

Maja Peharc

# ODPRTA ZNANOST V PROGRAMU OBZORJU EVROPA

Izmenjava dobrih praks na temo  
*Odprte znanosti v projektih centraliziranih evropskih programov*

17. marec 2026



REPUBLIKA SLOVENIJA  
MINISTRSTVO ZA VISOKO ŠOLSTVO,  
ZNANOST IN INOVACIJE



NAČRT ZA  
OKREVANJE  
IN ODPORNOST



Financira  
Evropska unija  
NextGenerationEU

Jaz, ko sem kot  
NKT za odprto  
znanost povabljeni  
na vaš dogodek ...



Vir:  
Serija Parki in rekreacija, sezona 4, 6. del

... vi, kot  
absolutni  
strokovnjaki za  
odprto znanost.



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<b>Sklepi Sveta o prihodnjem upravljanju evropskega raziskovalnega prostora (ERA) – NOVA ERA</b>	<b>Pakt za raziskave in inovacije v Evropi-PAKT</b>	<b>Prvi načrt politik ERA (2022-2024)</b>  <b>Drugi načrt politik ERA (2025-2027)</b>	<b>Obzorje Evropa 2021 - 2027</b>
<p>V teh sklepih je opisan <b>okvir upravljanja</b> za prenovljeni Evropski raziskovalni prostor (ERA) in postavljen temelj za izvajanje RI politik in pobud.</p>	<p>Pakt prvič doslej določa <b>načela</b> za raziskave in inovacije. Spodbuja skupno ukrepanje ter poenostavlja spremljanje in usklajevanje.</p>	<p>Načrt politik ERA je strateški instrument, ki državam članicam in Evropski komisiji <b>omogoča, da združijo moči in uskladijo svoja prizadevanja</b> za doseganje ciljev in ambicij ERA.</p>	<p>Program Obzorje Evropa pa kot <b>najmočnejši in najvplivnejši program financiranja</b> raziskav in inovacij v EU igra pri tem ključno vlogo.</p>

## 20 ukrepov iz načrta politik ERA 2022–2024

**Ukrep 1: Omogočiti odprto izmenjavo znanja in ponovno uporabo raziskovalnih rezultatov, vključno z razvojem evropskega oblaka odprte znanosti**

→ Uvesti **načela odprte znanosti** v sinergiji z drugimi ustreznimi ukrepi ERA in opredeliti najboljše prakse odprte znanosti s strani različnih skupnosti, da bi odprta znanost postopoma postala »nova normalnost«

→ Uvesti **ključne komponente in storitve EOSC**, združiti obstoječe podatkovne infrastrukture v Evropi in razviti okvire skupnosti za interoperabilnost raziskovalnih podatkov in nadzor kakovosti virov EOSC

→ Vzpostaviti **mehanizem za zbiranje podatkov in naložb**, politik, digitalnih raziskovalnih rezultatov, znanj in spretnosti na področju odprte znanosti in zmogljivosti infrastrukture, povezanih z EOSC, ter ga povezati z mehanizmom za spremljanje ERA

## 11 strukturnih politik in 8 ukrepov ERA 2025-2027

### STRUKTURNE POLITIKE

**Politika 1: Omogočanje odprte znanosti z deljenjem in ponovno uporabo podatkov, vključno z evropskim oblakom za odprto znanost (EOSC)**

### UKREP:

**Ukrep 1: Uporaba enakosti v odprti znanosti**

# ODPRTA ZNANOST V „OBZORJIH“ SKOZI LETA

2008 - 7. okvirni program	2014 – Obzorje 2020	2017 – Obzorje 2020	2021 – Obzorje Evropa	2028 – Obzorje Evropa
<i>Pilotna vpeljava odprte znanosti</i>	<i>Odprta znanost obvezna</i>	<i>Odprta znanost obvezna</i>	<i>Odprta znanost vključena v FP</i>	<i>Odprta znanost vključena v FP</i>
Arhiviranje in odprti dostop do publikacij	Arhiviranje in odprti dostop do publikacij Pilotno testiranje NRRP	Arhiviranje in odprti dostop do publikacij NRRP obvezen, z izjemami	Obvezne prakse Priporočene prakse	<b>Obvezne prakse?</b> <b>Priporočene prakse?</b>



# Zahteve odprte znanosti v Obzorju Evropa 21-27

ZAHTEVE ODPRTE ZNANOSTI			Opomba
UPRAVLJANJE S PODATKI OZ. NAČRTI RAVNANJA Z RAZISKOVALNIMI PODATKI	NRRP - Data Management Plan (DMP)	<b>OBVEZNO</b>	Eden prvih rezultatov projekta ( <i>deliverable</i> ).
PONOVNA UPORAVA N PREVERLJIVOST REZULTATOV RAZISKAV	Informacije o rezultatih, orodjih, instrumentih itn. ter dostop do podatkov, za validacijo raziskave.	<b>OBVEZNO</b>	Upoštevanje načel FAIR.
ODPRTO DELJENJE REZULTATOV RAZISKAV, PREKO REPOZITORIJEV	Odprti dostop do publikacij, podatkov, programske opreme, modelov, algoritmov itn. > vseh rezultatov raziskav.	<b>OBVEZNO</b>	Obvezno za objave, po principu „odprto kolikor mogoče, zaprto kolikor potrebno“. <i>Priporočljivo za vse ostale rezultate.</i>
ZGODNJE DELJENE RAZISKAV, PODATKOV ITN.	Pred-registracije, registracijska poročila, arhiviranje nerecenziranih verzij objav itn.	PRIPOROČLJIVO	
SODELOVANJE V ODPRTIH RECENZIJSKIH POSTOPKIH	Objava prispevkov v odprtih revijah ali platformah.	PRIPOROČLJIVO	Kot npr. Open Reserach Europe (ORE).
OBČANSKA ZNANOSTI	Vključevanje metod občanske znanosti v raziskovalno delo.	PRIPOROČLJIVO	Kot npr. crowd-sourcing, vključevanje v načrtovanje raziskav itn.

# PROJEKTNA PRIJAVA

## DEL A – „ADMINISTRATIVNI“ DEL

- 5 najbolj pomembnih preteklih objav, podatkovnih sklopov ali drugih dosežkov.
- Objave morajo biti v *odprtem dostopu*, podatki pa dostopni po načelu **FAIR** in „odprto, kolikor je mogoče, zaprto, kolikor je nujno“ – retroaktivna odprtost in dostopnost v repozitorijih.

<i>List of up to 5 publications, widely-used datasets, software, goods, services, or any other achievements relevant to the call content.</i>	
Type of achievement	Short description
[Publication]	Key elements of the achievement, including a short qualitative assessment of its impact and (where available) its digital object identifier (DOI) or other type of persistent identifier (PID).  Publications, in particular journal articles, are expected to be <b>open</b> access. Datasets are expected to be FAIR and 'as <b>open</b> as possible, as closed as necessary'.
[Dataset]	
[Software]	
[Good]	
[Service]	

# PROJEKTNA PRIJAVA

## DEL B – „VSEBINSKI“ DEL

- Obvezne prakse OZ se ocenjujejo v dveh kriterijih in morajo biti **KONKRETNO** navedene.
- Kriterij I. **ODLIČNOST**, v delu METODOLOGIJA
- Razlike glede na **tip** razpisa!

### RIA IA

- Describe how appropriate open science practices are implemented as an integral part of the proposed methodology. Show how the choice of practices and their implementation are adapted to the nature of your work, in a way that will increase the chances of the project delivering on its objectives *[e.g. 1 page]*. If you believe that none of these practices are appropriate for your project, please provide a justification here.

### CSA

- Describe how appropriate open science practices are implemented as an integral part of the proposed methodology. Show how the choice of practices and their implementation are adapted to the nature of your work, in a way that will increase the chances of the project delivering on its objectives *[e.g. 1 page, including research data management]*. If you believe that none of these practices are appropriate for your project, please provide a justification here.

# PROJEKTNA PRIJAVA

## DEL B – „VSEBINSKI“ DEL

### MSCA PF

- Open science practices: Describe how appropriate open science practices are implemented as an integral part of the proposed methodology. Show how the choice of practices and their implementation is adapted to the nature of your work in a way that will increase the chances of the project delivering on its objectives [1/2 page]. If you believe that none of these practices are appropriate for your project, please provide a justification here.

### MSCA DN MSCA SE MSCA COFUND

- Open science practices: Describe how appropriate open science practices are implemented as an integral part of the proposed methodology. Show how the choice of practices and their implementation are adapted to the nature of your work, in a way that will increase the chances of the project delivering on its objectives. If you believe that none of these practices are appropriate for your project, you should provide a justification.

### EIC Pathfinder EIC Transition

- Describe how appropriate open science practices are implemented as an integral part of the proposed methodology. Show how the choice of practices and their implementation are adapted to the nature of your work, in a way that will increase the chances of the project delivering on its objectives. If you believe that none of these practices are appropriate for your project, please provide a justification here.

ERC

EIC Accelerator

V metodologiji ni zahtev  
po praksah OZ!

# PROJEKTNA PRIJAVA

## DEL B – „VSEBINSKI“ DEL

- Kriterij III. KVALITETA IN UČINKOVITOST IZVEDBE, v delu ZMOGLJIVOST UDELEŽENCEV IN KONZORCIJA KOT CELOTE

RIA  
IA  
CSA

- Describe the consortium. How does it match the project's objectives, and bring together the necessary disciplinary and inter-disciplinary knowledge? Show how this includes expertise in social sciences and humanities, **open science practices**, and gender aspects of R&I, as appropriate. Include in the description affiliated entities and associated partners, if any.

MSCA DN  
MSCA SE  
MSCA Cofund

- Consortium composition and exploitation of participating organisations' complementarities: explain the compatibility and coherence between the tasks attributed to each beneficiary/associated partner in the action, including in light of their experience; Show how this includes expertise in social sciences and humanities, **open science practices**, and gender aspects of R&I, as appropriate.

MREŽA  
NACIONALNIH  
KONTAKTNIH TOČK  
Obzorje Evropa



# POGODBENE OBVEZNOSTI

Izbrani projekti se v GRANT AGREEMENTU zavežejo tudi k zahtevam ODPRTE ZNANOSTI:

UPRAVLJANJE Z RAZISKOVALNIMI PODATKI	ODPRTI DOSTOP TO ZNANSTVENIH PUBLIKACIJ
Upravičenec <b>mora</b> odgovorno <u>upravljati</u> z digitalnimi raziskovalnimi podatki, ki nastanejo tekom raziskave, <u>skladno z načeli FAIR</u> .	Upravičenec <b>mora</b> zagotoviti odprti dostop do recenziranih znanstvenih objav, ki so rezultat projekta.
Načrt ravnanja z raziskovalnimi podatki (NNRP) Repozitoriji Licence in izjeme Ponovna uporaba podatkov in metapodatkov	Repozitoriji Licence in avtorskopravna vprašanja Ponovna uporaba podatkov in metapodatkov Upravičeni stroški za odprti dostop

## Open Science

### Open science: open access to scientific publications

The beneficiaries must ensure open access to peer-reviewed scientific publications relating to their results. In particular, they must ensure that:

- at the latest at the time of publication, a machine-readable electronic copy of the published version or the final peer-reviewed manuscript accepted for publication, is deposited in a trusted repository for scientific publications
- immediate open access is provided to the deposited publication via the repository, under the latest available version of the Creative Commons Attribution International Public Licence (CC BY) or a licence with equivalent rights; for monographs and other long-text formats, the licence may exclude commercial uses and derivative works (e.g. CC BY-NC, CC BY-ND) and
- information is given via the repository about any research output or any other tools and instruments needed to validate the conclusions of the scientific publication.

Beneficiaries (or authors) must retain sufficient intellectual property rights to comply with the open access requirements.

Metadata of deposited publications must be open under a Creative Commons Public Domain Dedication (CC 0) or equivalent, in line with the FAIR principles (in particular machine-actionable) and provide information at least about the following: publication (author(s), title, date of publication, publication venue); Horizon Europe or Euratom funding; grant project name, acronym and number; licensing terms; persistent identifiers for the publication, the authors involved in the action and, if possible, for their organisations and the grant. Where applicable, the metadata must include persistent identifiers for any research output or any other tools and instruments needed to validate the conclusions of the publication.

Only publication fees in full open access venues for scientific publications are eligible for reimbursement.

### Open science: research data management

The beneficiaries must manage the digital research data generated in the action ('data') responsibly, in line with the FAIR principles and by taking all of the following actions:

- establish a data management plan ('DMP') (and regularly update it)
- as soon as possible and within the deadlines set out in the DMP, deposit the data in a trusted repository; if required in the call conditions, this repository must be federated in the EOSC in compliance with EOSC requirements
- as soon as possible and within the deadlines set out in the DMP, ensure open access — via the repository — to the deposited data, under the latest available version of the Creative Commons Attribution International Public License (CC BY) or Creative Commons Public Domain Dedication (CC 0) or a licence/dedication with equivalent rights, following the principle 'as open as possible as closed as necessary', unless providing open access would in particular:
  - be against the beneficiary's legitimate interests, including regarding commercial exploitation, or
  - be contrary to any other constraints, in particular the EU competitive interests or the beneficiary's obligations under this Agreement; if open access is not provided (to some or all data), this must be justified in the DMP
- provide information via the repository about any research output or any other tools and instruments needed to re-use or validate the data.

Metadata of deposited data must be open under a Creative Commons Public Domain Dedication (CC 0) or equivalent (to the extent legitimate interests or constraints are safeguarded), in line with the FAIR principles (in particular machine-actionable) and provide information at least about the following: datasets (description, date of deposit, author(s) and embargo); Horizon Europe or Euratom funding; grant project name, acronym and number; licensing terms; persistent identifiers for the dataset, the authors involved in the action, and, if possible, for their organisations and the grant. Where applicable, the metadata must include persistent identifiers for related publications and other research outputs.

# Annotated grant Agreement

## Open Science

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- immediate open access is provided to the deposited publication via the repository, under the latest available version of the Creative Commons Attribution International Public Licence (CC BY) or a licence with equivalent rights; for monographs and other long-text formats, the licence may exclude commercial uses and derivative works (e.g. CC BY-NC, CC BY-ND) and
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- as soon as possible and within the deadlines set out in the DMP, ensure open access — via the repository — to the deposited data, under the latest available version of the Creative Commons Attribution International Public License (CC BY) or Creative Commons Public Domain Dedication (CC0) or a licence/dedication with equivalent rights, following the principle 'as open as possible as closed as necessary', unless providing open access would in particular:
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# Ravnanje z raziskovalnimi podatki

- Upravičenci morajo z raziskovalnimi podatki, ustvarjenimi v okviru projekta, ravnati odgovorno, skladno s **FAIR ukrepi** in po načelu „**odprto kolikor mogoče, zaprto kolikor nujno**“.
- **Zahtevana sta dva pogoja:**
  - Vzpostavitev in redno posodabljanje **NRRP** – Načrt ravnanja z raziskovalnimi podatki.
  - Shramba in arhiviranje podatkov v zaupanja vrednem repozitoriju:
    - ❖ V najkrajšem možnem času in skladno z NRRP (repozitorij usklajen z EOSC).
    - ❖ Odprti dostop do podatkov v repozitoriju, skladen z odprto licenco (CC BY, CC0 ali enakovredne) po načelu „odprto kolikor mogoče, zaprto kolikor nujno“.
    - ❖ V repozitoriju zagotoviti informacije o kakršnih koli drugih rezultatih, orodjih in instrumentih potrebnih za validacijo in ponovno uporabo podatkov (reproducibility).



# Odprte objave

- V Grant Agreementu se upravičenci **zavežejo** k odprtem objavljanju.
- Upravičenci projektov Obzorje Evropa **morajo** zagotoviti odprti dostop do recenziranih znanstvenih publikacij (članki, monografije, ostale publikacije), ki se nanašajo na njihove rezultate.
- **Zlasti morajo zagotoviti:**
  - Da sta najpozneje ob objavi strojno berljiva elektronska kopija objavljane različice članka (VoR, Version of Record) ali končni recenzirani rokopis (AAM, Author Accepted Manuscript), sprejet za objavo, shranjena v zaupanja vrednem repozitoriju za znanstvene publikacije.
  - Takojšen odprt dostop do članka, označenega z odprto licenco (npr. CC BY ali z enakovredno) v repozitoriju.
    - Pri odprti objavi monografije ali ostalih obsežnejših publikacij se lahko uporabi odprta licenca, ki omejuje nadaljnjo komercialno uporabo ali izpeljava dela (npr. CC BY-NCM, CC BY-ND).



# Hvala za pozornost!



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