



EPN 2024 RI

EUROPLANET 2024 Research Infrastructure

H2020-INFRAIA-2019-1

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Dissemination level2 PU

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Contributing beneficiaries: DFET, BSSL, ACRI-ST, Wigner, UNIBO, ESF, VU,

IWF-OEAW, EILST, NORR, INAF

Document status: Draft

Start date of project: 01 February 2020. Duration: 48 months Project Co-ordinator: Prof Nigel Mason, University of Kent

Executive Summary / Abstract:

As the main platform for dissemination for the Europlanet 2024 RI project, Networking Activity 1 (NA1 - Community Support, Dissemination and Engagement with Stakeholders) aims to foster a culture of co-operation between Europlanet 2024 RI and its stakeholders, and to extend the user base of the project's facilities and services. The Work Package (WP) is organised around nine tasks that target dissemination, communication and engagement with specific audiences.

- 1. Nature: R = Report, P = Prototype, D = Demonstrator, O = Other
- 2. Dissemination level:

PU PP RE CO

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Confidential, only for members of the consortium (excluding the Commission Services)



With travel restrictions due to the Covid-19 pandemic lifting during Year 3 of the project, there has been a new focus on in-person activities, although hybrid and virtual opportunities have also been exploited. In particular, the Europlanet Science Congress (EPSC) 2022 in Granada, held as an in-person meeting for the first time in three years, has been a key focus for dissemination of Europlanet 2024 RI activities.

Highlights of the year have included:

- A Dinner Debate co-organised by the Industry and Policy teams in the European Parliament, which included participation by two Members of the European Parliament (MEPs), representatives of the Commission, the Director General of the European Space Agency and other high level space agency personnel and representatives of academia and industry.
- Exhibition stands at the EPSC2022, the European Astronomical Society Annual Meeting (EAS) 2022 in Valencia and the EuroScience Open Forum in Leiden, where the activities of Europlanet 2024 RI were promoted.
- The launch of a programme to support researchers in Ukraine, with 10 visits completed.
- Workshop organised by the Global Collaboration team in Addis Ababa in December 2022 that attracted 38 members of the space community in Africa and a workshop for 65 school students.
- Two new issues of the biannual Europlanet Magazine, featuring several articles on Europlanet 2024 RI activities, and distribution of printed copies of the first three editions.
- The Expert Exchange programme catching up to the expected point for the project, with 17 visits approved and 11 taking place during the last 12 months.
- The Mentoring Programme exceeding the target for the project of 50 active matched pairs.
- A third internship programme, which took place during EPSC2022, for early career researchers to develop skills in working with the media and social media.
- A widespread consultation of international teachers about the changing demands for educational resources and training following the disruption of the pandemic.
- Commencement of work on a major virtual exhibition about Mars Sample Return.



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1. Explanation of NA1 Work & Overview of Progress

The Work Package (WP) is organised in nine tasks that target dissemination, communication and engagement with specific audiences (see Figure 1).

Figure 1: NA1 Tasks



a) Objectives

The main objectives for each of the nine NA1 Tasks are listed in Table 1.

Table 1: Main Objectives of each NA1 Task

Task	Lead Beneficiary	Main Objectives
Management	UNIKENT	 To provide overall management of the WP, including: Organising WP internal and review meetings Facilitating cross-task collaboration Liaising with other WPs and Europlanet 2024 RI management Ensuring compliance with Europlanet diversity and communication strategies Coordinating activities with the Europlanet Society.
• Industry	BSSL, ACRI- ST	To foster industry-academia interactions by: • Developing a network of companies interested in working closely with planetary science academics



Widening Participation	Wigner, VU	 Developing and maintaining a Europlanet database of EU space-sector companies Delivering workshops Supporting early-career networking events and workshops Using EPSC as a catalyst for industry-academia interactions Initiating discussions with the Europlanet Hub Network in the context of industry activities. To widen participation from countries currently under-represented in the European planetary community by: Increasing the visibility of under-represented planetary scientists Increasing their involvement in Europlanet's programs, their awareness and usage of Europlanet's infrastructure. Supporting a programme of visits for Ukrainian researchers to carry out research, build new collaborations and develop additional skills.
Global Collaboration and Integration Development	UNIBO, ESF	To strengthen and expand the European planetary science community by providing opportunities for international engagement through: • Organising workshops to promote engagement and inclusive growth in emerging space nations, in particular in African and South American countries where TA1 infrastructures are located • Administering an Ambassadors' programme to support community-led promotion of Europlanet and European planetary science • Defining conditions for a pilot TA programme for reciprocal access to facilities offered through Europlanet 2024 RI and project beneficiaries in China and Korea.
• Expert Exchanges	FMI	To provide focused support for the community to develop new collaborations and share expertise, particularly in the context of: • Facilities wishing to develop sites for inclusion in future TA programmes • Early-career scientists and applicants from under-represented countries • Cooperation between academia and industry.
Early Career Training and Education	VU, IWF- OEAW	To support graduate students and early career professionals (typically <7 years after the last MSc or PhD degree) in the field of planetary sciences by: • Supporting the Europlanet Early Career (EPEC) Annual Week • Organising meetings, training workshops and summer schools, particularly in under-represented states • Offering mentorship by more experienced members of the community.
Europlanet Media Centre	DFET	To promote the socioeconomic impact of Europlanet 2024 RI and planetary science in Europe by: • Issuing press releases on newsworthy results from Europlanet activities and results presented at the Europlanet Science Congress • Maintaining an active presence on Twitter, Facebook and YouTube • Administering a media internship programme • Providing training for the Europlanet Regional Hubs and the EPEC network to develop distributed capabilities for media and social media engagement • Sustainability planning for the Europlanet Media Centre.
Policy Engagement	EILST	To engagement with European policy makers by: Identifying key events and priorities in the European Parliament and opportunities for Europlanet to highlight the importance and relevance of planetary science and related industry Maintaining and developing communication channels with Members of the European Parliament and European Commission,



		 as well as high-level representatives of ESA, NASA and other space agencies Participating in policy events and conferences Working strategically on policy activities with other related organisations (e.g. the European Astronomical Society, European Geosciences Union, distributed research infrastructures) Supporting the Europlanet Regional Hubs in developing policy links at a local and national level.
 Education 	VU, DFET,	To support the planetary community in engaging with citizens and
and	INAF, NHM	inspiring the next generation with STEM by:
Inspiration		Providing training for outreach providers
		Developing and distributing educational resources linked to
		Europlanet 2024 RI and planetary topics
		Building a community of users for the Planets in a Room (PIAR)
		spherical projector and promoting its use as an education tool
		Developing a virtual exhibition on Mars Sample Return.

Table 2: Deliverables for WP11 in Year 2 of the project

Deliverable	Description	Due	Delivery Date
D11.3	NA1 2 nd Annual Report	Month 24	31 January 2022

Table 3: Milestones for WP11 in Year 2 of the project

Milestone	Description	Due	Delivery Date
MS52	3 nd Industry workshop	Month 24	21 September 2022
MS53	3 rd Widening participation workshop	Month 24	19 September 2022
MS28	2 nd Global collaboration workshop	Month 52	16 December 2022
MS56	Media internship	Month 36	24 September 2021

^{*} TMS55 and future MS will be renamed from EPEC Annual Week to Early Career Workshops to allow for greater flexibility,

b) Explanation of the work carried in WP

Task 11.1 – Management

Lead: Anita Heward (UNIKent). Deputies: Susmita Datta (UNIKent), Livia Giacomini (INAF).

In Year 3 of the project, the NA1 Management team has organised bimonthly virtual meetings with Task Leaders to discuss progress and identify any issues arising within the Work Package (WP). Activities and requests for input have been communicated within the Europlanet 2024 RI project to the Management Team via weekly meetings, to other WP leaders via monthly Project Management Committee (PMC) meetings, and to all beneficiaries via presentations at the Council Meeting in September 2022.

News, updates and opportunities resulting from NA1 have been disseminated to the wider planetary community each month via the Europlanet newsletter, which currently has 2121 recipients. Regular items on NA1 have been featured in the RI News, Open Calls, Early Career and Training Opportunities, Funding Opportunities and Policy Reports segments of the newsletter.

A major focus for NA1 in 2022 was on providing bursaries for target groups (early careers, researchers from under-represented countries in Europe and Africa, educators and outreach



providers). This involved several tasks in NA1 and NA2 and was coordinated by NA1 Management in collaboration with WP1 Management. In total, 192 bursaries were offered through NA1 funding at a cost of €110,820 (although a few were not taken up in the end as applicants could not attend the meeting due to Covid, travel disruption or other unforeseen circumstances).

Key performance indicators, metrics and opportunities for case studies have been gathered and shared with the Evaluation Officer.

Oral presentations on the impact of Europlanet 2024 RI activities were given at <u>EPSC2022</u> in Granada and in a <u>session and panel discussion</u> at the International Conference on Research Infrastructures (ICRI) in Brno in October 2022.

Task 11.2 - Industry

Lead: Marcell Tessenyi (BSSL). Deputy: Jeronimo Bernard-Salas (ACRI-ST).

A core objective of the Europlanet 2024 RI project is to increase collaborations between planetary science's academic community and industry.

Efforts in Year 3 of the project have focused on collaborations with the Policy Team (Task 11.8) in organising sessions at EPSC2022, events in the European Parliament and regenerating the network of Industry Officers within the Regional Hubs. The Industry Team has analysed responses to the survey issued during Year 2 about the experiences and priorities of the planetary community in working with companies outside academia. The results were published in Issue 3 of the Europlanet Magazine.

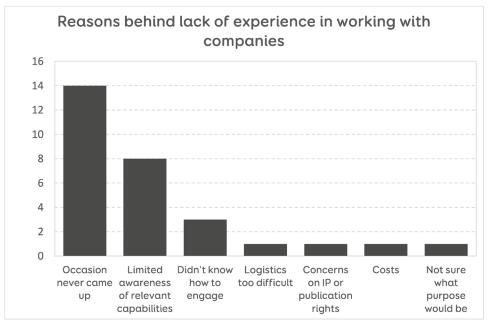


Figure 2: Preliminary results from the industry survey.

Work has continued on the online database to help planetary scientists find companies that could be relevant to their research areas. Due to technical issues, this has been at a relatively low level in Year 3, but it will be a major focus in Year 4, with the network of Hub Industry Officers checking the content. An inter-hub call was held on 19 January 2023 to discuss the input.



In collaboration with Task 11.8 Policy, a high-level session on Industry and Policy was organised at EPSC2022 (on 22/09/22). The session was held as splinter meeting to ensure that industry participants were not deterred by the abstract submission system and fees, and attracted participants from academia, industry and public bodies. The session was delivered in 2 parts. It started with a session to gather the views from the Europlanet regional hubs with the perspectives of academic community members involved in industry and policy activities, and then a panel discussion with industrial and public sector representatives.

The Industry Team (Jeronimo Bernard-Salas) and the President Elect (Ann-Carine Vandaele) and Treasurer of the Europlanet Society (Didier Moreau) also participated in a Dinner Debate on space traffic management organised by the Friends of Europe (FoE) group in Brussels on 9 November 2022. It was co-hosted by FoE and ESA (Michael Praet, Head of Office). There were about 30 participants including MEPs, NATO representatives, lawyers and admin offices for some companies. Ann-Carine introduced Europlanet, and Jeronimo spoke about the aims of Europlanet's activities in policy and industry in bringing together policymakers, planetary researchers, and entrepreneurs to debate the future of planetary and space research in Europe, and how these activities can support evidence-based policy, informing policymakers on the scientific, industrial and socio-economic impacts of planetary science, at European and national level.

A Dinner Debate in the European Parliament, hosted by MEP Niklas Nienass, was also organised by the Industry and Policy teams. For details, see Task 11.8

Task 11.3 – Widening Participation Lead: Andrea Opitz, Wigner Institute

In Year 3 of the project, activities have focused on EPSC2022 in Granada. Bursaries were offered to 26 researchers from Under-Represented States (URS) to cover abstract processing fees, registration fees and travel costs for attending the meeting.

The Widening Participation team co-organised a session on <u>Diversity and Inclusion in Planetary Science</u> at EPSC2022, and gave an oral presentation on <u>Participation Trends and Geographical Diversity in Earth and Space Science</u>. The Widening Participation Officer also participated in the Diversity and Inclusion Community Splinter Meeting at EPSC2022 on 23 September 2022, which was attended by about 35 participants and discussed challenges faced by members of the community from Under-Represented States (URS).

There have been some delays caused by changes in the legal entity that will deliver a Massive Open Online Course (MOOC) approved in Year 2 to provide training in communication and soft-skills for researchers in South East Europe. However, a contract is now being prepared by Wigner and the new organisation, with support from the Europlanet Society South Eastern Hub, will deliver the MOOC in Year 4 of the project.

Planning has continued on the Europlanet Research Infrastructure Meeting (ERIM) 2023. Although the original plan was to hold this in Budapest, Hungary, the quotations from



conference organisers came in over budget. Other options for URS venues were investigated and the Hotel Sorea in Bratislava has been booked. A licence for the 'Whova' platform has also been purchased, to support virtual access to the meeting.

The ERIM is designed to bring together multiple workshops organised through Europlanet 2024 RI to exploit synergies and raise awareness amongst user groups of the project's range of services, facilities and activities. As EPSC will be held jointly with the American Astronomical Society's Division of Planetary Sciences (DPS) in San Antonio, Texas, in 2023, the ERIM meeting will be an opportunity to convene the planetary science community in Europe. The hosting of the meeting in Slovakia aims to encourage participation from the URS community. A programme of schools engagement in Bratislava around the meeting is also being investigated (see Task 11.9)

Subtask 3.1 Support of Ukrainian scientists Lead: Grazina Tautvaisiene (Vilnius)

In May 2022, a scheme to support research trips for Ukrainian scientists was launched. As of January 2023, reports from 10 applicants have been received and travel expenses reimbursed for the amount of €5,056. Consultations have been provided to support Ukrainian colleagues in preparing of applications for the European Commission MSCA4Ukraine programme.

Task 4 – Global Collaboration Lead: Barbara Cavalazzi (UNIBO). Deputy: Nicolas Walter (ESF).

A session on <u>Europlanet for Emerging Space Countries</u> was organised at EPSC2022 in Granada. Bursaries were offered to 5 researchers from Africa to cover abstract processing fees, registration fees and travel costs for attending the meeting.

Sub-Task 11.4.1: Global Collaboration and Integration Workshops Lead: Barbara Cavalazzi (UNIBO).

The second Europlanet 2024 RI Workshop, "Applications of Earth Observation Satellite Data", coordinated by the University of Bologna and Italian Cultural Institute (Ministry of Foreign Affairs and International Cooperation), was held in Addis Ababa at the Italian Cultural Institute (IIC) in Ethiopia from 13-16 December. The event, which was sponsored by the Italian Space Agency and the National Institute of Astrophysics, brought together 38 space technology specialists, scientists and students to discuss current topics in this rapidly developing field. The attendees comprised 24 participants from Addis Ababa, as well as 12 from wider Ethiopia, including from Semera, Wollo and Willowy Universities, and the team of trainers. The week started with 65 school students from 3 classes attending a hands-on laboratory workshop called 'Light up the constellation', led by INAF (the Italian Institute for Astrophysics).

The workshop was featured in news stories by <u>Europlanet</u> and the <u>Università di Bologna</u>.



Planning is now in progress for the next workshops in the series. A third workshop will be organised in Casablanca in Morocco in April 2023 on meteoritics. The final workshop will be held in Cordoba in Argentina in November 2023 on the topic of astrobiology.

Sub-Task 11.4.2: Defining the boundary conditions for pilot TAs with China and Korea Lead: Jonas L'Haridon (ESF).

Through the Memorandum of Understanding with Korean partners implemented in Year 1 of the project, 11 facilities from the Korea Basic Institute of Science (KBSI) were included in TA Call 2. Korean facilities received three applications, of which two were funded and the visits took place during Year 3.

Barbara Cavalazzi visited the Korean facilities in July 2022 to discuss further collaboration on TA programmes.

Sub-Task 11.4.3: Global collaboration strategic planning Lead: Barbara Cavalazzi (UNIBO).

In Year 3 of the project, activities have continued to implement the Global Collaboration and Integration Development Strategy (delivered at the end of Year 1). Meetings have been held to discuss opportunities for collaboration with the Africa-Europe Science and Innovation Platform, AERAP. A session on <u>Africa-European collaborations in planetary science</u> was convened at EPSC2022, and this was attended by 18 people, including six speakers from Africa that were supported by Sub-Task 11.4.3.

The first project of the Europlanet Ambassadors Programme, a tour of the French SpaceBus outreach initiative in Togo, with support of the SG2D Togolese science outreach association, was successfully held in March 2022 and reported in Issue 3 of the Europlanet Magazine.

The Ambassadors Programme also supported the second edition of the exhibition "Meteorites, messengers of the sky, origins", which showcases meteorite research in Morocco. The exhibit, organised by ATTARIK Foundation, took place in the Marina Shopping Mall, Casablanca, Morocco from 15 September to 30 December 2022 and welcomed around 20,000 people.

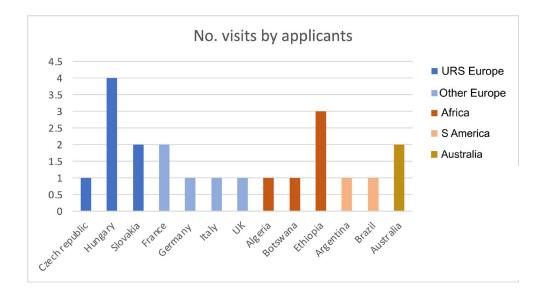
Task 11.5 – Expert Exchanges Lead: Maria Genzer (FMI). Deputy: Harri Haukka (FMI).

Following a delayed start due to Covid-19, the Expert Exchanges Programme has now progressed rapidly. To date, 26 applications have been received, 21 have been approved (17 in Year 3) and 15 reports have been received (11 in Year 3).

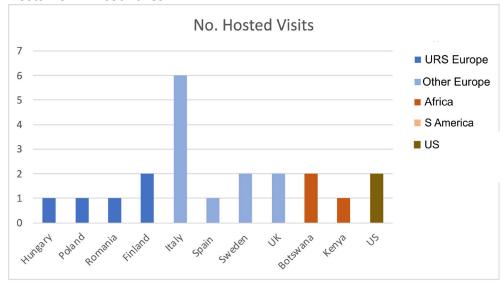
Successful applications have involved

Visitors from 13 countries





Hosts from 11 countries



The reports are published on the Expert Exchange pages of the Europlanet website.

Task 11.6 – Early Career Education and Training Lead: Grazina Tautvaisiene and Edita Stonkute (Vilnius U.), Manuel Scherf/Guenter Kargl (OEAW-IWF).

The third year of the project has seen the ongoing maintenance of the Early Careers Training and Education Portal http://www.europlanet.tfai.vu.lt, which provides information on PhD positions, job opportunities, summer schools, and meetings relevant to early career professionals working in planetary science and related fields.

Announcements of nine PhD advertisements (including multiple PhD opportunities) and over 13 early career positions in planetary sciences at various institutions have been posted over the past 12 months. Eleven advertisements have been disseminated on summer schools and meetings relevant to early career professionals working in planetary science and related fields. The team has communicated via e-mails with interested individuals



asking for advice on questions related to mentoring and early career job opportunities in the sector.

The portal includes a section dedicated to mentorship. The aim of the Europlanet Mentorship Platform is to help early career scientists to develop expertise, ask questions and discuss career plans with the support of more established members of the planetary community. The platform also includes a gallery of participating mentors who agreed for their profile to be made public.

Figure: Visits and unique visitors to the Early Careers Training and Education Portal in Year 3.



During the last year, with input from the Evaluation Officer Jen DeWitt, the evaluation forms for the mentoring participants have been updated. The feedback gathered from participants have been constructive and positive. Jen DeWitt conducted several interviews with participants of the Mentorship programme and findings were shared in the Europlanet Magazine an article "Europlanet Mentorship Programme: Two Years After Launch" and also presented the programme in the Europlanet Society Webinar on 25 October 2022.

During the third year the Task 6 Team participated in many astronomy conferences and presented the programme, including:

- Europlanet Telescope Network Science Workshop. February 9 11, 2022. Invited talk on Europlanet Mentorship Platform.
- Revealing the Milky Way with Gaia. Breaking Barriers: Inspiring the Next Generation.
 May 23 25, 2022. Talk title "Mentorship platform for early career researchers".
- Europlanet Science Congress. September 18-23, 2022. Talk title "<u>Europlanet</u> Mentorship programme: opportunities for sharing the knowledge".
- European Astronomical Society Annual Meeting. 27 June 1 July, 2022. European
 Forum of Astronomical Communities. Invited talk "<u>Europlanet Mentorship platform</u>
 <u>for early career researchers</u>".



To date, 56 pairs have been matched, with ten more applications from mentees awaiting a suitable mentor. This exceeds the target of 50 matched pairs participating in the scheme over the course of the project.

Task 11.7 – Europlanet Media Centre Lead: Anita Heward (DFET). Deputy: Helen Usher/Luca Nardi (DFET)

The Europlanet Media Centre has issued twenty press releases on activities by the Europlanet 2024 RI, the Europlanet Society and the Europlanet Science Congress. The stories have been covered by the worldwide media, including ANSA, BBC News, Forbes, Daily Mail Online, The Guardian, Madrid Press, Europa Press, Space.com, IFL Science, Universe Today, New Scientist and Nature.

The Social Media team has issued regular (~ twice daily) updates on Europlanet 2024 RI activities and planetary topics throughout Year 3 of the project on Twitter and Facebook. The Twitter following has grown to 3779 (from 2205 at the start of the project) and the Facebook following to 2479 (from 2015 at the start of the project).

The Europlanet LinkedIn account (https://www.linkedin.com/company/europlanet-society) has reached a milestone 2,000 monthly impressions (up from 350 at this point a year ago). This continues a trend of increasing traction for Europlanet on LinkedIn. Europlanet has also helped amplify dissemination efforts of its sister EC-funded project, EXPLORE, supporting the industrial link of Europlanet's presence on the platform and highlighting the benefits of industry-academia collaboration.

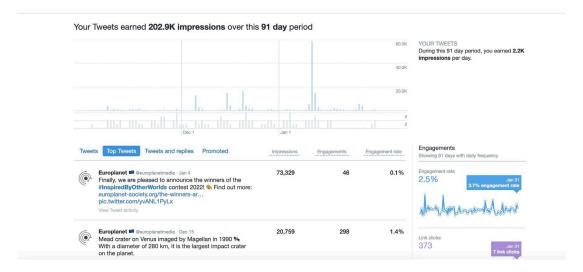


Figure 4: Tweets activity by @europlanetmedia from July-September 2023

The team has posted 89 stories and announcements related to Europlanet 2024 RI on the Europlanet website during Year 3 of the project, many of which have resulted in notable peaks of traffic to the site. Aggregators have been set up so that reports on TA visits and expert exchanges are posted on the relevant pages around the Europlanet site.

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Figure 5: Page views of the Europlanet website during Year 3 of the project

A third paid internship programme was held in September 2022 to support early career researchers in developing skills for engaging with the media and social media. One media intern and three social media interns joined the communications team for EPSC2022 in Granada. The social media interns supported the social media team in covering live sessions during the meeting. The media intern (Sanje Fenkert) supported the press office team in preparing materials for the media. Sanje contributed an article to the Europlanet Magazine about observations by the James Webb Space Telescope (JWST) of Mars that were announced during a press briefing at EPSC2022.

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15,869 (12.99%)

Task 11.7 was responsible for putting together the schedules for daily interviews and briefings hosted by Dr Niamh Shaw during EPSC2022. Europlanet 2024 RI representatives, including the Project Coordinator, TA visitors and facility leads, global collaboration lead, and the team of interns, were invited to participate as guests. The briefings were viewed by 298 people live.

Following the successful launch of the Europlanet Magazine in 2021, two further issues were produced in Year 3. Management of the Europlanet Magazine is shared by Task 11.7 and WP 1, as the design and support for content development is provided through the WP1 marketing budget. The main objectives of the magazine are to summarise highlights emerging from Europlanet activities (including the 2024 RI project, past projects, the Europlanet Society and EPSC) in order to raise awareness amongst the wider community (ranging from interested general public and policy makers to researchers) and to provide case studies that may be used as a basis for impact reports.

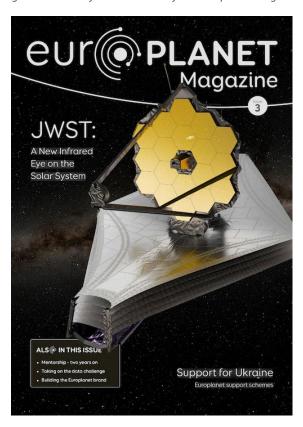
Issues 3 and 4 of the magazine were published <u>online</u> as a pdf that can be viewed as a flip-book or downloaded, or as separate articles in web-story format. Articles featuring the RI in Year 3 of the project included reports on VESPA and results from SPIDER and the Machine Learning services, a feature on the Atomki TA facility, features on outcomes from Expert



Exchanges, the industry survey, the Ukraine programme and evaluation of the mentorship service.

Around 250 printed copies of each of the Issues 1-3 of the Europlanet Magazine have been distributed at EPSC2022 and other meetings (EAS 2022, ESOF 2022, the Dinner Debate in the European Parliament).







Task 11.8 - Policy Lead: Policy Team (EILST)

In Year 3 of the project, the Policy Team co-coordinated with the Task 2 Industry team to organise the Industry and Policy session at EPSC 2022. The team held a number of debriefs with the Industry colleagues regarding the outcome and future improvements.

The Policy Team held several meetings with the office of MEP Niklas Nienass about hosting a Dinner Debate on the topic of 'Promoting the importance of space policies and a European Space Strategy' at the European Parliament. The date was set for 24 January 2023 for logistic issues and to tie in with the 15th European Space Conference. The event was attended by over 30 people, including Mr Nienass and Mr Marian-Jean Marinescu MEP, Christoph Kautz (Head of DG DEFIS), Kai-Uwe Schrogl (International Institute of Space Law), Rodrigo da Costa, Head of EU Agency for the Space Programme (EUSPA), Josef Aschbacher (Director of the European Space Agency (ESA)), David Parker (Director, ESA Human and



Robotic Exploration), Walther Pelzer, (Member of the Executive Board, DLR), Charles Galland (ASD-Eurospace). Europlanet was represented by the Industry and Policy teams, NA1 Management, the President Elect and Treasurer of the Europlanet Society and the leads of WP2 (TA Planetary Field Analogues,) and WP10 (Machine Learning)

The Policy Team has also engaged in active networking with the FoE think tank, which resulted in a number of on-line meetings and active participation of Europlanet in the Space Traffic Management dinner featuring high-level stakeholders (see Task 11.2). Further discussion for collaboration with FoE are underway.

The Industry and Policy teams have hosted regular monthly informal meetings with colleagues from Management and other interested parties. They have also produced the regular policy report, updated the lists of funding opportunities and upcoming events, and uploaded these on the Policy website and on Sharepoint.

The Policy Team, NA1 and WP1 Management teams, the European Science Foundation, and MOSBRI and VITALISE research infrastructures organised a side event on 'Long-term sustainability of small and mid-scale distributed RI projects' during the International Conference on Research Infrastructures held in October 2022 in Brno. This attracted 50 inperson participants, with a further 70 taking part online. A <u>full report</u> was published in Issue 4 of the Europlanet Magazine.

Task 11.9: Outreach and Inspiration

Lead: Anita Heward (DFET). Sub-Task Leads: Grazina Tautvaiseine (VU), Ulysse Pedreira Segade (DFET), Federica Duras (INAF)

Sub-Task 11.9.1: Outreach Community Support Lead: Anita Heward (DFET) / Federica Duras (INAF)

Regular meeting of the Europlanet Society Working Group have been held throughout Year 3 of the project.

Presentations on Europlanet Outreach have been given at EAS2022, CAP 2022 and EPSC2022. A session 'To Mars and Beyond' was held at ESOF2022 in Leiden (co-organised with the EC-funded EXPLORE project), and was attended by 45 people. The Europlanet/EXPLORE stand at ESOF2022 was visited by over 500 people during the conference, including policy makers, journalists, members of the public and school children.

Sub-Task 11.9.2: Training

Lead: Grazina Tautvaisiene (Vilnius U.)

Planning is now underway for a summer school at the Moletai Astronomical Observatory in the summer of 2023. As well as learning observational skills, the early career participants will take part in daily science communication training on a range of themes during the 10-day programme.

Sub-Task Task 11.9.3: Education and Inspiration

Lead: Ulysse Pedreira-Segatde (DFET). Deputies: Rosie Cane, Tony Thompson, Jose Utreras (DEFT).



The objective for the Education Team in Year 3 was to further disseminate educational resources related to Europlanet 2024 RI planetary field analogue sites.

The Illustrated Guide to Mars was finalised and collated as a collection of 13 image galleries addressing several aspects of the Martian exploration and observation. It was shared as one gallery per week on Facebook and Instagram for 18 weeks. To support the publication of the seven lessons of the Mars Collection and to encourage science communicators and teachers to use them, the posts of image galleries were linked to the main Mars Collection every time.

The Mars Collection was promoted via the main Europlanet channels (hubs, EPEC, Outreach Working Group, Communications and Media, social media, Europlanet Newsletter and Outreach Newsletter) as well as via the networks of our partners (astroEDU, INAF, LeWiBo, Scientix, LCO, EAI, LaSCiL, Nuclio, GTTP, Ecsite Space Group, NASA InOMN, and the French Planetarium Network). The webpage is ranked #19 for Europlanet's website and has 902 pageviews as of 04/01/2022, with an increased weekly average from 10 to 20 pageviews between the beginning and end of 2022.

The Education Team is preparing for the publication of new resources (Icy Moons Collection, Craters and Mass Extinctions Collection) and reflecting on the use of previous ones. In consultation with the Outreach Working Group, a survey has been created, tested and shared to try to understand the needs and interests of the science communication and education community who may be using the Mars Collection of educational resources. This survey was translated and available in 10 languages thanks to an Europlanet community-wide effort. So far, 53 responses were collected and are being analysed. The results will inform the team on the best strategies to publish the next set of resources and build a dynamic community of testers, users, and creators of educational resources. The Outreach and Education team presented two posters during EPSC and co-chaired one session dedicated to Tools, resources, and opportunities for education initiatives in planetary science and astronomy.

The team also co-organised the third edition of the EPSC-satellite outreach event EPSC Goes Live for Schools (with the NGO Lecturers Without Borders). For the first time this event was both an in-person event during the week of the congress in Granada, and a month-long webinar series online. Thanks to the participation of 20 scientists from the Europlanet community, 12 school visits were organised in Granada and more than 350 high school students reached. The online webinar series was also a success, as 13 scientists worked collaboratively in pairs to give lectures to more than 40 schools.

Sub-Task 11.9.4: Planets in A Room

Lead: Federica Duras and Livia Giacomini (INAF)

Planets in a Room (PIAR) kits were brought to EAS 2022 in Valencia and EPSC2022 in Granada. At both events, training was provided and poster presentations given.

Sub-Task 11.9.5: Virtual Exhibition Lead: Sara Russell and Pete Grindrod.



This Sub-Task will create an interactive virtual exhibit about Mars Sample Return, using "augmented reality" to bring the NHM's collection of Martian meteorites and the surface of the planet to life. The exhibit will emphasise how Martian sample return relies on a diverse team of scientists and engineers, and on extensive international cooperation. The content will be developed with the input from an expert international oversight committee. The information will be aimed at the interested public including adults and teenagers, but will be multi-layered, including links to more detailed information and quotes from scientists. A multipage website will provide access to "virtual galleries" on topics including: the geology and climate of Mars, importance of sample return missions, Martian meteorites, planetary protection and curation of samples, the history of Mars exploration, and missions including ExoMars, Mars 2020 and MMX.

In November 2022, work at the Natural History Museum in London started on the virtual exhibition on the theme of Mars sample return. The exhibition will be completed in 2023.

c) Impact to date

Following the lifting of travel restrictions, NA1 is largely on track to deliver the expected impacts of the project as described in Section 2.1 of the Description of Action.

The NA1 team is working with the Evaluation Officer to track metrics including participation in workshops and training sessions, coverage of press releases, social media followings, website page views, video views, users of resources etc. The <u>online spreadsheet</u> for monitoring indicators and metrics has been revised to facilitate logging of data. Case studies can also be an important tool for evaluating and demonstrating impact, and the Evaluation Officer working with the NA1 team to identify potential examples. The analysis of surveys carried out by the industry and education teams have helped to understand the target audiences and will inform activities during the final 18 months of the project. The Europlanet Magazine has also proved a rich source of information on impact for both this project and previous Europlanet RI projects, with articles describing <u>results from the project</u>, giving case studies of how <u>TA facilities</u> have expanded through Europlanet and EC support, and the <u>impact of the VA services</u>.

The return to face to face meetings has provided further opportunities to disseminate the results of the project, both through presentations and through exhibitions at major conferences, with displays at EPSC, EAS and ESOF highlighting Europlanet 2024 RI activities and reaching an audience of around 3500 people in total.

The programme to support researchers in Ukraine has been successful and will be readvertised in early 2023. It should also be noted that the research community in Ethiopia (where a cessation of hostilities was announced in November 2022) has also been supported through the Expert Exchange Programme and the workshop organised by Task 11.4. Seven Expert Exchange applications were received from Ethiopian researchers (five following the Task 11.4 workshop in December 2022) and three of these have been approved for visits to Italy and the UK.





Figure 3 The Europlanet Management Team crewing the Europlanet 2024 RI booth at EPSC2022.

d) Summary of plans for Year 4

Table 4: Summary of plans for NA Tasks in Project Year 4

Task	Main objectives for Year 4 of the project
1. Management	 Disseminate and request input for NA1 activities via Europlanet 2024 RI Management, the PMC and the Society. Track metrics and outcomes for project evaluation. Support other work packages with dissemination. Support interaction with the communities via webinars. Work with WP1 on community demographic survey.
2. Industry	 Progress work on the database of companies with an interest in planetary science. Organise industry workshop at ERIM 2023 Seek opportunities to promote Europlanet at industry events (e.g. Space Expo in Bremen from 14-16 November). Develop joint programmes with Task 8 Policy.
3. Widening Participation	 Plan virtual and physical workshops. Support planning of Europlanet Research Infrastructure Meeting (ERIM) 2023 in Budapest. Monitor progress of MOOC in Southeast Europe. Readvertise the Ukraine funding scheme.
4. Global Collaboration	 Implement actions from the Global Collaboration and Integration Strategy. Implement the 3rd and 4th Global Collaboration workshops in Morocco and Argentina respectively.



1		
	 Monitor TA visits by European researchers accessing KBSI facilities and Korean researchers visiting Europlanet TA facilities. Promote the Europlanet Ambassadors' Scheme. 	
Expert		
Exchanges	Review applications and administer support for visits	
	Promote the Expert Exchange programme and outcomes of visits.	
6. Early Career		
,	 Update the Portal with additional mentoring support materials and 	
	 Opdate the Portal with additional mentoring support materials and advice. Continue to actively circulate the announcements on PhD positions, job 	
	Continue to actively circulate the announcements on PhD positions, job	
	opportunities, summer schools, and meetings relevant to early career	
	professionals working in planetary science and related fields.	
	Support EPEC Annual Week during ERIM in June 2023.	
	Hold a Summer School at the Moletai Observatory in Lithania in August	
	2023 on exoplanet observations.	
7. Europlanet	Promote the activities of Europlanet 2024 RI and the planetary community	
Media	via the media and social media.	
Centre	Support the press office for EPSC2022.	
	Solicit content and edit Issues 5 and 6 of the Europlanet Magazine.	
8. Policy	Follow up on contacts made at the dinner debate held in the European	
	Parliament in January 2023, co-hosted by MEPs Nienaß and Marinescu.	
	Participate in the exhibition organised in the EP by the EAS in	
	collaboration with ESA and ESO.	
	Hold regular meetings with the Regional Hub policy and industry office	
and liaise on relevant national policy events.		
	Enrich and maintain the Europlanet Society Policy website and helping to	
create updated promotional material.		
	Continue to work closely with the Task 2 Industry team and co-organising	
	a joint session at ERIM 2023.	
	Maintain the regular monitoring and reporting of activities already	
	established.	
9. Education	Publish the new set of educational resources (Icy Moons Collection and	
and	Craters and Mass Extinctions Collection) and develop a dissemination	
Inspiration	strategy informed by the results of our survey.	
	Engage the Europlanet scientific community in in-person outreach events	
	similar to EPSC Goes Live for Schools, during ERIM 2023 for instance.	
	Define guidelines and evaluation metrics for the production, use, and	
	improvement of educational resources.	
	Define a long-term sustainability plan for the activities of the Outreach	
	and Education team.	

^{*} If Covid-19 travel restrictions are lifted and/or face-to-face meetings are possible in 2022.

2. Update of the exploitation & dissemination plan

The Exploitation and Dissemination plan described in Section 2.2. Annex 1 of the Description of the Action (DoA) is largely on track.

3. Update of the data management plan

There are no updates required for the data management plan.



4. Follow-up of recommendations & comments from previous review(s)

A number of types of dissemination have been carried out, but they do not in all cases include a reference to EU funding. (Relevant to all WP11 Tasks)

We always endeavour to correctly acknowledge the EC correctly with all out outputs and have gone through the periodic report links to double-check any entries that may not have the acknowledgement embedded within any outputs. We have reinforced efforts to ensure that NA1 activities include the correct acknowledgement.

The Europlanet website is a very good archive for all the deliverables of the consortium within the proposal. As a working environment for users interested in using the VAs the website more difficult to navigate. (Relevant to Task 11.1 Management and Task 11.7 Media)

Buttons were added to the front page of the website to make all the RI services easier to find. Menus have also been simplified.

Care has to be taken to further activate URS in participating in the TAs, the wide range of already implemented strategies to include URS are less successful than projected. (Relevant to Task 11.3 Widening Participation and Task 11.5 Expert Exchanges)

Bursaries supported 26 URS researchers to attend EPSC2022 to engage further with Europlanet activities and find out more about the services it offers. We plan to host future events (hopefully face to face) within URS countries in order to facilitate more successful engagement with TA programmes (by this and future projects). The Expert Exchange programme has effectively supported collaborations between URS and non-URS beneficiaries and foster sharing of best practice, grant writing and ideas. ERIM 2023 in Bratislava will also be an opportunity to engage with URS communities.

Please consider including education on good data management practises and usage of VA tools in the educational and exchange programmes. (Relevant to Task 11.6 Early Careers). This is noted when preparing the programme for ERIM/EPEC Annual Week 2023 in June.

The project results will to some extend have impact on space policy and especially policies related to solar system exploration missions. The focus of the impact on policy is on informing the policy makers. A Policy Officer is appointed to identify key events and priorities in the European Parliament and opportunities for Europlanet to highlight the importance and relevance of planetary science and related industry. (Relevant to Task 11.8 Policy).

Europlanet representatives attended the Friends of Europe dinner in Brussels, as well as organising the dinner debate in the Parliament during in Year 3 of the project. Europlanet representatives have been invited to a further dinner in the Parliament in February 2023 organised by the European Astronomical Society.

5. Deviations from Annex 1 (DoA)

WP11 NA1	Review budgets:	INAF: The reason for this
		transfer is that due to the
	NORR terminated from Project in June 2021 – due to	pandemic, activities in presence
	staff turnover – funds temporarily retained at 01 UoK	in schools and in public events



(~€118783.75) ALREADY ACTIONED IN RP1- this is a reminder

01 UoK (NORR budget)

Budget moved from 01 UoK WP11 to 32 NHM WP11 €78768.00 for Mars Returns Virtual Space Exhibit

Add UniKent to all actions in WP11 (to facilitate direct activities will be transformed to payments e.g. bursaries for the Industry task, payment of future invoices for the ERIM meeting to be held in Slovakia in 2023 where we will have our Council meeting and a series of workshops- the EPSC will be jointly held with DPS in the US so we will be meeting in Slovakia instead June 2023) activities will be transformed to online educational and communication activities (like online workshops for teachers, online educational material, videos and interviews). So we would like to replace the

32 NHM – Add NHM to WP Task 9:

Mars Returns Virtual Space Exhibit budget received from what was previously held at NORR (terminated from Project)

€78768.00 moved from **01 UoK** (€74267 personnel + 4500 other goods and services), total 10.75 PM added in WP11

15 DFET

5PM €15000.00 - added to effort Task11.1 Management (from NORR Personnel funds currently held at UniKent)

22 INAF:

PIAR remove the sub-contract €20,000 move within the same WP and Beneficiary to Personnel

Add new sub-task to widening participation:

Subtask 3.1: Lead: VU, Wigner RCP, UNIBO. This subtask will support displaced researchers, particularly those citizens/residents of Ukraine, by enabling visits and providing opportunities to continue research, build new collaborations related to planetary science and develop additional skills. This task will also help put researchers in touch with other institutions providing support for researchers that have been displaced by conflict.

Add sub-task to Outreach and Inspiration: Sub-Task 9.5: Mars Sample Return Exhibit - Lead: NHM

This Sub-Task will create an interactive virtual exhibit about Mars Sample Return, using "augmented reality" to bring the NHM's collection of Martian meteorites and the surface of the planet to life. The exhibit will

with Planets in a Room were impossible in the last 18 months and will be difficult in the next year. Therefore the physical distribution of Planets in a Room kits has been slowed down and most of the planned online educational and communication activities (like online workshops for teachers, online educational material. videos and interviews). So we would like to replace the previously planned expenses for a subcontractor (planned to develop a new prototype and furtherly distribute Planets in a Room) to personnel cost for INAF staff to follow up with the production and distribution of online educational and communication activities related to PIAR.



emphasise how Martian sample return relies on a diverse team of scientists and engineers, and on extensive international cooperation. The content will be developed with the input from an expert international oversight committee. The information will be aimed at the interested public including adults and teenagers, but will be multi-layered, including links to more detailed information and quotes from scientists. A multipage website will provide access to "virtual galleries" on topics including: the geology and climate of Mars, importance of sample return missions, Martian meteorites, planetary protection and curation of samples, the history of Mars exploration, and missions including ExoMars, Mars 2020 and MMX.

New Deliverables

D11.9 4th Annual Report due Jan 31 2024 (PM48) D11.10 Mars Sample Return Exhibit (PM48)

Milestones

MS53 2nd Widening Participation workshop due Jan 2022 (PM24) -> May 31 2024 (PM52)

MS54 2nd Global Collaboration workshop due Jan 31 2022 (PM24) -> May 31 2024 (PM52)

MS86 3rd Industry workshop due Jan 31 2023 (PM36) -> May 31 2024 (PM52)

MS88 3rd Global Collaboration workshop due Jan 31 2023 (PM36) -> May 31 2024 (PM52)

MS108 4th Industry workshop due Jan 31 2024 (PM48) -> May 31 2024 (PM52)

MS109 4th Widening Participation workshop due PM48 -> REMOVE

MS111 4th EPEC annual meeting due PM48 -> May 31 2024 (PM52)

MS55 MS89 MS110

Change the name of EPEC week to 'Early Career events'

40 UNIBO

€20000.00 moved from WP11 other goods service to Travel WP11 (Prof. Cavalazzi to travel to Korea, Casablanca). (Task 4: Global Collaboration/Ambassador scheme)

Move € 7.039,40 from ODC to add to the Personnel for Prof. Cavalazzi => plus PM 1.229



45 VU- add €7200 to personnel 1.9PM -PM added in portal – need to change budget, plus 1800euro moved from NORR, total 9000euro

01 UoK

funds moved other goods services from WP11 to WP01 total €7116.36

Task 2: Industry move ~18,000 plus overhead_from 11 BSSL to UniKent for EPSC bursaries UniKent added to all tasks- to facilitate certain admin procedures (e.g. bursary payments)

11 BSSL

Move €18000 to Uni Kent WP11 Other goods services and travel for EPSC industry bursary

15 DFET

€3226.14. to other goods and services WP11 (part of NORR)

5 PM added from UoK (WP11 NORR) - €20000 €9000.00 transferred to VU Task 3: Widening participation:

Bursaries to attend EPSC

19 FMI

Task 5: Expert exchange @ FMI: Reduce personnel by € 17,520.00 (plus overhead) and move to ODC (for use on the expert exchange scheme) Personnel now 2.4PM (this was a reversal of what we did in Grant Amendment 1 in October 2020 as these weren't utilised as PM and there is now renewed interest in the expert exchange programme.

25 IWF-OEAW

Task 6: Early Careers: Bursaries to attend EPSC move 27 171.22 Eur +OH to VU WP12 Personnel

From IWF-OEAW WP11 to WP12 VU– have added 4PM to VU in WP12 (22000Eur +OH to WP12)

22 INAF

€7200 from personnel (for Task8 policy) to VU for widening participation, 1.45PM reduced

Deviations

Change Deliverables

11.5 Industry Engagement Sustainability Plan move from Feb 2023 (M37) --> February 2024 (M49)



11.6 Media Engagement Sustainability Plan move from	
Feb 2023 (M37)> February 2024 (M49)	
11.7 Policy Engagement Sustainability Plan move from	
Feb 2023 (M37)> February 2024 (M49)	
11.8 Outreach Engagement Sustainability Plan move	
from Feb 2023 (M37)> February 2024 (M49)	