences. Proposed training activities should respond to well identified needs in various R&I areas, with appropriate references to inter- and multidisciplinary fields and follow the EU Principles for Innovative Doctoral Training<sup>[4]</sup>. They should be primarily focused on developing new scientific knowledge through original research on personalised projects.

Inter-sectoral secondments of researchers to other participating organisations, including in third countries, are encouraged when relevant, feasible and beneficial for the researchers and in line with the project objectives. This will increase the employability of the researchers outside academia.

Doctoral Networks should develop substantial training modules, including digital ones, addressing key transferable skills and competences common to all fields and fostering the culture of Open Science, innovation and entrepreneurship. In particular, Doctoral Networks should adequately prepare doctoral candidates for increased research collaboration and information-sharing made possible by new (digital) technologies (e.g. collaborative tools, opening access to publications and to research data, FAIR data management, public engagement and citizen science, etc.).

#### *Supervision*

Particular attention is paid to the quality of supervision and mentoring arrangements as well as career guidance. Joint supervision of the researchers is mandatory for Industrial and Joint Doctorates.

#### *Career Development Plan*

A Career Development Plan must be established jointly by the supervisor and each recruited doctoral candidate. In case of joint supervision, such a plan should be established involving all supervisors. In addition to research objectives, this plan comprises the researcher's training and career needs, including training on transferable skills, teaching, planning for publications and participation in conferences and events aiming at opening science and research to citizens. The plan, established at the beginning of the recruitment, should be revised (and updated where needed) within 18 months.

[1]As an illustration, Eurodoc published a list of such transferable skills at: <http://eurodoc.net/skills-report-2018.pdf>

[2]<https://euraxess.ec.europa.eu/>

[3]Every time this Work Programme part refers to doctoral degrees, this means that the degrees have to be recognised as such by the relevant authorities of the country or countries concerned.

[4][https://euraxess.ec.europa.eu/sites/default/files/policy\\_library/principles\\_for\\_innovative\\_doctoral\\_training.pdf](https://euraxess.ec.europa.eu/sites/default/files/policy_library/principles_for_innovative_doctoral_training.pdf)

## Destination

### MSCA Doctoral Networks

The MSCA Doctoral Networks aim to train creative, entrepreneurial, innovative and resilient doctoral candidates, able to face current and future challenges and to convert knowledge and ideas into products and services for economic and social benefit.

The MSCA Doctoral Networks will raise the attractiveness and excellence of doctoral training in Europe. They will equip researchers with the right combination of research-related and transferable competences and provide them with enhanced career perspectives in both the academic and non-academic sectors through international, interdisciplinary and inter-sectoral mobility combined with an innovation-oriented mind-set.

### Expected impact

Proposals under this Action should contribute to the following expected impacts:

- Strengthen Europe's human capital base in R&I by training highly-skilled doctoral candidates,
- Improve the attractiveness of researchers' careers notably through better working and employment conditions of doctoral candidates in Europe
- Enhance talent and knowledge circulation across the R&I landscape, through inter-sectoral, interdisciplinary and international mobility
- Increase Europe's attractiveness as a leading research destination
- Enhance the quality of R&I contributing to Europe's sustainable competitiveness
- Establish sustainable collaboration between academic and non-academic organisations
- Foster the culture of open science, innovation and entrepreneurship.

## 5. Javni razpis za sofinanciranje priključitve organizacij k izbranim projektom

Evropska Komisija je objavila javni razpis za sofinanciranje priključitve organizacij iz držav, ki zaostajajo na področju raziskav, razvoja in inovacij (t.i. widening države) k izbranim projektom stebra 2 in stebra 3 (EIC Iskalec). Gre za t.i. "hop on" shemo, ki daje možnost sofinanciranja vključevanja dodatnih partnerjev, tudi iz Slovenije, v že izbrane projekte, ki so sofinancirani iz sredstev Obzorja Evropa.

Javni razpis je namenjen krepitvi raziskovalne odličnosti v tako imenovanih "widening državah", prepoznavnosti sodelujočih, izboljšanju prenosa znanja, odpiranju zaprtih silosov obstoječih konzorcijev ter pridobivanju novih znanj in spretnosti za delo na mednarodnih projektih institucij iz tako imenovanih "widening držav".

Gre za ti. RIA aktivnost, saj gre za vključitev novega partnerja k obstoječim izbranim konzorcijem, ki imajo podpisane pogodbe o sofinanciranju v okviru stebra 2 in stebra 3 (EIC Iskalec) in v projektu

nimajo nobenega partnerja iz nobene izmed držav, ki zaostajajo na področju raziskav, razvoja in inovacij, kot so definirane v Delovnem programu WIDERA in v okviru posebnih pogojev javnega razpisa.

Pričakuje se sofinanciranje v višini od 200.000 evrov do 500.000 evrov, pri čemer so ta sredstva namenjena v celoti za stroške novega partnerja, razen 10% pristojbine za koordinacijo, ki jo lahko prejme koordinator.

V okviru informacij na spletni strani objavljenega javnega razpisa najdete tudi seznam nekaterih že izbranih projektov stebra 2 in stebra 3 (EIC Iskalec), za katere so že bile podpisane pogodbe o sofinanciranju in nimajo partnerjev iz držav, ki zaostajajo na področju raziskav, razvoja in inovacij.

Odpiranje bo **10. 11. 2022** za katero je namenjenih 20 milijonov evrov.

Na spletni strani EU Funding and Tenders portal najdete [več informacij o javnem razpisu in pogojih za sodelovanje](#)

### **Seznam financiranih projektov v okviru 2. stebra Horizon Europe in EIC Iskalec:**

[List of funded projects under Horizon Europe pillar 2 and the EIC Pathfinder \(europa.eu\)](#)

### **Projekti, ki iščejo partnerje za vključitev v okviru HOP ON sheme:**

#### **5.1. [Risk and Resilience in Developmental Diversity and Mental Health](#)**

##### **Abstract**

Individuals with mental health (MH) conditions and their families, especially those with highly prevalent neurodevelopmental disorders (NDDs), are exposed to high levels of discrimination and stigma, which significantly affects their physical and mental well-being. Our world-leading collaborative group at the forefront of research in NDDs will launch a new project - 'Risk, Resilience and Developmental Diversity in Mental Health' (R2D2-MH). We propose a double paradigm shift to improve the wellbeing of people with MH conditions and their families. We will move (i) from risk-focused studies towards understanding and promoting resilience, and (ii) from a diagnosis-based approach to a developmental diversity approach that will define wellbeing and functioning across the human lifespan. R2D2-MH aims to identify genetic and environmental protective/resilience factors and how they influence developmental diversity and MH. We will investigate at multiple levels two highly prevalent early risks for MH conditions: prematurity and genetic liability for NDDs. Our project has four main ambitions 1. Provide the largest European multi-scale dataset on early human brain development and MH outcomes; 2 Identify biological mechanisms of resilience to the adverse effects of NDD; 3. Co-develop, with the stakeholders, new digital tools to increase participatory research/medicine and reduce stigma; 4. Establish predictive models to guide personalised interventions. R2D2-MH integrates interdisciplinary and complementary expertise across Europe, Israel, and Australia that covers ethics, epidemiology, sociology, genetics, cell biology, neuroscience, computational modelling, Information Technology, psychology, and psychiatry. Our research is highly engaged: it embeds participant and patient involvement in research to ensure that our expected outcomes are truly translational, and will help to reduce stigma and burden for individuals with MH conditions.

##### **Participants**

- INSTITUT PASTEUR - IP(999993080) - **COORDINATOR**
- STICHTING RADBOUD UNIVERSITAIR MEDISCH CENTRUM - RADBOUDUMC(892057785) - **BENEFICIARY**

- THE PROVOST, FELLOWS, FOUNDATION SCHOLARS & THE OTHER MEMBERS OF BOARD, OF THE COLLEGE OF THE HOLY & UNDIVIDED TRINITY OF QUEEN ELIZABETH NEAR DUBLIN - TRINITY COLLEGE DUBLIN(999845446) - **BENEFICIARY**
- COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES - CEA(999992401) - **BENEFICIARY**
- MAX-PLANCK-GESELLSCHAFT ZUR FORDERUNG DER WISSENSCHAFTEN EV - MPG(999990267) - **BENEFICIARY**
- JOHANN WOLFGANG GOETHE-UNIVERSITAET FRANKFURT AM MAIN - GUF(999978724) - **BENEFICIARY**
- ASSISTANCE PUBLIQUE HOPITAUX DE PARIS - (999645432) - **BENEFICIARY**
- BEN-GURION UNIVERSITY OF THE NEGEV - BGU(999846222) - **BENEFICIARY**
- AARHUS UNIVERSITET - AU(999997736) - **BENEFICIARY**
- ARTTIC INNOVATION GMBH - (893979743) - **BENEFICIARY**
- UNIVERSITEIT ANTWERPEN - UANTWERPEN(999902870) - **BENEFICIARY**
- LEARNENJOY - (890084417) - **BENEFICIARY**
- KAROLINSKA INSTITUTET - KI(999978530) - **BENEFICIARY**
- K I RESEARCH INSTITUTE RA - (889939305) - **BENEFICIARY**
- FONDAZIONE HUMAN TECHNOPOLE - (895748732) - **BENEFICIARY**
- UNIVERSITEIT TWENTE - UNIVERSITEIT TWENTE(999900833) - **BENEFICIARY**
- APLICA INVESTIGACION Y TRASLACION S. COOP. MAD. - (906263338) - **BENEFICIARY**

## 5.2. Reducing the impact of major environmental challenges on mental health

### **Abstract**

The environMENTAL project will investigate how some of the greatest global environmental challenges, climate change, urbanisation, and psychosocial stress caused by the COVID-19-pandemic affect mental health over the lifespan. It will identify their underlying molecular mechanisms and develop preventions and early interventions. Leveraging cohort data of over 1.5 million European citizens and patients enriched with deep phenotyping data from large scale behavioural neuroimaging cohorts, we will identify brain mechanisms related to environmental adversity underlying symptoms of depression, anxiety, stress and substance abuse. By linking population and patient data via geo-location to spatiotemporal environmental data derived from remote sensing satellites, climate models, regional-socioeconomic data and digital health applications, our interdisciplinary team will develop a neurocognitive model of multimodal environmental signatures related to transdiagnostic symptom groups that are characterised by shared brain mechanisms. We will uncover the molecular basis underlying these mechanisms using multi-modal -omics analyses, brain organoids and virtual brain simulations, thus providing an integrated perspective for each individual across the lifespan and spectrum of functioning. The insight gained will be applied to developing risk biomarkers and stratification markers. We will then screen for pharmacological compounds targeting the molecular mechanisms discovered. We will also reduce symptom development and progression using virtual reality interventions based on the adverse environmental features - developed in close collaboration with stakeholders. Overall, this project will lead to objective biomarkers and evidence-based pharmacologic and VR-based interventions that will significantly prevent and improve outcomes of environmentally-related mental illnesses, and empower EU citizens to manage better their mental health and well-being.

### **Participants**

- CHARITE - UNIVERSITAETSMEDIZIN BERLIN - (999992692) - **COORDINATOR**
- FREIE UNIVERSITAET BERLIN - Freie Universitaet Berlin(999994826) - **BENEFICIARY**



- ZENTRALINSTITUT FUER SEELISCHE GESUNDHEIT - (999889969) - **BENEFICIARY**
- UNIVERSITÄTSKLINIKUM SCHLESWIG-HOLSTEIN - UNIVERSITÄTSKLINIKUM SCHLESWIG-HOLSTEIN(999845349) - **BENEFICIARY**
- UNIVERSITETET I OSLO - UNIVERSITY OF OSLO(999975814) - **BENEFICIARY**
- UNIVERSITÄT POTSDAM - UP(999854855) - **BENEFICIARY**
- STICHTING RADBOUD UNIVERSITAIR MEDISCH CENTRUM - RADBOUDUMC(892057785) - **BENEFICIARY**
- INSTITUTE OF SCIENCE AND TECHNOLOGY AUSTRIA - IST AUSTRIA(996479740) - **BENEFICIARY**
- UNIVERSITAT DE BARCELONA - UB(999986387) - **BENEFICIARY**
- UNIVERSITÄTSKLINIKUM BONN - UKB(999867465) - **BENEFICIARY**
- LIFE AND BRAIN GMBH - (994637807) - **BENEFICIARY**
- KSILINK - (917396901) - **BENEFICIARY**
- UNIVERSITE D'AIX MARSEILLE - AMU(955518483) - **BENEFICIARY**
- VIRTUAL BODYWORKS SL - Virtual Bodyworks S.L.(916236490) - **BENEFICIARY**
- ARTTIC INNOVATION GMBH - (893979743) - **BENEFICIARY**
- FRIEDRICH-SCHILLER-UNIVERSITÄT JENA - UNIVERSITY OF JENA(999868726) - **BENEFICIARY**

### 5.3. Clinical validation of Artificial Intelligence for providing a personalized motor clinical profile assessment and rehabilitation of upper limb in children with unilateral Cerebral Palsy

#### *Abstract*

Unilateral Cerebral palsy (UCP) is the most common neurological chronic disease in childhood with a significant burden on children, their families and health care system. AInCP aims to develop evidence-based clinical Decision Support Tools (DST) for personalized functional diagnosis, Upper Limb (UpL) assessment and home-based intervention for children with UCP, by developing, testing and validating trustworthy Artificial Intelligence (AI) and cost-effective strategies. The AInCP approach will: i) establish a clinical diagnosis and accurate prognosis for treatment response of individual UCP profiles, by employing a multimodal approach including clinical phenotyping, advanced brain imaging and real-life monitoring of UpL function, and ii) provide personalized home-based treatment, from advanced ICT and AI technologies. The AInCP will build upon personalized diagnostic and rehabilitative DST (dDST and rDST) to be developed and validated through large observational and rehabilitation studies, including at least 200 and 150 children with UCP, respectively. Using data driven and AI approach, dDST and rDST will be combined for developing a theranostic DST (tDST) that will allow the re-designing of an economical, ethical, sustainable decision-making process for delivering a personalized and validated approach, focused on the care, monitoring and rehabilitation of UpL in children with UCP. AInCP is a significant example of a transdisciplinary approach, where all project collaborators (clinicians, data scientists, physicists, engineers, economists, ethicists, SMEs, children and parent associations) will work closely together in building the AInCP approach. This approach will, therefore, hinge on transdisciplinary contributions, multi-dimensional data, sets of innovative devices and fair AI-based algorithms, clinically effective and able to reduce users' and market barriers of acceptability, reimbursability and adoption of the proposed solution.

#### *Participants*

- UNIVERSITA DI PISA - UNIPI(999862712) - **COORDINATOR**
- Fondazione Stella Maris - (998105266) - **BENEFICIARY**
- UNIVERSIDAD DE CASTILLA - LA MANCHA - UCLM(999840208) - **BENEFICIARY**

- SCUOLA SUPERIORE DI STUDI UNIVERSITARI E DI PERFEZIONAMENTO S ANNA - SSSA(999884731) - **BENEFICIARY**
- NOLDUS INFORMATION TECHNOLOGY BV - NOLDUS(998559711) - **BENEFICIARY**
- FTS SRL - FTS(919522850) - **BENEFICIARY**
- KHYMEIA SRL - KHYMEIA GROUP(956172360) - **BENEFICIARY**
- TYROMOTION GMBH - TYM(968659267) - **BENEFICIARY**
- UNIVERSITA DEL SALENTO - UNILE(999863585) - **BENEFICIARY**
- KATHOLIEKE UNIVERSITEIT LEUVEN - KU Leuven(999991334) - **BENEFICIARY**

#### 5.4. HUMAN-ROBOT SENSORIMOTOR AUGMENTATION - WEARABLE SENSORIMOTOR INTERFACES AND SUPERNUMERARY ROBOTIC LIMBS FOR HUMANS WITH UPPER-LIMB DISABILITIES

##### *Abstract*

HARIA re-defines the nature of physical human-robot interaction (HRI), laying the foundations of a new research field, i.e., human sensorimotor augmentation, whose constitutive elements are: i) AI-powered wearable and grounded supernumerary robotic limbs and wearable sensorimotor interfaces; ii) methods for augmentation enabling users to directly control and feel the extra limbs exploiting the redundancy of the human sensorimotor system through wearable interfaces; iii) clear target populations, i.e., chronic stroke and spinal cord injured individuals, and real-world application scenarios to demonstrate the extraordinary value of the paradigm shift that HARIA represents in HRI and the great impact on the motivation to re-use the paretic arm(s), with consequent improvement of the quality of life. Supernumerary limbs will be partially controlled by artificial intelligence, and partially under the direct control of the human who gains the agency of some motion parameters of the supernumerary limbs. From the control point of view, it is fundamental to find the right trade-off between motion task parameters that are controlled by the user, and the level of robot autonomy. This interplay is enabled by the wearable sensorimotor interface that establishes a connection between the human sensorimotor system and the system of actuators and sensors of the robot, allowing reciprocal awareness, trustworthiness and mutual understanding. HARIA finds its natural application in assisting people with uni- or bi-lateral upper limbs chronic motor disabilities. Technology and methodology developments will follow a user-centered design approach, as only patients with disabilities are fully aware of their real (still unmet) needs in real life activities. This project will also go beyond the application to health, starting a new era of intuitive and seamless human-robot augmentation by wearable sensorimotor interfaces and supernumerary limbs.

##### *Participants*

- UNIVERSITA DEGLI STUDI DI SIENA - UNISI(999898020) - **COORDINATOR**
- FONDAZIONE ISTITUTO ITALIANO DI TECNOLOGIA - IIT(999596447) - **BENEFICIARY**
- KARLSRUHER INSTITUT FUER TECHNOLOGIE - KIT(990797674) - **BENEFICIARY**
- FONDAZIONE SANTA LUCIA - (999583449) - **BENEFICIARY**
- OTTOBOCK SE & CO. KGAA - OTTO BOCK HEALTHCARE GMBH(999941573) - **BENEFICIARY**
- LUNDS UNIVERSITET - (999901318) - **BENEFICIARY**
- TWENTE MEDICAL SYSTEMS INTERNATIONAL B.V. - TMSI(999649215) - **BENEFICIARY**
- SERVICIO DE SALUD DE CASTILLA LA MANCHA - SESCAM(998086060) – **BENEFICIARY**

## 5.5. CoreSense: A Hybrid Cognitive Architecture for Deep Understanding

### *Abstract*

Cognitive robots are augmenting their autonomy, enabling them to deployments in increasingly open-ended environments. This offers enormous possibilities for improvements in human economy and wellbeing. However, it also poses strong risks that are difficult to assess and control by humans. The trend towards increased autonomy conveys augmented problems concerning reliability, resilience, and trust for autonomous robots in open worlds. The essence of the problem can be traced to robots suffering from a lack of understanding of what is going on and a lack of awareness of their role in it. This is a problem that artificial intelligence approaches based on machine learning are not addressing well. Autonomous robots do not fully understand their open environments, their complex missions, their intricate realizations, and the unexpected events that affect their performance. An improvement in the capability to understand of autonomous robots is needed. This project tries to provide a solution to this need in the form of 1) a theory of understanding, 2) a theory of awareness, 3) reusable software assets to apply these theories in real robots, and 4) three demonstrations of its capability to a) augment resilience of drone teams, b) augment flexibility of manufacturing robots, and c) augment human alignment of social robots. In summary, we will develop a cognitive architecture for autonomous robots based on a formal concept of understanding, supporting value-oriented situation understanding and self-awareness to improve robot flexibility, resilience and explainability.

### *Participants*

- UNIVERSIDAD POLITECNICA DE MADRID - UPM(**999974844**) - **COORDINATOR**
- TECHNISCHE UNIVERSITEIT DELFT - TU Delft(**999977366**) - **BENEFICIARY**
- FRAUNHOFER GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN FORSCHUNG EV - FHG(**999984059**) - **BENEFICIARY**
- UNIVERSIDAD REY JUAN CARLOS - URJC(**999886283**) - **BENEFICIARY**
- PAL ROBOTICS SL - PAL ROBOTICS(**970666488**) - **BENEFICIARY**
- IRISH MANUFACTURING RESEARCH COMPANY LIMITED BY GUARANTEE - IRISH MANUFACTURING RESEARCH(**927973393**) - **BENEFICIARY**