



# MuCol

A Design Study for a Muon Collier Complex  
at 10+ TeV Centre of Mass

Kick-off meeting

HORIZON-INFRA-2022-DEV-01-01

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*REA C.4*

# Research Infrastructures in Horizon Europe

## Pillar 1 Excellent Science

European Research Council

Marie Skłodowska-Curie Actions

**Research Infrastructures**  
EUR 2,4 bn

## Pillar 2 Global Challenges and European Industrial Competitiveness

- Clusters
- Health
  - Culture, Creativity and Inclusive Society
  - Civil Security for Society
  - Digital, Industry and Space
  - Climate, Energy and Mobility
  - Food, Bioeconomy, Natural Resources, Agriculture and Environment

Joint Research Centre

## Pillar 3 Innovative Europe

European Innovation Council

European innovation ecosystems

European Institute of Innovation and Technology

## Widening Participation and Strengthening the European Research Area

Widening participation and spreading excellence

Reforming and Enhancing the European R&I system

# Role Distribution



## DG Research and Innovation

- > Definition of Policies
- > Drafting the Work Programme



## European Research Executive Agency (REA)

'Reforming European Research & Innovation and Research Infrastructures',  
**Unit C4**

- > Implementation of calls for proposals
- > Grant Management



## Coordinator

- > Monitor that the action is implemented properly
- > Act as the intermediary for all communications with REA
- > Distribution of payments

# Research Infrastructures Work Programme 2021-2022

## *Destinations*

- **INFRA SERV:** RI services to support health research, accelerate the green and digital transformation, and advance frontier knowledge
- **INFRA TECH:** Next generation of scientific instrumentation, tools and methods and advanced digital solutions
- **INFRA DEV:** Developing, consolidating and optimising the European RI landscape, maintaining global leadership-*Research Infrastructure Concept Development- provision of integrated RIs services to enable R&I addressing major societal challenges*
- **INFRA EOSC:** Enabling an operational, open and FAIR EOSC ecosystem
- **INFRA NET:** Network connectivity in Research and Education – Enabling collaboration without boundaries

# Projects (HORIZON-INFRA-2022-DEV-01-01)

Project Acronym	Project Title
ARGOS-CDS	ARGOS Conceptual Design Study: Designing a next-generation radio facility for <b>multi-messenger astronomy</b>
DAESY	<b>DA</b> ta and services for the <b>Earth SY</b> stem science
ESSnuSBplus	Study of the use of the ESS facility to accurately measure the neutrino cross-sections for ESSnuSB leptonic CP violation measurements and to perform sterile <b>neutrino searches</b> and <b>astroparticle physics</b>
Euro GO-SHIP	Developing a Research Infrastructure concept to support <b>European hydrography</b>
EuroFAANG	A European infrastructure for <b>farmed animal genotype</b> to phenotype research
MDDB	Molecular Dynamics Data Bank. The European Repository for Biosimulation Data
MuCol	A Design Study for a <b>Muon Collider complex</b> at 10+ TeV center of mass
PRESTO	Pathfinder facility for a new class of precision-physics storage <b>rings Pathfinder</b> facility for a new class of PREcision-physics <b>STO</b> rage rings
PRO-GRACE	Promoting a <b>Plant Genetic Resource</b> Community for Europe
RITIFI	Research Infrastructure Technology Infrastructure For Impact
STRAITS	Strategic Infrastructure for improved <b>animal Tracking</b> in <b>European Seas</b>
WST	The Wide Field Spectroscopic Telescope

# Relevant European RIs, projects and programmes

## European Research infrastructures-ESFRI/ERICs

- **EuPRAXIA, HL-LHC and European Spallation Source-ERIC**

## European Projects, alliances

- **EURO-LABS** (INFRASERV)
- **IMPRESS** (INFRATECH)

## European Programmes

- to ensure interoperability with and availability of data to: **EOSC**

# Reporting guidelines-MuCol

# Periodic report

*MuCol: period 1 M1-24 (28/2/25), period 2 M25-48 (28/2/27)*

## WHEN

60 days after  
reporting period  
end

## WHAT

Periodic Report:

## HOW

via Portal

### 1. Technical report

- Prepared by the Coordinator
  - \* What was done and achieved?
  - \* Which problems were encountered?
  - \* How can progress so far be assessed?
  - \* Were there any deviations or corrective actions?

### 2. Financial report

- Individual financial statement
- Explanation of the use of resources and information on subcontracting
- The certificates on the financial statements (CFS)



# Periodic reporting: reviews



**Reviews** planned at the **end** of final reporting **period** (1 month after submission of reports). Article 21 of the GA  
*MuCol: months 27, 51*



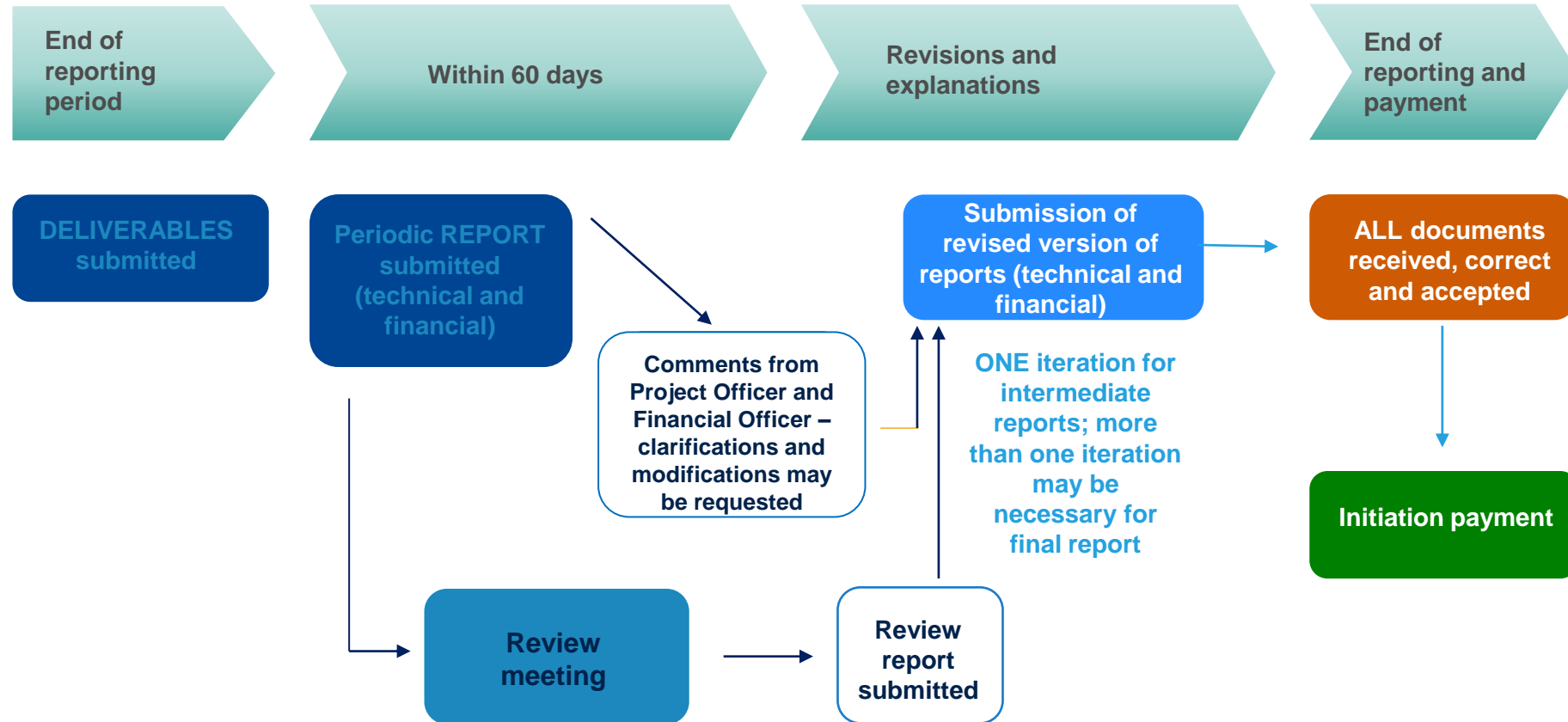
Present the **work carried out**, **main achievements** and **use of resources**.

Participation of the **coordinator** and **WP leaders**.



REA is assisted by external **expert(s)**

# Overview: Reporting and Monitoring



# Continuous Reporting – deliverables

**Project Continuous Report**

101058391 (HSBooster.eu) HORIZON-...  
 Call: HORIZON-WIDERA-2021-ERA-01  
 Topic: HORIZON-WIDERA-2021-ERA-01-32

**Deliverables and Other Reports**

Add actual delivery dates (or new due date for late deliverables, together with an explanation for the delay). In the Comments, please indicate if the deliverable was achieved as planned or not.  
 The labels used mean:  
 Public – fully open (automatically posted online on the Project Results platforms)  
 Sensitive – limited under the conditions of the Grant Agreement  
 EU classified – RESTREINT-UE/EU-RESTRICTED, CONFIDENTIEL-UE/EU-CONFIDENTIAL, SECRET-UE/EU-SECRET under Decision 2015/444

[Link to anti plagiarism tool](#)

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Work Pack	Deliverable	Deliverable Name	Description	Lead Br	Type	Disseminat	Due Date	New Due Date	Delivery Date	Approval Date	Status	Public	Private	Comments
WP1	D1.1	D1	Project Handbook		COMM	R	C-UE/EU	30 Apr 2022			Submitted	✓	✗	
WP1	D1.2	D2	DMP - Data Management Plan		DCU	R	PU	30 Apr 2022	17 May 2022		Submitted	✓	✗	
WP2	D2.1	D3	HSBooster.eu website		COMM	DEC	PU	31 May 2022	01 Jul 2022		Submitted	✓	✗	
WP2	D2.2	D4	Interim Call Monitoring Report		COMM	R	PU	31 Mar 2023			Pending			
WP2	D2.3	D5	Final Call Monitoring Report		COMM	R	PU	31 Mar 2024			Pending			
WP3	D3.1	D6	Services matrix		DS	R	PU	31 May 2022	31 Aug 2022		Pending			
WP3	D3.2	D7	Lessons learned and service repor		SGS Br	R	PU	31 Mar 2024			Pending			
WP4	D4.1	D8	Stakeholder Engagement plan		COMM	R	PU	30 Jun 2022	14 Jul 2022		Submitted	✓	✗	
WP4	D4.2	D9	Initial Standards Impact Report		DCU	R	PU	31 Mar 2023			Pending			
WP4	D4.3	D10	Intermediate Standards Impact Re		DCU	R	PU	30 Sep 2023			Pending			
WP4	D4.4	D11	Final Standards Impact Report		DCU	R	PU	31 Mar 2024			Pending			
WP5	D5.1	D12	Initial plan for dissemination, exp		COMM	R	PU	30 Sep 2022			Pending			
WP5	D5.2	D13	Recommendations Report - Frami		DS	R	PU	30 Nov 2023			Pending			
WP5	D5.3	D14	Sustainability and exploitation pl		UOB	R	PU	31 Mar 2024			Pending			
WP5	D5.4	D15	The HSBooster Training academy :		UOB	R	PU	31 Mar 2024			Pending			

**!!!! All HE deliverables flagged as 'PUBLIC' will be published in Cordis**

Be particularly attentive to quality of all public deliverables!

**Timing:** get in touch with REA PO if any delays anticipated

# Novelties in continuous reporting - HE

Coordinators' day autumn 2022

101058020 (AgroServ)	HORIZON-...	Project Summary	Researchers Involved in the project	Deliverables	Milestones	Critical Risks	Publications	Results	Disseminat... activities	Standards	Patents (IPR)	Communic... Activities	Datasets	Infrastruct...	Financial support to 3rd parties	Beneficiaries Feedback	Impact	Other Results	
Call: HORIZON-INFRA-2021-SERV-01 Topic: HORIZON-INFRA-2021-SERV-01-02																			

**Impact**

Impact Indicators	Citizen Engagement	Exploitation	Identified Bottleneck
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**I. Technology Readiness Level of The Project**

Applicable  Yes  No

At project start

Current status

Expected by Project end

**II. To what extent will the project results impact the following Sustainable Development Goals**

Climate Neutrality

Clean Water And Sanitation

Life Below Water

Life On Land

No Poverty

Zero Hunger

Good Health And Well-Being

**Title:** Horizon Europe Coordinators' Day on Grant Management

**Date:** 04 October 2022, from 09:30am to 12:40am (CET, Brussels time)

**Event video link:**  
[Horizon Europe Coordinators' Day: Grant Management \(4 October 2022\) - YouTube](#)

# Financial management: some advice

- Personnel Costs: **KEEP TIME RECORDS** of the hours worked on the action (if not working full time on an EU project)
- Meetings: collect participants' signatures (especially if you reimburse or claim travel costs)
- Any **subcontracting**?
  - If you need a subcontract which is not planned in the Description of Action, ask approval to the REA project officer **beforehand** as this may require an AMD
- Note to the coordinator **if one partner overspends**, it is up to the coordinator with the Consortium to decide internally how the EU contribution will be distributed (i.e. full amount if the overspending is due to anticipated work, or only the budget share agreed for the reporting period).

# Amendments

# Amendments

**Budget transfer** is allowed between **beneficiaries** and among existing **budget categories** without filing an amendment

**Action** to be implemented as described in Annex I

If the **change is significant**, an **amendment** to the GA is needed

**Grant agreement duration** is, as a rule, **not extended** (except Force Majeure)

**TIP**

Always contact the REA PO (Coordinator – PO) to discuss the typology and impact of change

## Amendment needed if:

- Change of **Annex 1** (description of action)
- Change of **Annex 2** estimated budget
- Change of **coordinator or its legal status**
- Change of the coordinator's **bank account** for payments
- Addition/removal of **linked third party**
- Change of action's **title**, acronym, **duration**, reporting **periods**
- Change of dissemination status of a deliverables (PU→SEN or SEN→PU)

# Communication, Dissemination, Exploitation



# Communication, dissemination and exploitation

## Communication: Promote your action and results

Inform, promote and communicate  
your activities and results

 **Reaching multiple audiences**  
Citizens, the media, stakeholders

### How?

- Having a well-designed strategy
- Conveying clear messages
- Using the right media channels

### When?

From the start of the action until the end


### Why?

- Engage with stakeholders
- Attract the best experts to your team
- Generate market demand
- Raise awareness of how public money is spent
- Show the success of European collaboration

**Legal obligation of your Grant Agreement**

## Dissemination: Make your results public

Open Science: knowledge and results (free of charge)  
for others to use

 **Only to scientists?**

Not only but also to others that can learn from the results:  
authorities, industry, policymakers, sectors of interest, civil  
society

 **How?**

Publishing your results on:

- Scientific magazines
- Scientific and/or targeted conferences
- Databases

 **When?**

At any time, and as soon as the action has results

 **Why?**

- Maximise results' impact
- Allow other researchers to go a step forward
- Contribute to the advancement of the state of the art
- Make scientific results a common good

**Legal obligation of your Grant Agreement**

## Exploitation: Make concrete use of results

Commercial, Societal, Political Purposes

 **Only by researchers?**

Not only, but also:

- Industry including SMEs
- Those that can make good use of them:  
authorities, industrial authorities, policymakers, sectors of  
interest, civil society

 **How?**

- Creating roadmaps, prototypes, softwares
- Sharing knowledge, skills, data

 **When?**

Towards the end and beyond, as soon as the action has exploit-  
able results

 **Why?**

- Lead to new legislation or recommendations
- For the benefit of innovation, the economy and the society
- Help to tackle a problem and respond to an existing demand

**Legal obligation of your Grant Agreement**

# Acknowledge EU Funding

**Article 17.2 of the Horizon Europe grant agreement:  
Visibility - European flag and funding statement**



**Funded by  
the European Union**



**Co-funded by  
the European Union**

Make sure to display the European flag (emblem), do not use the European Commission logo!

Find guidance and download the EU emblem: <https://europa.eu/!m83Myq>

# Disclaimer

Disclaimer GA art . 17.3 must be added in any publication/output:

” Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or [name of the granting authority]. Neither the European Union nor the granting authority can be held responsible for them.”

# How can REA support you?

Has your project won an important scientific award? Have you made a ground-breaking discovery and are featured in the press?

**Don't forget to inform your project officer!**

REA's Communication team can help promote by:

- Highlighting & multiplying your news and results through our own and the Commission's social media channels **(please tag us!)**
- Proposing your project's success story for inclusion in the European Commission's free-of-charge communication channels.

# Free-of-charge European Commission dissemination tools

## Research and Innovation success stories ●●●

A collection of the most recent success stories from EU-funded Research & Innovation.

## Horizon Dashboard ●●

An intuitive and interactive knowledge platform where you can extract statistics and data on EU Research and Innovation programmes – sorting by topics, countries, organisations, sectors, as well as individual projects and beneficiaries!

## CORDIS ●●●

Multilingual articles and publications that highlight research results, based on an open repository of EU project information.

## Horizon Results Booster ●●

A service free of charge in case you would like to apply to benefit from one of these services:

1. Portfolio Dissemination & Exploitation Strategy
2. Business plan development
3. Go-to-Market Support

## Horizon Magazine ●

The latest news and features about thought-provoking science and innovative research projects funded by the EU.

## Innovation Radar ●●

A data-driven method focused on the identification of high potential innovations and the key innovators behind them in EU-funded Research and Innovation projects.

## Horizon Impact Award ●

An annual prize to recognise and celebrate outstanding projects that have used their results to provide value for society. The award enables individuals or teams to showcase their best practices and achievements, and inspire beneficiaries of research and innovation funding to maximise the impact of their research!

## Horizon Results Platform ●●

A public platform that hosts and promotes research results thereby widening exploitation opportunities. It helps to bridge the gap between research results and generating value for economy and society. You can create your own page to showcase your results, find collaboration opportunities and get inspired by the results of others!

● Communication

● Dissemination

● Exploitation

# Open Science

# Open Research Europe

## Why Open Research Europe?

- **Support our open access policy** and beneficiary capacity to adhere to it and also enables **publishing post-grant**
- Leading by example in operationalising **open science principles** within scientific publishing and **enabling the European Research Area**
- Contribute to **transparency** and **cost-effectiveness** and explore **sustainable** open access publishing business models

## What is Open Research Europe?

- **A peer-reviewed publishing platform.** Not a repository. Post-publication peer-review model. First you publish, then review takes place. Publication and review reports open access under CC BY licenses. Optional service for our beneficiaries at no cost to them.





# Key points on open science in Horizon Europe

- Beneficiaries **must manage the digital research data** generated in the action responsibly, **in line with the FAIR (“Findable”, “Accessible”, “Interoperable”, Reusable”) principle**
- Establish + regularly update a **data management plan** (‘DMP’) for generated (and/or collected) data
- **Ensure open access ‘as open as possible, as closed as necessary’**

## Useful resources

- [Horizon Europe Annotated Model Grant Agreement](#)
- [Horizon Europe Data Management Plan Template](#) (under [reference documents](#) of the Funding and Tenders portal).



# Open access to publications

- Beneficiaries (or authors) **must retain sufficient intellectual property rights** to comply with the open access requirements
- Publication in venue of their choice but **publication fees are reimbursable only if publishing venue is full open access** (publication fees in hybrid venues are not reimbursed)
- Beneficiaries have the possibility to publish at no costs in [Open Research Europe](#), the European Commission open access publishing platform

# Audits

# Audits



**Audits** can be carried out during the entire lifetime of the project, by the European Commission, not later than 2 years after the payment of the balance.

Two types of audits: **financial** and/or **technical audits**



**Keeping records:** Keep a clear account of the project activities during the reporting period (Article 20 Grant Agreement).

Beneficiaries must keep **records and other supporting documentation up to 5 years** in order to prove the proper implementation and the costs declared as eligible.

# Links and useful information

# HE Online Manual

<https://webgate.ec.europa.eu/funding-tenders-opportunities/display/OM/Online+Manual>

## Grant management

- [Keeping records](#)
- [Amendments](#)
- [Reports & payment requests](#)
- [Deliverables & milestones](#)
- [Dissemination & exploitation](#)
- [Communicating your project](#)
- [Acknowledgement of EU funding](#)
- [Checks, audits, reviews & investigations](#)

# Useful links

[HE Annotated Model Grant Agreement](#)

[Guidance on social media for EU funded R&I projects](#)

[Horizon Europe – Funding Programme for Research and Innovation](#)

[Factsheet ‘Open Science in Horizon Europe’](#)

[Communication on ‘A new ERA for Research and Innovation’](#)

[Pact for Research and Innovation in Europe](#)

# Keep in touch



[ec.europa.eu/info/research-and-innovation\\_en](https://ec.europa.eu/info/research-and-innovation_en)



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[EUTube](https://www.youtube.com/EUTube)



[EU Spotify](https://www.spotify.com/eu)

# Thank you

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# Extra-Slide

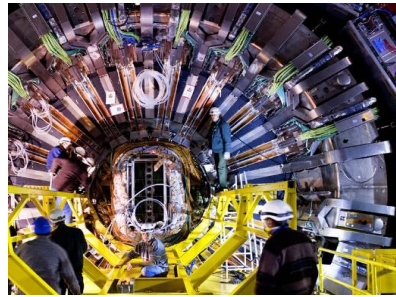
# Research Infrastructures

**Facilities providing resources and services** for research communities to conduct research and foster innovation (single site, distributed, virtual). They provide **access to external users**.

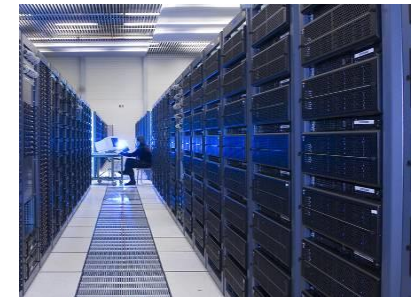
*Knowledge-related facilities*



*Major scientific equipments*



*ICT infrastructures*



e.g.: archives, collections, data infrastructures, telescopes, research vessels, FEL, computing systems, communication networks

*Inter alia, RIs contribute to:*

- ✓ Extend the frontiers of knowledge
- ✓ Exchange and transmit knowledge
- ✓ Train the next generation of top researchers
- ✓ Support industrial innovation