# HEARTS 1st Annual Meeting: WP2

## Communication

6 February 2024

https://indico.cern.ch/event/1314502/



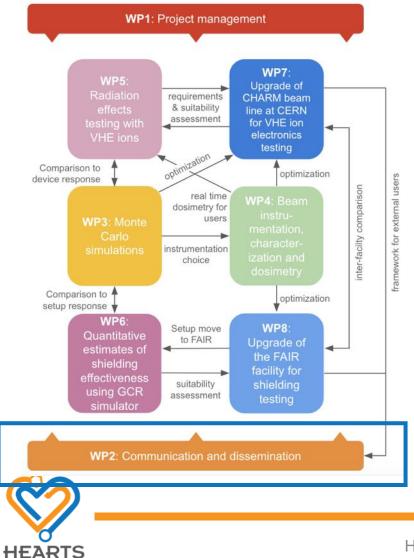
Funded by the European Union

HEARTS is a project funded by the European Union under GA No 101082402, through the Space Work Programme of the European Commission.



#### Antoine Le Gall (CERN)

### **Tasks & Objectives**



Main objectives:

- Maximise the project's impact on the economical, societal, commercial, industrial, technical and scientific levels.
- Dissemination of the R&D achieved within the project and about knowledge transfer to external parties.

2



### **The Communication setup**

- Internal and external communication
   → Antoine Le Gall, CERN
- Information flow management → Pablo Lopez, CERN

With support for:

- Website Management → Dávid Lucsányi, CERN
  - External communication
- External communication
   Xaor Aquiar CEPN
  - $\rightarrow$  Ygor Aguiar, CERN





• 2.1. Communication



- 2.2. Dissemination and outreach M1-M48
- 2.3. Knowledge transfer

M24-M48



- Three related topics: radiation to electronics, radiobiology, shielding.
  - Yet, different communities, different target audience, different events.
- Summary of the first year:
  - No big results for the moment.
  - Communication on TRL increase, job offers, first meetings and events.
  - Highlight at the end of the year: HEARTS@CERN Run.



- ~60 project members from 5 partners with new tools for some:
  - 19 dedicated egroups for WPs, management and ad-hoc topics.
  - 30 HEARTS meetings via Indico.
  - 43 HEARTS documents on EDMS.



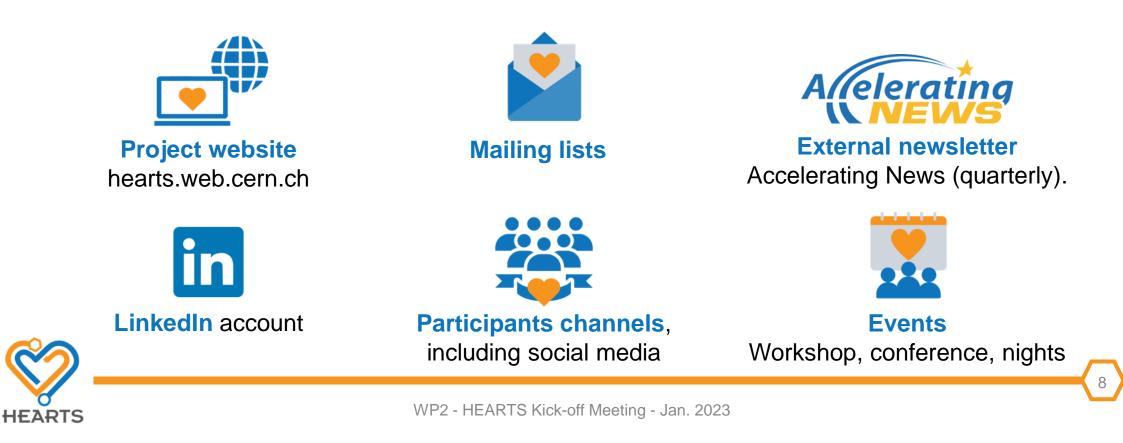
### **Communication plan**

	DRIVERS	DESIRED OUTCOMES	MESSAGES	CHANNELS
Project participants	<ul><li>Community spirit</li><li>Career development</li></ul>	<ul> <li>Inform/report on the project's progress.</li> <li>Build synergies between WPs.</li> </ul>	<ul> <li>Many of your activities might have synergies with other WPs.</li> <li>They might also be interesting to the communication WP!</li> </ul>	<ul> <li>Website</li> <li>Internal newsletter</li> <li>External newsletter</li> <li>Annual events</li> </ul>
Industry Prime-contractors New Space actors	<ul><li>Innovation</li><li>Job creation</li><li>Collaboration</li></ul>	<ul> <li>Increase visibility of the project and dissemination of results.</li> <li>Enhance access to irradiation facilities.</li> <li>Attract new users and customers.</li> </ul>	<ul> <li>HEARTS is ensuring that space technology does not lag behind what's available on Earth.</li> <li>By providing dedicated facilities in Europe, HEARTS is enhancing the competitiveness of the European space industry.</li> </ul>	<ul> <li>Website</li> <li>Social media</li> <li>Media</li> <li>External newsletter</li> <li>Events (conferences, workshops, annual events, industry events)</li> </ul>
Academia Electronics design New applications Pharma for long-term spaceflight	<ul> <li>Scientific excellence</li> <li>Peer recognition</li> <li>Funding</li> </ul>	<ul> <li>Increase visibility of the project and dissemination of results.</li> <li>Attract new users and customers.</li> <li>Attract students towards radiation research disciplines.</li> </ul>	<ul> <li>HEARTS is providing cost-effective radiation qualification approaches.</li> <li>HEARTS is are fostering the use of advanced electronics in space.</li> <li>HEARTS is are enhancing the human exploration of space by fostering solutions reducing the health impact of radiation.</li> </ul>	<ul> <li>Website</li> <li>Social media</li> <li>Media</li> <li>External newsletter</li> <li>Events (conferences, workshops, annual events, industry events)</li> <li>Publications in journals.</li> </ul>
Decision makers	<ul> <li>Scientific excellence</li> <li>European independence</li> <li>Economic/societal impact</li> </ul>	<ul> <li>Justify investment in radiation testing infrastructure development.</li> <li>Motivate follow-ups projects.</li> </ul>	<ul> <li>Space is a hazardous environment for both satellite's electronics and space crews. HEARTS will provide two facilities capable of mimicking the effects of galactic cosmic rays.</li> <li>HEARTS is enhancing the competitiveness of the European space industry.</li> <li>HEARTS will be instrumental at ensuring European space sovereignty.</li> </ul>	<ul> <li>Social media</li> <li>Media</li> <li>Events (protocol visits, annual events, industry events, EU researcher nights)</li> <li>Website</li> </ul>
General public	<ul> <li>Scientific excellence</li> <li>Economic/societal impact</li> <li>(for students) Career development</li> </ul>	<ul> <li>Raise awareness about the challenges of space radiation.</li> <li>Increase visibility of the project and outreach of results.</li> <li>Attract students towards radiation research disciplines.</li> </ul>	<ul> <li>HEARTS is enhancing the human exploration of space by fostering solutions reducing the health impact of radiation.</li> <li>HEARTS is enabling news technologies capable of empowering satellite activities for climate change purposes and much more.</li> <li>(for students) Take part in building the satellites of tomorrow and allowing space exploration!</li> </ul>	<ul> <li>Social media</li> <li>Media</li> <li>Events (open days, EU researcher nights, visits)</li> <li>Website</li> </ul>



Dissemination & outreach / External & internal communication

 Communication and Dissemination Plan created with specific strategy for the following channels:



#### HEARTS 1st Annual Meeting - 6 February 2024



- **Comment:**

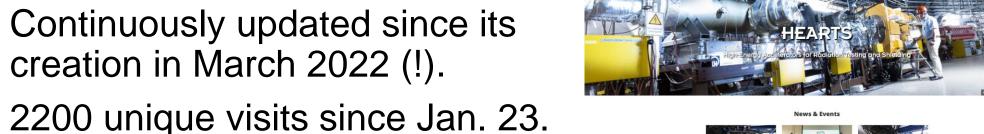
**HEARTS Website** 

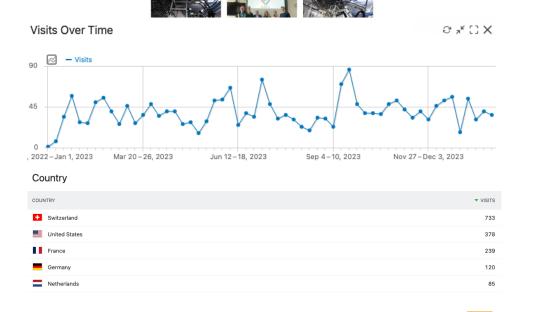
spikes at 230.

creation in March 2022 (!).

- 6800 pageviews (4000 uniq.).
- Around 150 monthly visits, with

Number to increase once calls are



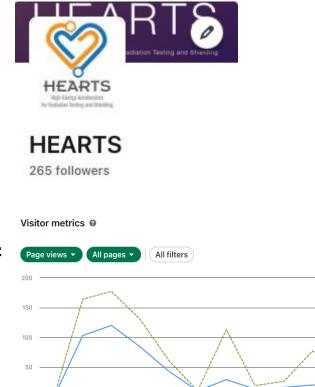




9

### **HEARTS Social Media (LinkedIn)**

- Dedicated communication strategy.
- Some numbers:
  - >265 followers.
  - >1300 page views.
- Comments:
  - Difficulties to find content at the early stage of the project (no big updates, no call to users).
  - Plans to engage more from this year (one post per month at least).



May 1

Jul 1

Sep

Nov '

Jan 24

Mar





# Articles and social media by partners

#### HEARTS innovates to foster European access to space

The EU-funded project HEARTS aims at providing access to high-energy heavy ion radiation testing facilities for space exploitation and space exploration

5 APRIL, 2023 | By Antoine Le Gall





Ring accelerator SIS18



CERN 395,432 followers 10mo • 🕲

#DidYouKnow that satellites can be tested at CERN?

Space is an extremely radioactive environment for satellites. Space particles, especially the ones at the highest energies, can be damaging to advanced electronics. CERN is one of the places where you can replicate the effect of these particles in facilities on Earth to test electronics.

CERN is leading HEARTS, an EU-funded project, to provide access to highenergy heavy ions radiation testing facilities for space exploitation and space exploration.

The project will be instrumental in ensuring European access to space.

#### Read more: https://lnkd.in/eNZiggGV

#HaDEA European Health and Digital Executive Agency (HaDEA)





Funded under the **#Horizon #Europe** programme, **HEARTS** (High-Energy Accelerators for Radiation Testing and Shielding) aims at developing and establishing a European infrastructure for research and industrial access to high-energy heavy ion facilities for the fields of radiation effects in electronics, shielding and radiobiology.

Started last January, **#HEARTS** will enable testing high-end **#microelectronics #technology** for novel space applications, as well as for shielding and **#radiobiology** experiments that will foster human space exploration.

**#HEARTS** will be instrumental to ensure Europe's autonomous access to space. With very-high energy ion facilities available in Europe, European companies will be less dependable on critical facilities available elsewhere. By the end of the project in 2026, HEARTS will make it possible for Europe to easily accommodate the current demand for very-high energy ions and to meet the increasing demand that is foreseen by the end of the decade.

The project is a collaboration between CERN and GSI Helmholtz Centre for Heavy Ion Research, as #ion accelerator infrastructures, the Università degli Studi di Padova of Padova (Dept. of Information Engineering, #RREACT group), with prof. Marta Bagatin as Unit Leader and Prof. Simone Gerardin as WP Leader as academic partner, Thales Alenia Space and Airbus Defence and Space as industrial participants, all of which have extensive experience in the field of radiation effects and a strong interest in heavy ion testing.

The role of **#UniPD** is to perform experiments and Monte Carlo simulations to study the suitability of high-energy beams to test electronic devices with

CERN Innovation Partnerships 3,833 followers 1mo · S

...

14 projects to contribute to European technological excellence.

CERN is an active participant in the **#Horizon2020** and **#HorizonEurope** programmes, particularly in projects supporting the use of CERN technologies outside particle physics in areas such as **#healthcare**, energy and the environment.

. . .

Among 60+ European-funded projects running at CERN, 14 have a strong technology-transfer component and many are coordinated by CERN, such as:

ATTRACT EU brings together Europe's fundamental research and industrial communities to lead the next generation of detection and imaging technologies.

The **PRISMAP Project** federates a European consortium of labs and institutes for the production of medical high-purity **#radionuclide**.

RADNEXT offers to industry and research a free access to a Europe-wide network #RadiationTesting facilities.

HEARTS develops two radiation-testing facilities specifically tailored for the needs of **#space** users to study the effects of radiation on electronics, shielding and radiobiology.

Do you know any other EU-funded project coordinated by CERN?

▲ Comment below your guesses!



### **Big communication moment: CERN Heavy-Ion Run**

- 52-minute live on all CERN channels on 2 November 2023 with representatives from all CERN experiments and HEARTS.
  - YouTube:
    - >260 simultaneous viewers (usually 50-100 on CERN channel)
    - 9,1K total views.
    - >200 messages.
  - LinkedIn:
    - 16k total views.
    - >200 messages.





### **HEARTS @ Events**

- HEARTS was present at:
  - EUCASS-CEAS, Lausanne, CH.
     >100 people passing by.
     ~15 conversations.
  - NSREC 2023, Kansas City, USA.
     >300 people passing by.
     ~30 conversations.
  - RADECS 2023, Toulouse, FR.
     >200 people passing by.
     ~30-40 conversations



#### **Communication kit**

(Leaflet, roll-up, presentation, video, stickers)



#### **HEARTS @ Events**







### **Knowledge Transfer**

#### CERN, GSI

- Support wider exploitation with connected industries (space, medical, accelerators).
- Exploitation plan set to render the knowledge built with the project accessible and easier to standardise.
- Two webinars to be organised with interested industrial stakeholders to present would-be technologies.



#### **Deliverables due in Y1**

Deliv. No.	Deliverable name	Due date	Status	Summary
D2.1	Communication and dissemination plan	2023-06-30	Achieved	Communication objectives, messages, vectors, "hooks" and timeline. Includes descriptions of channels and social media strategy.
D2.2	Exploitation and data management plan	2023-12-31	Achieved	How the consortium will proceed for valorisation of key exploitable results. Description of knowledge transfer procedures.



The achieved deliverables are available on HEARTS website page:

https://hearts-project.eu/project/deliverables/

16

#### **Milestones due in Y1**

Milest. No.	Milestone name	Due date	Status	Summary
M09	Project website launched, with update and maintenance plan	2023-02-28	Achieved	/
M10	Project social media launched	2023-03-31	Achieved	/

The achieved milestones are available on HEARTS website page:

https://hearts-project.eu/project/milestones/



### **Upcoming Deliverables & Milestones**

Deliv. No.	Deliverable name	Due date	Status
D2.3	Knowledge transfer turnover report	2025-12-31	Pending
D2.4	Final report on communication, dissemination, outreach and exploitation	2026-12-31	Pending

#### No upcoming milestone.





#### **Plans for the future**

#### • Actions for Y2:

- Advertise beam time (social media, webpage, dedicated leaflet).
- Give life to social media (Open calls, Valentine's Day, International Day of Human Space Flight, Europe Day, World Space Week).
- Events:
  - 20-21 March: EU R&I Days (usually in September!).
  - 22-26 July: NSREC 2024.
  - 16-20 September: RADECS 2024.
  - Other for radiobiology and shielding?





Insert Video

## 

#### HIGH RADIATION

HEARTS is a project funded by the European Union under GA No 101082402, through the Space Work Programme of the European Commission.

# HEARTS



Funded by the European Union

#### **Strategy and Planning**

- Basics: Logo, presentation template, images.
- Communication plan (messages, contacts, etc.).
- Communication calendar (events, major milestones).
- Social media strategy.

HEARTS

**Communication material** 

#### **Communication channels**

- Mailing lists, Indico, CERNbox, EDMS to set up.
- Project website to design and develop.
- Project LinkedIn to design and develop.
- Category in Accelerating News.

22

Introduction video