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2nd Report on national needs

WP2 – T2.3



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Version 3	29 October 2025	T2.3 partners	The third draft was prepared based on the final comments received from the T2.3 partners.
Version 4	30 November 2025	WP2 co-leaders	The fourth draft was prepared based on the comments received from the WP2 co-leaders.
Version 5	16 December 2025	MB members	The final version was prepared based on the comments received from MB members.

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Abstract

This report presents the follow-up on the first report on national needs (Deliverable D2.7), providing an updated assessment of the development, activities, and challenges of National Hubs (NHs) within the Partnership for the Assessment of Risks in Chemicals (PARC). Building on three annual surveys conducted between 2022 and 2025, as well as six structured National Hub Contact Point (NHCP) meetings, the report offers a comprehensive overview of the evolution of NH structures, stakeholder engagement, expertise coverage, communication practices, and national outreach activities.

Key findings indicate steady growth in NH membership and activities, with more diverse participation from policymakers, regulators, scientists, and other relevant stakeholders. The report identifies emerging needs in strategic communication, capacity building, coordination with PARC work packages, and improving the visibility and influence of NHs at both national and European levels. Persistent challenges include maintaining balanced stakeholder engagement, addressing limited resources, and ensuring the active involvement of Governing Board (GB) members in NHs.

The report outlines practical recommendations to strengthen the functioning and impact of NHs. These include:

- enhancing communication within the NHCP network;
- making fuller use of PARC tools and networks such as PARCopedia;
- fostering NHCP-GB collaboration;
- supporting targeted activities for knowledge sharing and capacity building;
- ensuring the long-term sustainability of NHs.

Overall, this follow-up demonstrates that NHs are essential instruments for integrating national perspectives into PARC, facilitating two-way dialogue, promoting collaboration across sectors, and ensuring that PARC outputs are effectively translated into policy and practice across Europe. The findings provide a solid basis for guiding ongoing improvements, strategic planning, and the long-term sustainability of the NH network.

Key Words

national hub, national needs, network, survey, sustainability

Table of contents

Abstract 4
1. Introduction 7
2. Methods 8
2.1 Implementation of the surveys for mapping the needs of the NHs 8
2.2 Organisation of the PARC NHCP meetings 9
3. Results and discussion 10
3.1. Participation overview: Survey responses and meeting attendance 10
3.2. Strengthening NHs: Addressing gaps in stakeholder engagement and expertise 10
3.3. NHs in action: Achievements and challenges 13
3.3.1. General overview 13
3.3.2. NH meetings 14
3.3.3. National outreach activities 15
3.3.4. Challenges in implementing NH actions 16
3.4. Managing requests in response to the needs of WPs 17
3.5. Good practices in stakeholder engagement and NHCP activities 18
3.6. Pathways to the sustainability of the NHs 18
3.7. Recommendations 20
4. Conclusions & further work 21
Annex I. First survey for mapping the needs of the National Hubs 23
Annex II. Second survey for mapping the needs of the National Hubs 29
Annex III. Third survey for mapping the needs of the National Hubs 34
Annex IV. Good Practices in Stakeholder Engagement and NHCP Activities 40

Authors and acknowledgements

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Acronyms

GB: Governing Board

GSB: Grant Signatory Board

HBM4EU: Human Biomonitoring for EU project, co-funded under Horizon 2020

MB: Management Board

NGO: Non-Governmental Organisation

NH: National Hub

NHC: National Hub co-Coordinator

NHCP: National Hub Contact Point

KARC: Key Areas of Regulatory Challenge

SSbD: Safe and Sustainable by Design

WP: Work Package

1. Introduction

Since the publication of the first report on national needs (Deliverable D2.7, November 2023), significant efforts have been made to further support the development of the National Hubs (NHs) within PARC. The NHs are networks of organisations at the country level, involving PARC participating organisations, relevant national ministries, public and research institutions, and other stakeholders (e.g., industry, NGOs, trade unions) active in the field of chemical risk assessment both within and beyond the direct scope of PARC. Each country has a designated National Hub Contact Point (NHCP) who coordinates national-level exchanges and contributes to the development of synergies with related national and European initiatives. NHs are crucial building blocks of the Partnership, essential to both the fulfilment and sustainability of PARC's main activities. Their importance is further underlined by the national co-funding of PARC, which highlights the need for strong, stable, and well-functioning NHs. These structures play a key role in facilitating two-way dialogue and information exchange between PARC and national stakeholders.

Under Task 2.3 'Sustainability', a process for mapping the needs of the NHs was developed at the beginning of PARC and will continue throughout the duration of the project. This includes **annual surveys** sent to NHCPs to **track progress** and **regularly collect feedback and suggestions**. In addition to the surveys, biannual NHCP meetings provide further opportunities to identify, discuss, and address evolving needs. The **outcomes of these activities inform efforts to strengthen the NHs and feed into PARC's capacity-building** activities under WP9 'Building infrastructural and human capacities'. They are also used to **support the follow-up of the PARC indicator framework**, offering input on achieved outputs, outcomes, and long-term impact. The mapping process is thus a living, iterative mechanism that will continue until the end of PARC.

Deliverable D2.7, prepared in 2023, presented the results of the first survey and the outcomes of the kick-off meeting of the NHCPs. Based on the reported needs, several recommendations were formulated. The report concluded that most NHs had been successfully established and were already serving as effective channels for information flow and stakeholder engagement. However, a number of challenges were also identified, including limited capacity and engagement in some countries, unclear expectations or mandates for NHCPs, and the need for more structured tools and processes to support internal communication and coordination.

The main recommendations of D2.7 included the need to:

- provide targeted training, guidance, and peer-learning opportunities;
- facilitate better coordination with PARC work packages (WPs) and tasks to improve information flow and respond to requests;
- develop communication materials for the general public and stakeholders to support NHCPs in fostering engagement;
- strengthen the role and visibility of NHCPs.

Building on the foundations laid during this initial mapping exercise, peer-to-peer learning and needs assessment efforts have continued. Two additional annual surveys were conducted to gather updated information and monitor progress. In parallel, six NHCP meetings were organised, offering structured opportunities for knowledge exchange, mutual support, and co-creation of solutions. These meetings have served as important platforms to review developments, share national experiences, and reflect jointly on evolving needs and best practices. This process is coordinated by the National Hub Co-Coordinators (NHCs), with active contributions from the NHCPs and support from PARC's Task 2.3 on Sustainability.

This follow-up report summarises the main findings from the most recent surveys and NHCP meetings. It reflects on progress since the first mapping exercise, highlights recurring or newly emerging needs, and offers recommendations for further strengthening the NH network, as a key element of PARC's exit strategy.

2. Methods

2.1 Implementation of the surveys for mapping the needs of the NHs

Since the beginning of PARC, three annual surveys have been conducted to monitor the development of the NHs, collect information on their evolving needs, and assess their contributions to the Partnership. The process started with the first survey in late 2022, the results of which were presented in Deliverable D2.7. This initial survey served to establish a baseline for NH activities, explore early experiences and challenges in setting up NHs, and gather input on communication needs that could be addressed in PARC. It also included a linked training needs survey developed by Task 9.4 to inform capacity-building priorities during the early phase of PARC.

Building on the foundations of the first round, two follow-up surveys were implemented in early 2024 and 2025, with the aim of tracking progress, identifying recurring or newly emerging needs of NHs, and collecting good practices and national success stories. While several key questions remained consistent across all three surveys, to allow comparability over time and to support the monitoring of output, outcome and impact indicators, each annual survey also addressed new or refined thematic areas based on current PARC priorities and feedback from NHCPs.

The second survey (2024) focused on a more structured monitoring of NH activities in 2022 and 2023, exploring stakeholder engagement, types of expertise represented within the NHs, and NH activities. It also gathered information on ongoing challenges and asked NHCPs to report on difficulties in responding to PARC requests and to highlight suggestions for improving support from WP leaders and NHCs. NHCPs were invited to report new good practices and national success stories. The survey included 13 questions.

The third survey (2025) introduced additional questions related to communication activities targeting citizens and national stakeholders, policy relevance, and references to PARC in national or regional policy documents, and the long-term sustainability of NHs. This survey consisted of 10 questions.

The three questionnaires are available in the Annexes. All three surveys were created using the REDCap platform and distributed to NHCPs via the NHCs. The launch and deadline dates were as follows:

- First survey: launched on 21 December 2022; survey closed on 14 February 2023.
- Second survey: launched on 2 February 2024; survey closed on 12 March 2024.
- Third survey: launched on 21 January 2025; survey closed on 28 February 2025.

Survey results were exported and analysed using Microsoft Excel.

2.2 Organisation of the PARC NHCP meetings

Since the beginning of PARC, six dedicated meetings have been organised for the NHCPs to facilitate regular exchange, peer learning, and structured dialogue on evolving needs and best practices. These meetings are coordinated by the NHCs, with support from Task 2.3, and are a core component of the mapping process of the NHs' needs. They complement the annual surveys and serve as platforms to strengthen collaboration between NHCPs and PARC activities in the different WPs, while also supporting reflection on the strategic role and added value of NHs within the Partnership.

The first face-to-face NHCP meeting took place on 26 - 27 April 2023 in Riga, Latvia, hosted by Rīga Stradiņš University. It brought together participants from 23 countries. The programme included plenary sessions presenting the results of the first survey on NH needs and the training needs survey, as well as breakout discussions on the indicators of success for NHs, internal communication flows, and the sustainability of NHs. During the final session, each NHCP introduced the structure of their NH, its current activities, and future plans, contributing to a shared understanding of national contexts and ambitions. The meeting concluded with a joint reflection on the preferred format and frequency of future NHCP gatherings.

The second NHCP meeting was held online on 5 December 2023. The PARC Coordination Team provided an overview of PARC's progress. The meeting focused on strengthening NHCP engagement in survey responses and enhancing communication between National Hubs and other parts of PARC. Presentations showcased communication tools, including the PARC website, social media channels, and PARCopedia, and initiated a discussion on integrating NHs into broader policy frameworks. Furthermore, the importance of communication and stronger links between the NHs, the PARC Governing Board (GB), the Grant Signatory Board (GSB) members and PARC governance was discussed and emphasised. The agenda also included an introduction to ECHA's Key Areas of Regulatory Challenge (KARC) document.

The third meeting took place on 15 May 2024 during the PARC consortium meeting at UMIT Tirol, Austria. It was a hybrid meeting that lasted two hours and primarily focused on the results of the second survey for mapping the needs of the NHs and on progress and updates in NH indicators.

The fourth meeting was held in person on 4 June 2024 in Brussels, Belgium, hosted by dOMG and organised back-to-back with the conference 'Human Biomonitoring and PARC: From regional to international level' as part of the European Presidency. It provided an opportunity for more interactive exchange and in-depth group work. Key topics included national experiences with KARC discussions and implementation, information on FAIR data, experiences with data sharing and requests within PARC, and NHCP contributions to communication and outreach. Additional sessions addressed indicator development, laboratory networks, sustainability planning, and NH involvement in policy support. The importance of providing feedback to the NHCPs after each request was highlighted, with PARCopedia recommended as the preferred channel for communication. The NHCPs also recommended elaborating a template for requests to simplify and accelerate responses. The agenda encouraged practical discussions and experience-sharing, strengthening the collaborative spirit of the NHCP network.

The fifth meeting was held online on 20 January 2025 and included updates from the PARC Coordination Team and several PARC WPs. It focused on WP9's mapping activity on eco/toxicology research, national expert contributions to the development of HBM guidance values, and the first results of citizens' focus groups.

The sixth meeting took place online on 16 May 2025. The agenda included a presentation on Safe and Sustainable by Design (SSbD) activities (e.g. SSbD knowledge sharing portal, SSbD toolbox), a discussion on the second training needs survey, feedback from the webinar on HBM guidance values, and the risk communication survey. The results of the third NH needs survey were also presented, followed by planning discussions for the in-person meeting in Ljubljana (October 23, 2025).

Collectively, these meetings have played a vital role in fostering dialogue, identifying challenges and solutions, and co-developing approaches to enhance the visibility, relevance, and sustainability of the NHs. They continue to serve as a key mechanism for translating the reported needs into concrete actions and supporting the ongoing development of the NHCP network within PARC.

3. Results and discussion

3.1. Participation overview: Survey responses and meeting attendance

In the first survey, NHCPs from 25 countries responded (Austria, Belgium, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Iceland, Israel, Latvia, Lithuania, Luxembourg, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom), while no responses were received from Greece, Italy, and the Netherlands. This corresponds to a response rate of 89.3% (25 out of 28).

In the second survey, NHCPs from 27 countries responded (Austria, Belgium, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Israel, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom), with only Italy not responding. This corresponds to a response rate of 96.4% (27 out of 28).

In the third survey, NHCPs from 27 countries responded (Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom), while no responses were received from Croatia and Iceland. This corresponds to a response rate of 93.1% (27 out of 29).

Engagement was also visible in meeting participation:

- April 2023 (face-to-face): 23 of 28 NHCPs
- December 2023 (online): 26 of 28 NHCPs
- May 2024 (hybrid, Hall in Tirol): 17 of 28 NHCPs (in-person participants)
- June 2024 (face-to-face, Brussels): 26 of 28 NHCPs
- January 2025 (online): 27 of 29 NHCPs
- May 2025 (online): 28 of 29 NHCPs

Overall, these figures indicate that NHCPs remain highly engaged both in surveys and in collaborative meetings. The active participation underscores the importance of the NH network as a backbone for two-way communication between PARC and national stakeholders. Importantly, the NHCPs themselves play a key role in sustaining this engagement, as they are actively involved in coordinating their networks, mobilising stakeholders, and ensuring that national perspectives are well represented within PARC.

3.2. Strengthening NHs: Addressing gaps in stakeholder engagement and expertise

In 2022, PARC started with 22 NHs, which consisted of 356 different organisations. More than half of the NHs were built on the NHs established during the HBM4EU project (Deliverable D2.7). By 2023, three new NHs (Cyprus, Luxembourg, Netherlands) had been created, while ten existing NHs expanded by adding additional stakeholders, raising the total number of participating organisations to 443 (Figure 1). In 2024, another two NHs (Italy, Poland) were established. At the same time, nine existing NHs grew, while six exhibited a small

decrease in stakeholders. Altogether, this brought the total number of participating organisations to 471, reflecting a steady increase in engagement over the years. Two countries (Ireland and Israel) have not yet been able to establish a NH due to resource constraints. (Note: Ireland joined PARC later, which may explain the delay.)

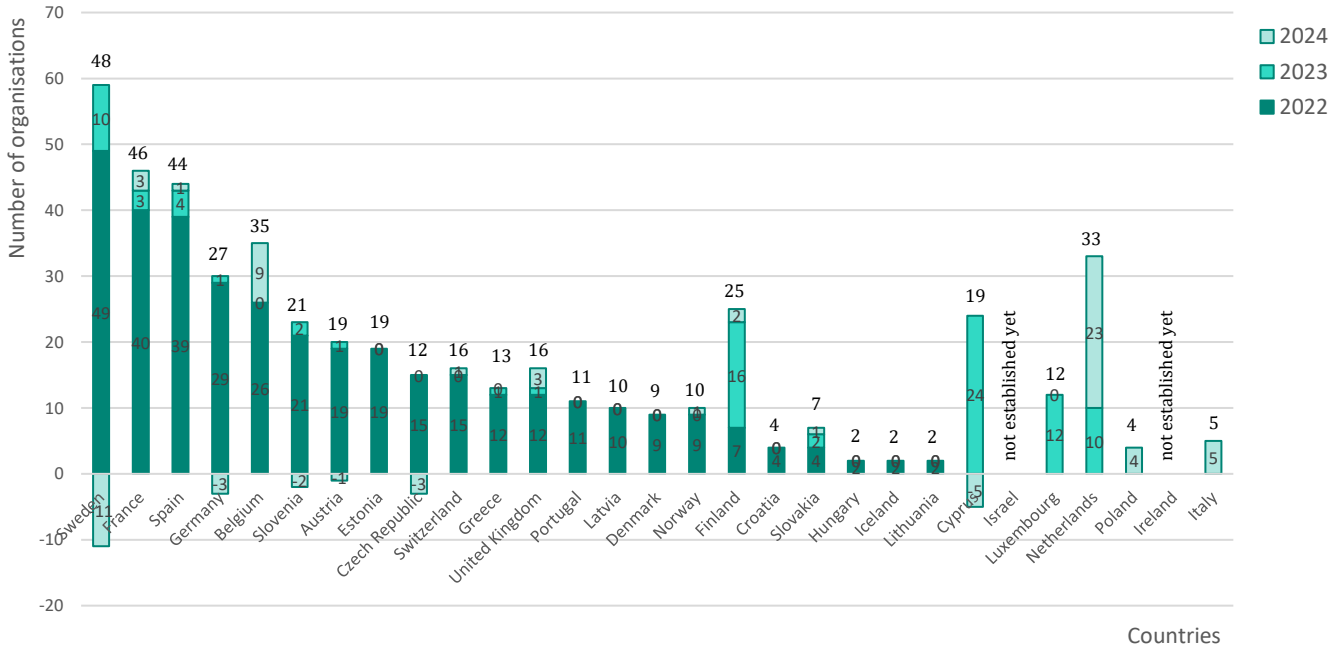


Figure 1. Changes in the size of the NHs (number of participating organisations) between 2022 and 2024. The number of organisations involved in the NHs in 2024 is indicated above the bars. Changes are shown as comparisons with the previous year. In some cases, the number of NH member organisations decreased compared with the previous year, resulting in negative values.

While all NHs include all PARC participating organisations (i.e. beneficiaries and affiliated entities, or their equivalent), the extent of stakeholder involvement differs considerably (Figure 2). Engagement from GB member organisations has been lower than expected, ideally all GB institutions should be represented within their NHs.

Roughly two-thirds of the NHs involve additional scientists, regulators, and policymakers beyond those formally included in PARC. Some countries have successfully created broad networks that also integrate policymakers, regulators, scientists and NGOs. However, consumer organisations and trade unions remain the least engaged. Encouragingly, participation from groups such as “other policymakers,” “industry representatives,” “consumer associations,” and “trade unions” has grown over the years, but their overall involvement still lags.

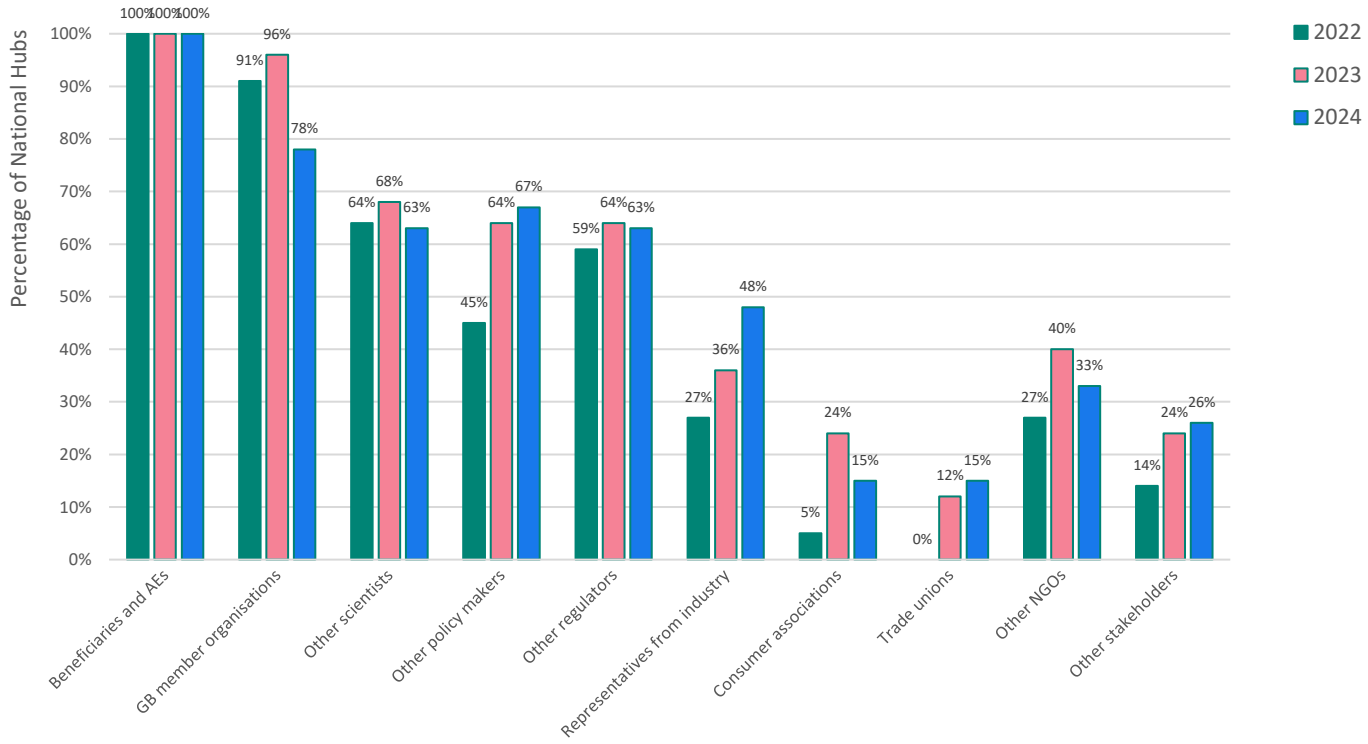


Figure 2. Changes in the involvement of different stakeholders in the NHs over the years (2022-2024).

The expertise represented within NHs also varies (Figure 3). Nearly all NHs cover the PARC core areas (risk assessment, human biomonitoring, environmental and multisource monitoring, occupational exposure, and hazard assessment). Around half of the NHs also include expertise in cross-cutting activities such as communication and dissemination, and FAIR data. The share of NHCPs reporting FAIR data expertise increased markedly from 2023 to 2024, likely supported by the targeted training activities organised within PARC.

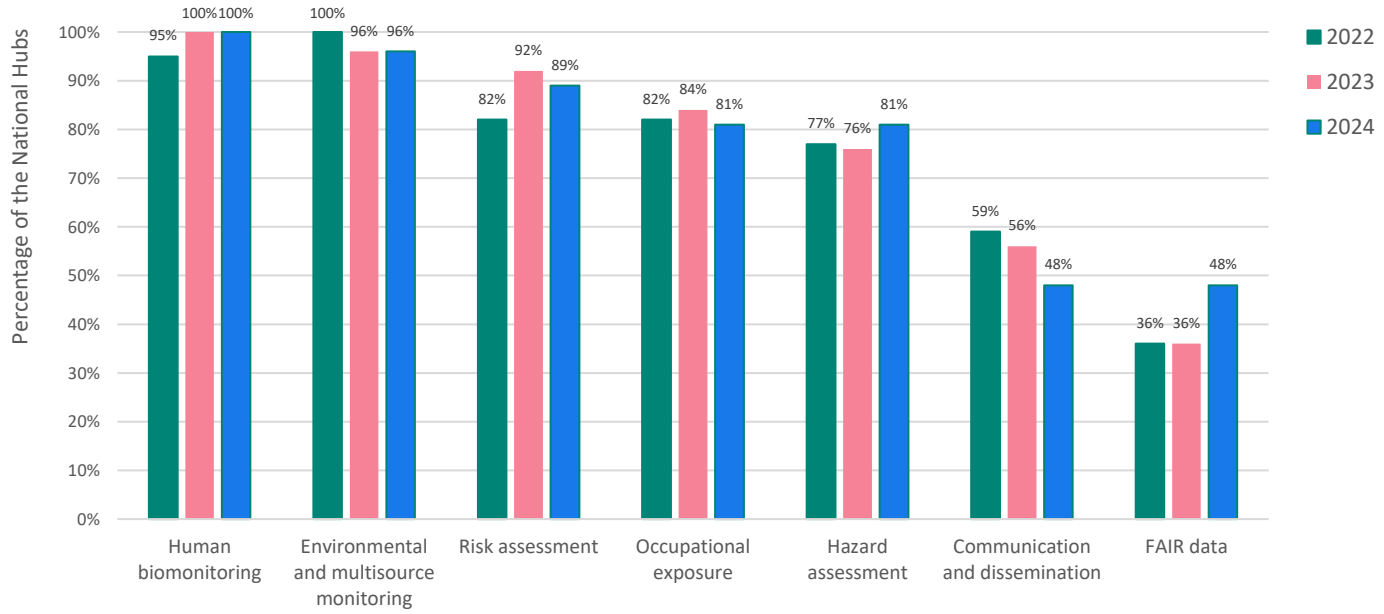


Figure 3. Changes in the expertise covered by the NH members over the years (2022-2024).

Despite progress, challenges persist. Around 40% of NHs still report difficulties in engaging at least one relevant stakeholder group, with particularly limited engagement of consumer associations, industry representatives, and policymakers (Figure 4). Some NHCPs also report difficulties involving GB members effectively, an issue that should be addressed in collaboration with the GB. In addition, approximately 25% of NHCPs are currently in the process of onboarding new members.

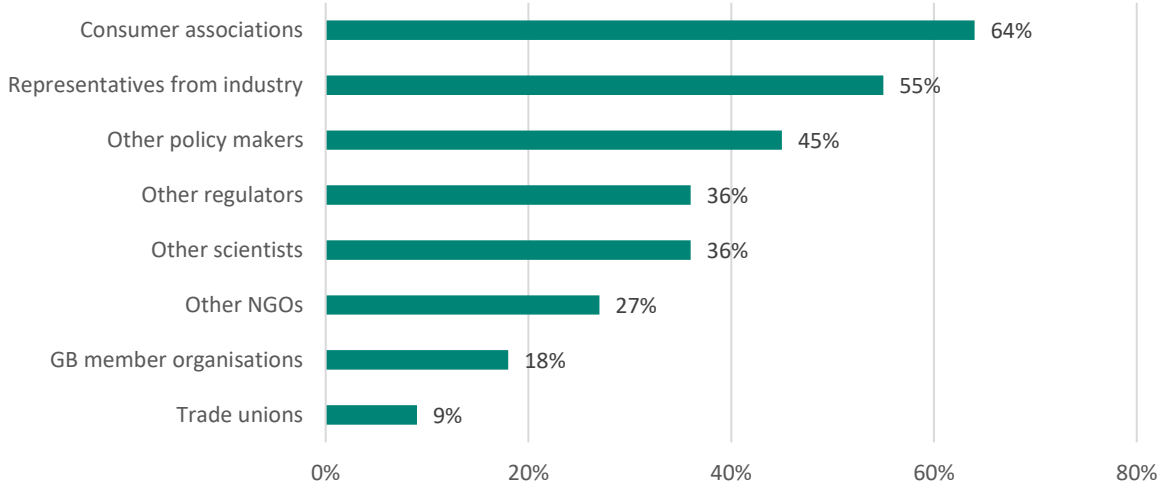


Figure 4. Reported engagement challenges in 2024 among NHCPs experiencing difficulties (40% of total NHCPs).

Maintaining the motivation of diverse NH members and ensuring balanced representation remain ongoing challenges.

The uneven participation **risks undermining** the ability of NHs to **fully reflect national perspectives, underscoring the need for continued capacity-building and targeted engagement strategies**.

3.3. NHs in action: Achievements and challenges

3.3.1. General overview

Between 1st May 2022 and 31st December 2024, NHCPs carried out a range of activities to support national coordination and disseminate PARC-related work (Figure 5). The most common activity was the regular organisation of NH meetings, conducted by almost all NHCPs each year. Approximately one-third of NHCPs also organised conferences, workshops, or seminars, prepared communication materials, or ran awareness-raising campaigns. Some NHCPs established platforms to share information among NH members and distributed newsletters. In 2024, 72% of NHs reported communicating PARC activities to government bodies or other policymakers.

Between 2022 and 2024, the number of actions organised by the NHCPs was either maintained or increased in most countries, reflecting an overall growth trend across partners. The United Kingdom implemented the highest number of actions (12), followed by the Czech Republic (11), and then Germany, Greece, and Norway (9 each).

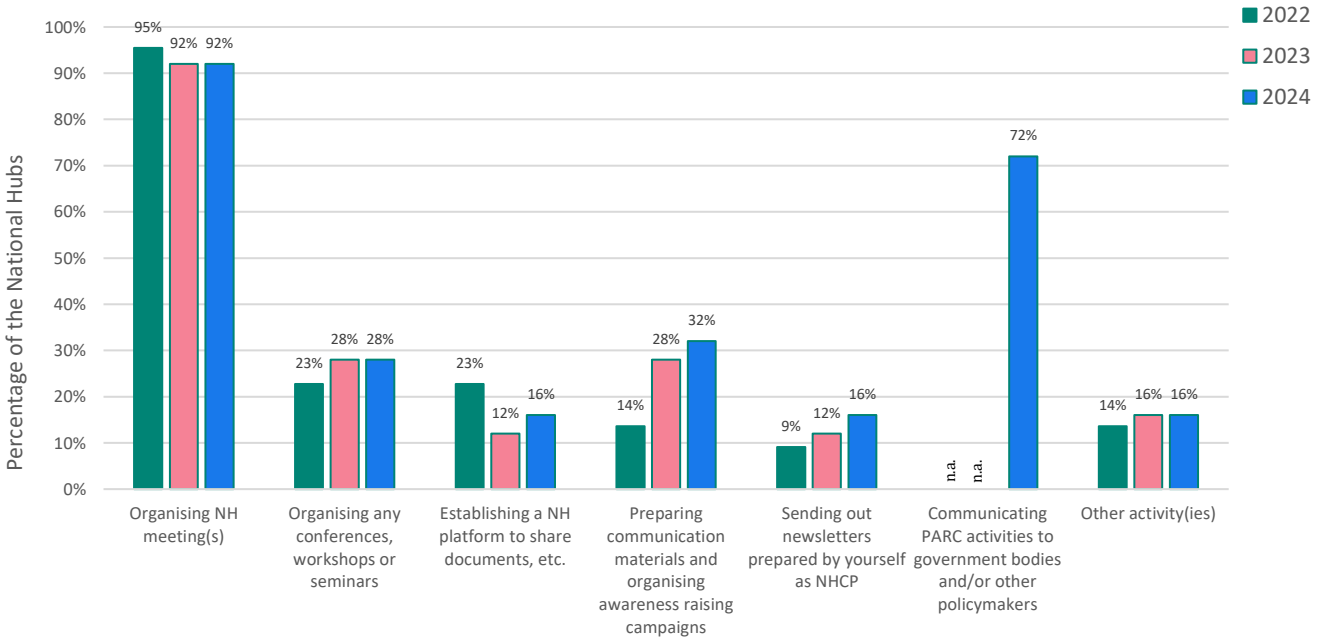


Figure 5. Overview of national activities carried out by the NHCPs between 2022 and 2024.

3.3.2. NH meetings

Between 2022 and 2024, the organisation of NH meetings, a key NHCP activity, remained generally consistent, with most countries holding at least one or two meetings per year (Figure 6). In 2022, 45% of NHs held one meeting, 27% held two, 5% held three, 18% held more than three, and 5% held none. In 2023, the distribution shifted slightly: 36% of NHs held one meeting, 24% held two, 20% held three, 12% held more than three, and 8% held none. By 2024, the majority of NHCPs organised two meetings (40%), followed by one meeting (32%) and three meetings (20%). Throughout the period, the proportion of NHs that did not hold any meetings remained low (<8%).

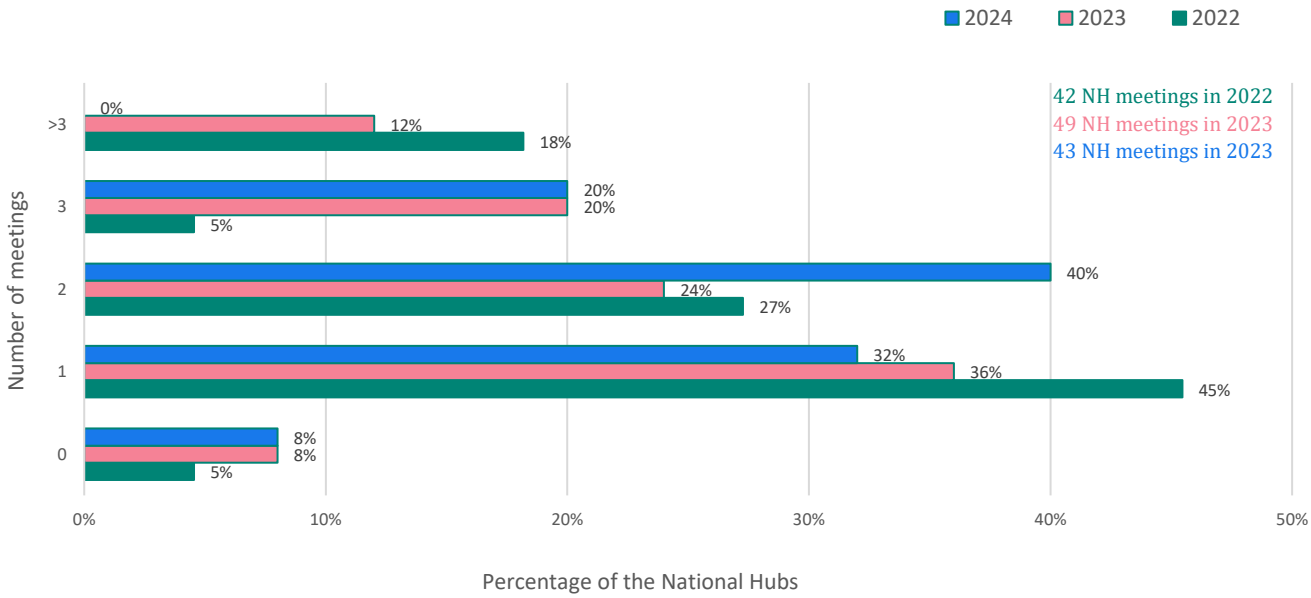


Figure 6. Distribution of the number of NH meetings organised between 2022 and 2024.

In 2022 and 2023, NH meetings covered several key topics including:

- Introductory sessions on PARC's goals and structure, including presentations of national partners' roles and updates on NHCP activities.
- Regular updates on the progress of PARC WPs, particularly those involving national researchers.
- Importance of exchanging scientific knowledge, sharing of data, and discussion of relevant study results.
- Policymakers' involvement, mapping of national needs, and strategic planning, including the exit strategy and sustainability of PARC activities.
- Stakeholder engagement, including ministries and the general public, with communication as a cross-cutting theme to strengthen science-policy interaction.
- Presentation of PARC tools (e.g. PARCopedia), discussions on FAIR data, NH outputs, and contributions to future workshops and regulatory developments.

By 2024, NH meetings reflected the growing maturity of PARC and a shift from foundation-building and coordination toward implementation, evaluation, and policy alignment. Key discussion topics in 2024 included:

- Activities performed by PARC partners and progress updates on ongoing tasks, including new projects, with a focus on scientific results and policy-relevant outputs.
- General updates on PARC to keep NH members informed about overall progress and key outputs.
- Identification of national priorities, planning of workshops, and proactive steps to ensure sustainability and alignment with national agendas.
- Discussion of PARC topics relevant to specific WPs and national contexts, such as methodological challenges, validation processes, and real-world applications of research findings.
- National priorities, including national HBM programmes, exposure monitoring, national PFAS plans, and national KARC initiatives, to guide local implementation and planning.
- Increased dialogue on regulatory impact, stakeholder expectations, and translating scientific evidence into policy-ready solutions.
- Collaboration and engagement of stakeholders, with emphasis on fostering partnerships across ministries, research institutions, and the public.
- Outreach activities, including national-level meetings, digital tools, and preparation for future scientific and policy events, moving beyond conceptual discussions to concrete dissemination actions.
- Requests formulated by PARC WPs, ensuring NHs could respond effectively to surveys, and information needs from PARC activities.

3.3.3. National outreach activities

Between 2022 and 2024, more than two-thirds of NHCPs (21 out of 27 respondents) organised communication activities targeting citizens or other stakeholders. The distribution of activities among these NHCPs is shown in Figure 7.

The most frequent actions were promoting PARC at events and maintaining a dedicated section on institutional websites. The use of digital channels more than doubled between 2022 and 2024, while updates on institutional webpages remained consistently high, with a slight decrease in 2024. In contrast, traditional media approaches, such as press releases and media appearances, declined or remained limited. Information sessions and the distribution of leaflets increased substantially in 2024, while other dissemination methods, such as news articles or blog posts, remained stable.

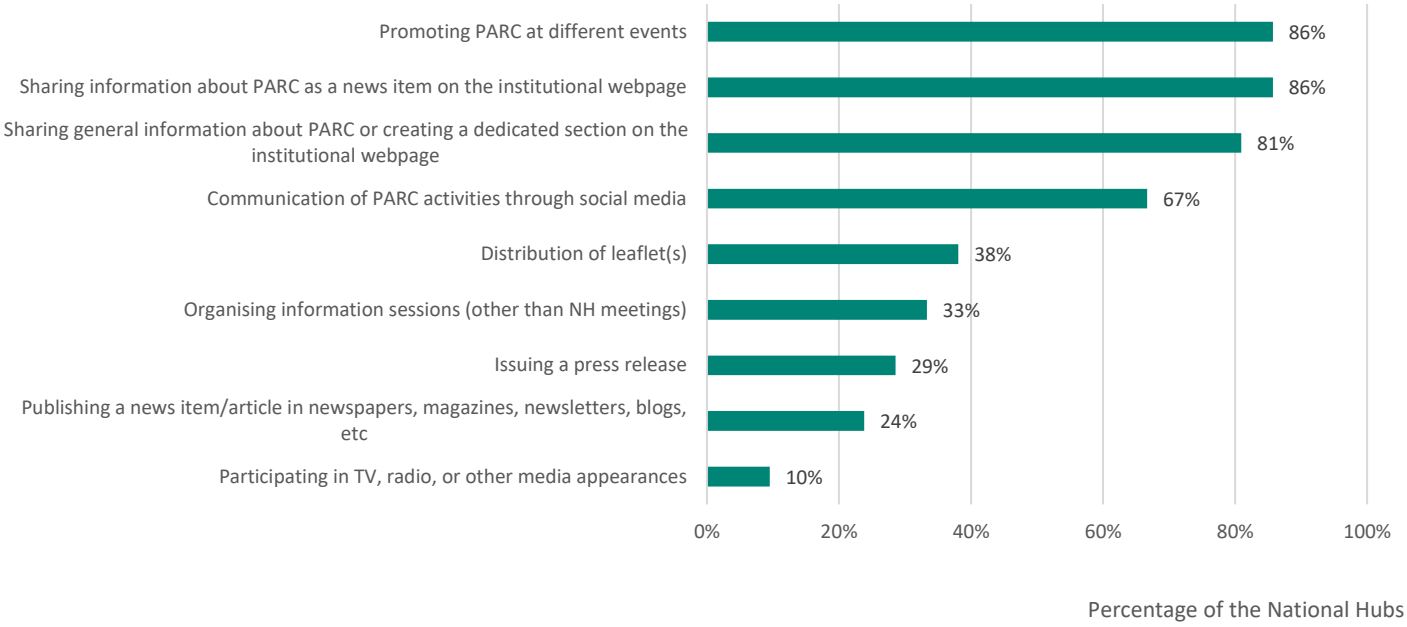


Figure 7. Distribution of communication activities by NHCPs engaged in communication (21 out of 27) between 2022 and 2024.

3.3.4. Challenges in implementing NH actions

In 2022, the NHCPs identified or anticipated several problems regarding the organisation of the NH meetings:

- Time constraints associated with the limited availability of members due to busy schedules and short deadlines, as well as with in-person meetings, which tend to be more time-consuming, leading to reliance on e-mail communication.
- Lack of dedicated funding and insufficient support from PARC budget, hindering the organisation of meetings, especially face-to-face ones, and the allocation of staff to NH specific activities.
- Difficulty in sustaining participation over time, particularly in countries with few active organisations, linked to lack of tools or guidance to attract and retain new members to the NH.
- Struggles to balance European and national priorities, with some uncertainty around the purpose of meetings; need for more specific and actionable information.
- Need for better long-term planning and a clearer central strategy from PARC to guide the NHs' role, support sustainability, and clarify how they can benefit from their involvement.

The second survey highlighted problems and challenges that often overlapped with those identified in 2022 but provided more detail on NH meetings:

- Limited funding and personnel, restricting NHCPs to basic coordination (e.g. organising meetings, responding to requests) and limiting engagement with stakeholders beyond the scientific community.
- Maintaining members' interest proved difficult, as stakeholders' attention varied by topic, making it challenging to build a cohesive NH community.
- Inconsistent communication and unclear responsibilities between NHs, NHCPs, and WPs, with requests sometimes lacking context or arriving with tight deadlines. NHCPs highlighted the need for clearer, standardised communication tools and feedback mechanisms.
- Challenges in cross-sector coordination, especially in contexts requiring inter-ministerial collaboration or where governance is fragmented.
- Limited overview of PARC activities, making it hard to identify relevant messages to convey.

- Need for better-tailored communication materials, adapted to the language and culture of target groups (e.g. policymakers, general public). Limited public-facing outreach risked constraining visibility and understanding of PARC.

By 2024, some issues persisted, while new emphasis was placed on strategic communication and structural alignment:

- Resource constraints continued to limit national activities.
- Complexity of stakeholder engagement became more apparent, with recognition that effective participation requires strategic communication to make PARC outputs actionable.
- Growing need for tailored communication materials, even more strongly emphasised than in 2023, to support national-level dissemination and stakeholder engagement.
- Difficulties prioritising stakeholders, as limited resources forced NHCPs to decide which groups to engage and how.
- Increased expectations for feedback, with NHCPs calling for clearer evidence on how their contributions (e.g. surveys, consultations) informed wider PARC outputs.

3.4. Managing requests in response to the needs of WPs

NHCPs are responsible for distributing information and coordinating various survey requests from the PARC WPs as part of their role in facilitating the flow of information between PARC and the members of the NHs. By August 2025, 35 requests had been sent to the NHCPs, mainly from the NHCs, but also from PARC partners representing different WPs. In some cases, requests were sent directly by colleagues from other WPs, and NHCPs could not always determine whether these requests had been coordinated with the NHCs.

To address this issue, the NHCs, together with the NHCPs and T2.3 partners, developed a request template to be completed by the requester before sending the request. It was agreed that both the request and the filled-in template should be sent out by the NHCs to the NHCPs. This template helps to clarify the purpose and added value of each request and to identify the appropriate recipients for a reply.

The requests received can be grouped into three main categories:

- Information sharing: requests to forward information from PARC or PARC partners to NH members or other stakeholders (e.g. announcements of training courses or PARC webinars) - 6 requests
- Individual or organisational surveys: surveys that can be answered at an individual or institutional level (e.g. consultations for specific deliverables or identification of relevant laboratories) - 19 requests
- National-level surveys: surveys requiring coordinated responses at national level (e.g. the exit strategy survey) - 10 requests

When coordinating surveys belonging to categories 2 and 3, NHCPs often face challenges in collecting sufficient feedback. In the “Third survey for mapping the needs of the National Hubs” (see Annex III for survey questions), they reported difficulties in meeting deadlines for providing responses. The main reasons identified were:

- Lack of response from NH members (e.g. in the case of HBM-GVs).
- Difficulty in reaching a consensus answer (e.g. prioritisation).
- Challenges in identifying the right stakeholders.
- Need for clearer formulation of requests.
- Missing or delayed feedback from the responsible persons.

At the meeting of the NHCPs in May 2025, these difficulties were discussed and several suggestions were collected to help overcome them:

- Provide feedback to participants after completing questionnaires.
- Acknowledge participation efforts through formal appreciation or visibility within PARC to motivate members to engage more actively.
- Consider allowing all AEs to respond to certain surveys, not just NHCPs.
- Bundle survey and information requests to reduce email overload and prevent duplicates; ensure alignment between NHCs and other communication channels to avoid overlap.
- Offer additional PARC resources or guidance to support survey responses and related activities.

3.5. Good practices in stakeholder engagement and NHCP activities

The compilation presented in Annex IV highlights a range of good practices identified through the annual surveys on the needs of the NHs. These examples demonstrate how effective stakeholder engagement and well-structured NHCP activities can strengthen collaboration, visibility, and participation within PARC.

NHCPs have successfully engaged stakeholders through:

- inclusion and collaboration, by involving key authorities, ministries, industry representatives, and advisory platforms in chemical risk assessment discussions,
- events and forums, such as national conferences, thematic meetings, and hybrid stakeholder dialogues, which foster awareness and exchange between policy, science, and industry,
- awareness-raising and communication, including newsletters, information dissemination through networks, and outreach to students and professionals.

NHCP activities also showcase effective coordination and communication mechanisms, such as structured meeting formats, thematic discussions, feedback loops, and internal newsletters. Together, these practices serve as valuable examples for strengthening the role of NHCPs as interfaces between PARC and national stakeholders.

3.6. Pathways to the sustainability of the NHs

The third survey sent to the National Hubs (NHs) included the question “Do you think that the National Hub and some of its activities can continue after the end of the Horizon Europe Partnership?” to gain first insights into the long-term sustainability of the NHs and their activities.

More than half of the countries expressed a strong interest in maintaining their NH and related activities beyond the lifetime of PARC (Figure 8). In total, 56% of respondents answered “yes”, indicating confidence in the continuation of their NHs, while 7% responded “no” and 37% were uncertain about future sustainability.

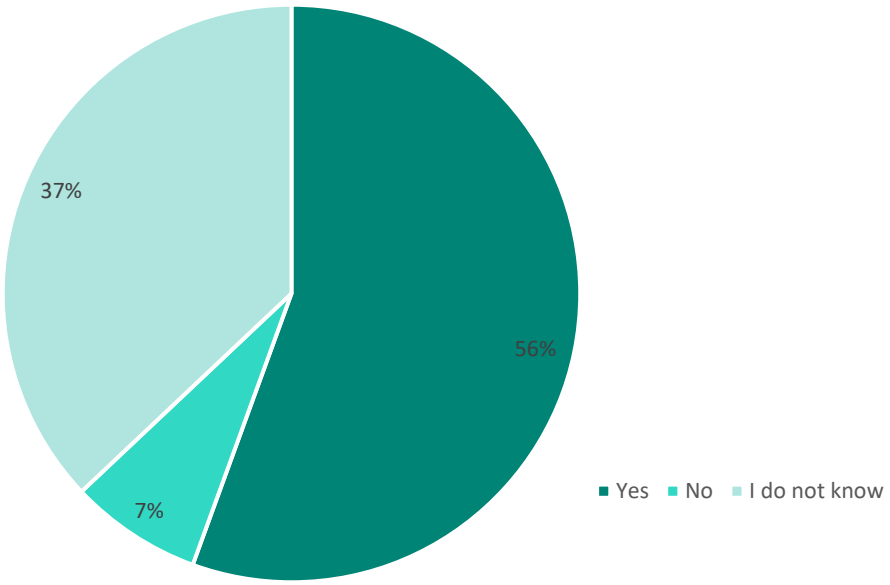


Figure 8. Do you think that the National Hub and some of its activities can continue after the end of the Partnership?

When asked "What would be the most reasonable way to ensure the continuation of the National Hub after the end of PARC?", countries provided a variety of perspectives reflecting their national contexts and institutional capacities.

Several organisations indicated a clear willingness to maintain the NH within their own structures. Some institutions, emphasised that ongoing activities - like the multi-year HBM programme - could provide a natural foundation for sustaining the Hub and integrating it into long-term national chemical risk management frameworks. Others plan to maintain regular exchanges between scientists and regulators involved in risk assessment, with proposals to continue holding two meetings per year to share updates on ongoing projects and emerging research needs.

In several countries, the NH is already integrated into existing intersectoral or governmental groups on chemical safety and risk management, which facilitates continuation. Examples include steering groups or national networks that bring together governmental agencies and academia. Maintaining these joint activities and projects is viewed as beneficial for both internal and external stakeholders and for strengthening the national risk assessment framework.

Some respondents noted that their HBM or chemical safety platforms had existed prior to PARC and are expected to continue afterward. Others proposed that NH activities could be sustained by embedding them into existing national frameworks for environmental health or sustainability.

At the same time, several countries pointed out that long-term sustainability depends heavily on available resources. Financial support - ideally at the European level through policy-linked or co-financed mechanisms - was repeatedly mentioned as a precondition, especially for smaller countries with limited capacity. In some cases, future activities may need to be scaled down or organised informally (e.g. via e-mail exchanges or topic-focused meetings) due to budget constraints.

Overall, most countries expressed strong motivation to sustain the NH in some form. The preferred pathway combines integration into existing national structures with continued European-level coordination and support to ensure continuity, efficiency, and alignment with broader chemical safety and sustainability objectives.

3.7. Recommendations

PARC's experience has demonstrated the feasibility of co-constructing a work programme between European and national regulatory agencies and the scientific community to advance Next Generation Risk Assessment. PARC has established a partnership that promotes collaboration in support of the objectives of the EU Chemicals Strategy for Sustainability by integrating diverse activities and breaking down regulatory silos - both at the Partnership level and at the national level, where the NHs have created mirror groups in each country.

In this sense, NHs play an essential role, as they bring together a wide array of stakeholders. To strengthen their functioning and maximise their contribution, it is recommended to:

- ensure the optimum engagement of NHs and the effective harvesting of their input by PARC;
- work towards the long-term sustainability of the NHs;
- maintain and support the NHs' invaluable role in providing the national perspective (e.g. how Member States approach specific issues, how PARC contributes to national needs, and how Member States can support and advocate for an exit strategy ensuring the sustainability of PARC's main assets).

The NHCPs have also identified several recurring challenges - limited resources, difficulties in maintaining engagement, lack of visibility of results, and overlapping communication channels - requiring targeted recommendations.

1. Strengthen communication within the NHCP network and build capacity

Improved communication and capacity building within the NHCP network can help engage NH members more effectively and sustain their long-term interest. Highlighting and sharing good practices and success stories enable each NHCP to adapt the functioning of the NH to national needs and maximise the benefits of participation in PARC. Several good practices have already been identified through the annual surveys on NH needs, discussed during NHCP meetings, and compiled into a living document that should be regularly updated. In addition, a number of success stories have been collected, with some already showcased on the PARC website. These activities should continue and be further developed to strengthen peer learning.

Training within the NHCP network (e.g. stakeholder engagement, communication strategies, or consensus-building) should remain a core element of capacity building, with the annual survey continuing to guide the planning of training topics. As most NHCP interactions still take place through periodic meetings, additional formats such as short thematic webinars or practical workshops could complement these and further enhance continuous learning and exchange.

2. Enhance communication within PARC and ensure better information management

To help NHCPs maintain a clear overview of PARC activities and identify relevant messages, closer interaction with the CT and WP leaders is encouraged. In addition, with the support of T3.2 'Communication, dissemination, and awareness', wider use of existing communication materials should be promoted. For instance, upcoming policy briefs can serve as key references for national-level messages.

The request template developed collaboratively by the NHCs, NHCPs, and T2.3 should continue to be systematically used to clarify the purpose and expected contribution of each request arising from the different PARC WPs. Efforts to coordinate communication and requests have been implemented jointly by the PARC Management Board (MB) and NHCs. Survey and information requests are now bundled to reduce e-mail overload and prevent duplication.

A central online interface to track survey requests, deadlines, and responses could further reduce e-mail overload and increase transparency. Providing feedback to NHs after surveys or consultations (e.g. demonstrating how their input was used) will help build trust and motivation. Finally, recognition of active

participation, for example through visibility in PARC communications or formal acknowledgment, could further encourage engagement.

3. Strengthening integration and coordination for greater PARC impact

To ensure "win–win" opportunities, NHCPs should continue to play an active role in cross-cutting tasks (e.g. T1.2, T2.1), facilitating knowledge transfer and integration of PARC results into policy documents. NHCs should maintain their coordination role, working with task leaders to channel national perspectives into PARC board discussions (MB, GB, and GSB).

NHs can act as effective bridges between ministries, regulators, scientists, and other stakeholders. Enhanced inter-ministerial collaboration should therefore be encouraged to ensure coherent national implementation. At the same time, continued European-level coordination and co-financing are crucial for sustainability, particularly for smaller countries with limited capacity. Integrating NH activities into existing national structures (e.g. intersectoral groups on chemical safety) and aligning them with broader European initiatives will help secure continuity and impact.

The collaboration between NHCPs and the respective GB members is a critical factor for maximising PARC's national impact. Joint efforts between NHCPs and GB members help ensure that PARC results are effectively translated into policy-relevant outputs and reach the appropriate stakeholders at the national level. This collaboration also strengthens outreach activities, facilitating engagement with ministries, regulators, and other key actors. In some countries, the GB members are not yet actively engaged with the NH, which can limit the visibility and uptake of PARC outputs. Addressing this gap is essential to enhance national representation and ensure that PARC findings inform policy and practice. One practical approach could be to explore the possibility of a dedicated joint NHCP-GB meeting, fostering regular dialogue, coordinated planning, and alignment of national and European priorities.

4. Improve the use of existing PARC tools and networks

Communication and coordination efforts have already been improved within PARC by bundling information requests and aligning channels. Building on this, NHCPs are encouraged to make greater use of the PARCopedia platform and the Science-to-Policy Dialogue Network.

Although NHCs make efforts to keep the PARCopedia NHCP group active, overall engagement remains low. To strengthen communication and knowledge sharing, each NH could designate a PARCopedia contact point (either the main NHCP or a deputy) to ensure the flow of information and encourage members to create institutional profiles. These platforms can be used to share both explicit and tacit knowledge, supporting the concept of "working through communities" and fostering collaboration across the Partnership. If this approach does not sufficiently increase engagement, alternative communication methods should be considered, such as more regular, focused, and concise meetings addressing specific topics, to maintain interaction and ensure that relevant information is effectively shared.

4. Conclusions & further work

The second report on national needs builds on the key findings of the first report, the results of the annual surveys mapping the needs of the National Hubs (NHs), and discussions during the NHCP meetings. While the maturity and composition of the NHs still vary considerably, substantial progress has been made since the beginning of PARC. The annual surveys and NHCP meetings have proven valuable in stimulating discussions and generating suggestions for further supporting and improving the NHs over time. Each survey has included additional questions (e.g. on communication activities or citations of PARC in policy documents) to encourage new reflections and ideas for NH development. Peer learning among NHCPs, such as sharing good practices,

has also been shown to be highly beneficial. Several activities identified in the recommendations can be strengthened in the remaining years of PARC. The annual surveys remain an effective tool for collecting NH input and suggestions. Responses collected each year allow us to highlight and valorise the progress and achievements of the NHs, reflect on possible improvements to the survey process, identify opportunities for implementation of targeted activities, such as capacity building or good practice sharing, to support NH development and structuring at the national level.

Ultimately, these efforts contribute to the long-term sustainability of PARC's impact by reinforcing national capacities, fostering collaboration, and ensuring that the Partnership's results are effectively translated into policy and practice. It would also be of added value if the NH network could support the implementation of the "One Substance, One Assessment" (OSOA) regulation. With the upcoming new tasks the Member States will have, such as the EU-wide HBM survey and the Early Warning Systems (EWS), the NHs could raise awareness and mobilise the relevant institutions that would be involved in this reporting.

Annex I. First survey for mapping the needs of the National Hubs

This survey is carried out under Task 2.3 'Sustainability'. It is sent to all National Hub Contact Points (NHCPs) for completion by 31/01/2023.

The National Hubs (NHs) are the national structures which support all PARC activities. There are no prescriptive rules and the construction is based on country needs. However, as a minimum they should include the national PARC partners as well as the national PARC Governing Board member institute(s). Each NH has a NHCP whose responsibility is to i) coordinate the national inputs to PARC either via the National Hub Co-Coordinators (NHCs) or through the WPLs; ii) convene NH meetings and iii) feed the NH needs into PARC. NHs are instrumental for the success of PARC and an indicator on the "performance" will be followed throughout the implementation of PARC.

The aim of this survey is to develop a baseline for the PARC NHs, to respond to specific requests from WPLs and to gather some preliminary information on the needs and expectations of the NHs themselves.

The outcomes of this survey will be used to promote the development of the NHs by transposing the results of this survey into training and capacity building programmes in WP9 'Building infrastructural and human capacities' as well as by developing materials which support the work of the NHCPs. The results will also be used within the scope of the indicators for output, outcome and impact. The mapping of the needs of the NHs will be a living process and will continue the entire duration of the Partnership. Annual general surveys will be sent out and will be complemented by specific surveys on hot topics or requests by WPLs. A calendar of these will be set to enable NHCPs to organize their completion as efficiently as possible. These annual surveys will cover specific needs of the NH in the future.

We ask all NHCPs to complete this survey. Most of the questions are addressed only to the NHCPs; however, there are a couple of questions that require discussions within each NH and a compilation of answers by the NHCPs. These latter ones are marked in the survey. The third section of the survey provides a link to a WP 9-specific survey on training needs, to be distributed to all NH members.

The collected information will be treated confidentially according to the requirements of the General Data Protection Regulation (GDPR). Data obtained from this survey will be saved and stored by the Portuguese National Institute of Health Doutor Ricardo Jorge (INSA) during the implementation and up to 5 years after the end of the PARC project. The pseudonymised data will be processed by the Task 2.3 partners and the National Hub Co-Coordinators.

Thank you for taking the time to complete this survey!

If you have any questions, please contact us.

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National Hub Co-Coordinators (NHCs)
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Ovnair Sepai (ovnair.sepai@ukhsa.gov.uk)

General information on the NHCP

Your name

Name of your institute

The country that you are representing

Your e-mail address

Section 1: Questions on the structure, operation and the first experiences of the National Hub

To be completed by the NHCP

1. Have you established a NH is your country?
- Yes
- No

If yes, please provide some information on the NH.

1.1. How many organisations are involved in your NH?
open numeric question

1.2. Who is involved in the NH? *(Select all options that apply.)*
- Beneficiaries and Affiliated Entities involved as participants in PARC
- PARC Governing Board member organisations
- Other scientists
- Other policy makers
- Other regulators
- NGOs
- Representatives from industry
- Consumer associations
- Trade unions
- Other stakeholders, please specify: *open text*

1.3. What expertise is covered by the NH members? *(Select all options that apply.)*
- Human biomonitoring
- Environmental and multisource monitoring
- Occupational exposure
- Hazard assessment
- Risk assessment
- FAIR data
- Communication and dissemination
- Other, please specify: *open text*

1.4. Are you planning to expand the NH with other organisations before May 2023?
- Yes
- No

1.5. Is the NH a follow-up of the NH established in the framework of the HBM4EU project?
- Yes
- No

2. To your knowledge, are there any intersectoral groups in your country (including scientists, policy makers, etc.; others than PARC National Hub) which are established to discuss national priorities and activities on chemical risk assessment?

- Yes
- No

2.1. If yes, please provide further information on the group(s).
open text

3. Do you have any difficulties in identifying the potential members of your NH?

- Yes
- No

3.1. If yes, please provide further information on the difficulties you are facing.
open text

4. Do you have any difficulties in engaging any relevant stakeholders?

- Yes
- No
- I have not contacted all potential members yet

4.1. If yes, please indicate the stakeholder(s) you have difficulties in engaging. *(Select all options that apply.)*

- Beneficiaries and Affiliated Entities involved as participants in PARC
- PARC Governing Board member organisations
- Other scientists
- Other policy makers
- Other regulators
- Non-governmental organisations (NGOs)
- Representatives from industry
- Consumer associations
- Trade unions
- Other stakeholders, please specify: *open text*

5. What kind of regular actions are you planning to implement as NHCP at national level during the first year of PARC (up to the end of April 2023)? *(Select all options that apply.)*

- Organising NH meeting(s)
- Establishing a NH platform to share documents, etc.
- Sending out newsletters prepared by yourself as NHCP
- Organising any conferences, workshops or seminars
- Preparing communication materials and organising awareness raising campaigns
- Other activity(ies), please specify: *open text*

5.1. Please describe how, in your opinion, the different PARC groups (NHCs, WPL and task co-leaders (TL), etc.) could support the national actions that you would like to implement.
open text

6. How many National Hub meetings are you planning in the first year of PARC (up to the end of April 2023)? Please include the past NH meetings.

- 1
- 2-3
- more than 3

7. Are you planning to invite all NH members to all NH meetings?

- Yes, all members will be invited to each NH meeting

- No, the list of invited partners will depend on the agenda of the meeting
- I do not know

8. Please describe existing or potential problems that you are facing with regard to the organisation of a NH meeting.
open text

9. Several requests to the NHCPs are expected from the different WPLs during the entire duration of the Partnership. All requests will be forwarded by the NHCs.
What kind of approach do you prefer? *(Select all options that apply.)*

- I prefer to receive each request in a separate e-mail.
- I prefer to receive several requests at the same time.
- I would like to know more about the expected requests in advance (e.g., through a calendar available through the PARC SharePoint).

  9.1. If you have any suggestions, please shortly describe them.
  open text

10. How are you planning to collect inputs from the NH members for requests from the different WPLs that require input by all NH members? *(Select all options that apply.)*

- Contacting the relevant members directly
- Forwarding the request to all NH members
- Organising a NH meeting
- Trying to answer the request myself without contacting the NH members
- Other, please specify: *open text*

11. Do you have any suggestion on how the NHCs can support the steering of the National Hubs (e.g., list of proposed topics to discussed, coordinate requests from WP Leaders)?

- Yes
- No

  11.1. If yes, please describe your suggestion.
  open text

12. The members of the NH might also formulate some requests towards the NHCPs. Please describe here if you have already received specific requests from your NH members and for which you feel that the support of the NHCs, WPLs &/or Coordination Team is needed.
open text

Section 2: Topic specific questions

To be discussed and compiled for the NH by the NHCP

Questions on communication activities

1. Are you planning to create a dedicated section about PARC on the website of your (NHCP) or other NH members' institute? *(Select all options that apply.)*
- Yes, my institute will have a dedicated section about PARC
- Yes, other institutes in the NH will have a dedicated section about PARC on their website
- No, but news related to PARC will be shared on the website of either my institute or other institutes in the NH
- I do not know

2. PARC will develop and disseminate several communication products (e.g., leaflets, policy briefs, research briefs, factsheets, infographics, videos, newsletters).
Which communication material should be translated in national languages?
open text

3. Are you willing to translate communication materials (if PMs are allocated)?
- Yes
- No

Question on the sustainability of the PARC-related activities

Task 2.3 is responsible, among others, for framing the exit strategy. As a first step, Task 2.3 would like to identify those activities that are already sustainable at national level. Please consult the answers with the National Hub members.

1. Which activities are sustainable in your country? *(Select all options that apply.)*
- Human biomonitoring
  (*e.g. national funding is available to regularly conduct national human biomonitoring studies targeting different age groups and substances*)
- Environmental monitoring (not already available)
  (*e.g. national funding is available to regularly conduct environmental monitoring studies targeting non-regulated substances*)
- Non-targeted screening
  (*e.g. national funding is available to regularly develop and apply non-targeted screening approaches in different fields /e.g. environmental monitoring or human biomonitoring/*)
- Toxicology: NAM development
  (*e.g., national funding is available to regularly conduct toxicological studies /NAM development*)
- Computational toxicology
  (*e.g. national funding is available to regularly conduct computational toxicological studies)*
- Toolbox and models enabling the application of a safe and sustainable by design (SSBD) approach
  (*e.g. national funding is available to develop and apply toolboxes and models for the application of SSBD approach*)
- Prioritisation process for substances
  (*e.g. a well-established process exists for the identification of priority substances*)
- Capacity for data storage
  (*e.g. the storage of the different national databases related to chemicals is well-managed and resources to continuously maintain their storage are available*)
- Access to data (environmental, human biomonitoring, etc.)
  (*e.g. FAIR data principles are applied for national databases*)
- Other chemical data flows, please specify: *open text*

The question of sustainability of PARC activities and our exit strategy is crucial and must be discussed in the different PARC groups from the start and in particular with the Governing Board members. Please note that a separate survey will be launched in February 2023, which will contain more questions and suggestions for discussion on the sustainability of PARC activities at European level.

Section 3: WP-specific surveys

First PARC's Training Needs Survey

All NH members should be asked to complete this survey

Task 9.4 'Training' is responsible for i) mapping training needs, ii) collecting and compiling training opportunities, and iii) providing support for the organisation of training.

To capture training needs in PARC-related scientific topics, Task 9.4 is now distributing among PARC participants, stakeholders and NHs the first PARC's Training Needs Survey. The survey is available here: https://survey-insa.min-saude.pt/redcap/surveys/?s=HHAMXKJXNW

We would like to ask you to complete the survey for your organization as well as to distribute the survey among the NH members.

The deadline for completion of the survey on training needs: 6th February 2023

Thank you for completing the survey!

Annex II. Second survey for mapping the needs of the National Hubs

This survey is carried out under Task 2.3 'Sustainability'. It is sent to all National Hub Contact Points (NHCPs) for completion by 29/02/2024.

The National Hubs (NHs) established in PARC are crucial building blocks of PARC as they play a key role in sharing information and needs in a two-way dialogue between the partnership players and the national stakeholders. PARC supports the continuous development of the NHs; thus, a peer-to-peer learning process was developed to foster the sustainable development of the NHs from the beginning of the Partnership. An online survey was developed and launched in the first year of PARC (i) to develop a baseline for the NHs; (ii) to identify the existing knowledge gaps, requests, suggestions and expertise and (iii) to address some specific requests arising from the Work Packages (WPs). The results of the survey can be found here.

The aim of this survey is (i) to monitor the NH activities; (ii) to gather information on the current needs and expectations of the NHs themselves; (iii) to collect good practices, and (iv) to get an insight into national success stories.

The results of this survey will be used to promote the development of the NHs by discussing common problems, sharing good practices, developing materials and organising trainings with the support of WP9 'Building infrastructural and human capacities'. The results will also be used within the scope of the output, outcome and impact indicators developed to follow the progress of PARC and communicate on success stories. The mapping of the needs of the NHs is a living process and will continue for the entire duration of the Partnership.

We ask all NHCPs to complete this survey. All questions are addressed to the NHCPs only.

The collected information will be treated confidentially according to the requirements of the General Data Protection Regulation (GDPR). Data obtained from this survey will be saved and stored by the Portuguese National Institute of Health Doutor Ricardo Jorge (INSA) during the implementation and up to 5 years after the end of the PARC project. The pseudonymised data will be processed by the Task 2.3 partners and the National Hub Co-Coordinators.

Thank you for taking the time to complete this survey!

If you have any questions, please contact us.

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General information on the NHCP

Your name

Name of your institute

The country that you are representing

Your e-mail address

1. When did you establish the NH in your country?
- In 2022
- In 2023
- The NH has not been established yet.

If the NH was established either in 2022 or in 2023, please provide some information on the NH.

1.1. How many organisations have been involved in your NH in 2022 and in 2023?
2022: *open numeric question*
2023: *open numeric question*

1.2. Who has been involved in the NH in 2022 and in 2023? *(Select all options that apply.)*

2022	**2023**
Beneficiaries and Affiliated Entities involved as participants in PARC	Beneficiaries and Affiliated Entities involved as participants in PARC
PARC Governing Board member organisations	PARC Governing Board member organisations
Other scientists	Other scientists
Other policy makers	Other policy makers
Other regulators	Other regulators
Representatives from industry (including industry associations)	Representatives from industry (including industry associations)
Consumer associations	Consumer associations
Trade unions	Trade unions
Other NGOs	Other NGOs
Other stakeholders/entities, please specify: *open text*	Other stakeholders/entities, please specify: *open text*

1.3. Are you planning to expand the NH with other organisations in 2024?
- Yes
- No

If yes:
1.3.1. Which type of organisations are you planning to expand?

- Beneficiaries and Affiliated Entities involved as participants in PARC
- PARC Governing Board member organisations
- Other scientists
- Other policy makers
- Other regulators
- Representatives from industry (including industry associations)
- Consumer associations
- Trade unions
- Other NGOs
- Other stakeholder/entities, please specify: *open text*

1.4. What expertise was covered by the NH members in 2022 and in 2023? *(Select all options that apply.)*

2022	**2023**
Human biomonitoring	Human biomonitoring
Environmental and multisource monitoring	Environmental and multisource monitoring
Occupational exposure	Occupational exposure
Hazard assessment	Hazard assessment
Risk assessment	Risk assessment
FAIR data	FAIR data
Communication and dissemination	Communication and dissemination
Other, please specify: *open text*	Other, please specify: *open text*

1.5. Are you planning to expand the expertise of the NH in 2024?
- Yes
- No

If yes:
1.5.1. Which expertise will be expanded?
- Human biomonitoring
- Environmental and multisource monitoring
- Occupational exposure
- Hazard assessment
- Risk assessment
- FAIR data
- Communication and dissemination
- Other, please specify: *open text*

In case the NH has not been established yet:
1.6. Please provide an explanation.
open text

2. Do you still have difficulties in engaging relevant stakeholders?
- Yes
- No
- I have not contacted all potential members yet

2.1. If yes, please indicate the stakeholder(s) you have difficulties in engaging. *(Select all options that apply.)*
- Beneficiaries and Affiliated Entities involved as participants in PARC
- PARC Governing Board member organisations
- Other scientists

- Other policy makers
- Other regulators
- Representatives from industry (including industrial associations)
- Consumer associations
- Trade unions
- Other NGOs
- Other stakeholders, please specify: *open text*

3. Which actions did you implement as NHCP at national level in 2022 and in 2023? *(Select all options that apply.)*

2022	**2023**
Organising NH meeting(s)	Organising NH meeting(s)
Establishing a NH platform to share documents, etc.	Establishing a NH platform to share documents, etc.
Sending out newsletters prepared by yourself as NHCP	Sending out newsletters prepared by yourself as NHCP
Organising any conferences, workshops or seminars	Organising any conferences, workshops or seminars
Preparing communication materials and organising awareness raising campaigns	Preparing communication materials and organising awareness raising campaigns
Other activity(ies), please specify: *open text*	Other activity(ies), please specify: *open text*

4. How many National Hub meetings have you organised in 2022 and in 2023?
2022: *open numeric question*
2023: *open numeric question*

4.1. What topics have you discussed during the meetings?
open text

5. Please describe existing or potential problems that you are recently facing with regard to NHCP actions.
open text

6. Some requests from the different WPs have already been formulated towards the NHs. Did you have any difficulties in answering any of those requests (e.g. no response from the members, lack of consensus among the members, short notice)?

- Yes
- No

6.1. If yes, please describe the difficulty/difficulties.
open text

6.2 Do you have any suggestions on how these issues can be supported by NHCs, WPLs and/or the Coordination Team?
open text

7. The members of the NH might also have formulated some requests towards the NHCPs in the past year. Please describe here if you received any specific requests from your NH members and for which you feel that the support of the NHCPs, WPLs &/or Coordination Team is needed.

open text

8. Please share good practices on the engagement of stakeholders, organising the meetings and other NHCP actions, if there are any. The information will be compiled and shared with the NHCPs.
open text

9. Please share national success stories which are related to PARC (e.g. new members joining the NH; launch of a national HBM programme, new national regulation, successful conference or awareness raising campaign, etc.), if there are any. This information will also be compiled and shared with the NHCPs. T3.2 'Communication, dissemination, and awareness' co-leaders will also review the reported stories and might contact you to develop the story for a news item or social media post.
open text

10. Do you have any suggestions for topics to be discussed during the next NHCP meeting?
open text

Thank you for completing the survey!

Annex III. Third survey for mapping the needs of the National Hubs

This survey is carried out under Task 2.3 'Sustainability'. It is sent to all National Hub Contact Points (NHCPs) for completion by 28 February 2025.

The National Hubs (NHs) established in PARC are crucial building blocks of PARC as they play a key role in sharing information and needs in a two-way dialogue between the partnership players and the national stakeholders. PARC supports the continuous development of the NHs; thus, a peer-to-peer learning process was developed to foster the sustainable development of the NHs from the beginning of the Partnership.

The aim of this survey is (i) to monitor the NH activities; (ii) to gather information on the current needs and expectations of the NHs themselves; (iii) to collect good practices, and (iv) to get an insight into national success stories.

The results of this survey will be used to promote the development of the NHs by discussing common problems, sharing good practices, developing materials and organising trainings with the support of WP9 'Building infrastructural and human capacities'. The results will also be used within the scope of the output, outcome and impact indicators developed to follow the progress of PARC and communicate on success stories. The mapping of the needs of the NHs is a living process and will continue for the entire duration of the Partnership.

We ask all NHCPs to complete this survey. All questions are addressed to the NHCPs only.

The results of previous surveys are available here.

The collected information will be treated confidentially according to the requirements of the General Data Protection Regulation (GDPR). Data obtained from this survey will be saved and stored by the Portuguese National Institute of Health Doutor Ricardo Jorge (INSA) during the implementation and up to 5 years after the end of the PARC project. The pseudonymised data will be processed by the Task 2.3 partners and the National Hub Co-Coordinators.

Thank you for taking the time to complete this survey!

If you have any questions, please contact us.

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I. General information on the NHCP

Your name

Name of your institute

The country that you are representing

Your e-mail address

II. Questions required for reporting output indicators

1. When did you establish the NH in your country?
- In 2024
- Earlier (2022 or 2023)
- The NH has not been established yet.

If the NH was established, please provide some information on the NH.

1.1. How many organisations have been involved in your NH in 2024?
open numeric question

1.2. Who has been involved in the NH in 2024? *(Select all options that apply.)*
- Beneficiaries and Affiliated Entities involved as participants in PARC
- PARC Governing Board member organisations
- Other scientists
- Other policy makers
- Other regulators
- Representatives from industry (including industry associations)
- Consumer associations
- Trade unions
- Other NGOs
- Other stakeholders/entities, please specify: *open text*

1.3. What expertise was covered by the NH members in 2024? *(Select all options that apply.)*
- Human biomonitoring
- Environmental and multisource monitoring
- Occupational exposure
- Hazard assessment
- Risk assessment
- FAIR data
- Communication and dissemination
- Other, please specify: *open text*

In case the NH has not been established yet:
1.4. Please provide an explanation.
open text

III. Questions related to NHCP activities

2. Which actions did you implement as NHCP at national level in 2024? *(Select all options that apply.)*

- Organising NH meeting(s)
- Establishing/maintaining a NH platform to share documents, etc.
- Sending out newsletters prepared by yourself as NHCP
- Organising any conferences, workshops or seminars
- Preparing communication materials and organising awareness raising campaigns
- Communicating PARC activities to government bodies and/or other policymakers
- Other activity(ies), please specify: *open text*

3. How many National Hub meetings have you organised in 2024?
open numeric question

3.1. What topics have you discussed during the meeting(s)?
open text

4. Have you organised any communication activities targeting citizens or stakeholders at the national or regional level between 2022 and 2024?

Note: Communication activities aims to inform, engage, and raise awareness about the project, its goals, and its societal and policy relevance.

- Yes
- No

4.1. If yes, please indicate the type(s) of communication activities you organised? Please tick the box at each year when the activity was performed.

Communication activity	**2022**	**2023**	**2024**
Sharing general information about PARC or creating a dedicated section on the institutional webpage			
Issuing a press release			
Sharing information about PARC as a news item on the institutional webpage (e.g. on launch of PARC)			
Publishing a news item/article in newspapers, magazines, newsletters, blogs, etc.			
Participating in TV, radio, or other media appearances			
Communication of PARC activities through social media			
Distribution of leaflet(s)			

Organising information sessions (other than NH meetings)			
Promoting PARC at different events			
Other: *please specify*			

If yes for "Creating a dedicated page for PARC on institutional webpage"

Please add the link
open text

If yes for "Issuing a press release", please add the link, if possible

open text

If yes for "Publishing a news item/article in newspapers, magazines, newsletters, blogs, etc." or "TV, radio or other media appearances".

If you have not added already, please add the information here.

IV. Questions highlighting potential issues

5. Do you still have difficulties in engaging relevant stakeholders?
- Yes
- No
- I have not contacted all potential members yet

5.1. If yes, please indicate the stakeholder(s) you have difficulties in engaging. *(Select all options that apply.)*
- Beneficiaries and Affiliated Entities involved as participants in PARC
- PARC Governing Board member organisations
- Other scientists
- Other policy makers
- Other regulators
- Representatives from industry (including industrial associations)
- Consumer associations
- Trade unions
- Other NGOs
- Other stakeholders, please specify: *open text*

6. Please describe any new or ongoing challenges you are currently facing with regard to NHCP actions.
Note: While we asked a similar question last year, we kindly request that you focus on issues that have arisen in 2024 or more recently.
open text

7. Some requests from the different PARC WPs have been formulated towards the NHs in 2024. Did you have any difficulties in answering any of those requests (e.g. no response from the members, lack of consensus among the members, short notice)?
- Yes
- No

7.1. If yes, please describe the difficulty/difficulties.
open text

7.2 Do you have any suggestions on how these issues can be supported by PARC NHCs, WPLs and/or the Coordination Team?
open text

8. The members of the NH might also have formulated some requests towards the NHCPs in the past year. Please describe here if you received any specific requests from your NH members and for which you feel that the support of the NHCCs, WPLs &/or Coordination Team is needed.
open text

V. Good practices and success stories

9. Please share any good practices from 2024 regarding stakeholder engagement, meeting organisation, or other NHCP actions. This information will be compiled and shared with all NHCPs.
open text

10. Please share national success stories from 2024 that are related to PARC (e.g. new members joining the NH, launch of a national HBM program, new national regulation, successful conference or awareness-raising campaign). This information will be compiled and shared with the NHCPs. Additionally, T3.2 'Communication, dissemination, and awareness' co-leaders will review the reported stories and may contact you to develop them further for a news item or social media post.
open text

11. Are you aware of citations of PARC in policy documents at the national or regional level?

With citations we mean:

'PARC' or 'Partnership for the Assessment of Risks from Chemicals" mentioned: The project itself is explicitly referenced.

Results of PARC mentioned/integrated in policy documents (a policy document is a formal written statement that outline the principles, guidelines and procedures an organisation or government entity follows, the documents provide a clear framework for decision-making, examples: policy papers, policy briefs, laws, regulations, etc.)

- Yes
- No

If yes:

11.1. How has PARC been referred to in the policy document(s)?

open text

11.2. Could you provide a link? Please upload the document(s) to the SharePoint?

open text

VI. Other

12. What resources are you currently using to support NH activities? Please describe them briefly.
open text

13. Do you think that the National Hub and some of its activities can continue after the end of the project?
- Yes
- No
- I do not know

If yes:
13.1. What would be the most reasonable way? (e.g. my organisation is willing to maintain it, it will be integrated into an existing intersectoral group on chemical risks, etc)
open text

If no:
13.2. What is the main reason? (e.g. no budget foreseen, lack of interest from members, etc.)
open text

14. Do you have any suggestions for topics to be discussed during the next NHCP meeting?
open text

Thank you for completing the survey!

Annex IV. Good Practices in Stakeholder Engagement and NHCP Activities

Introduction

Since the publication of the first report on national needs (Deliverable D2.7), significant efforts have been made to further support the development of the National Hubs (NHs) within PARC (Partnership for the Assessment of Risks from Chemicals). The NHs are networks of organisations at the country level, involving PARC partners, relevant national ministries, public and research institutions, and other stakeholders (e.g., industry, NGOs, trade unions) active in the field of chemical risk assessment both within and beyond the direct scope of PARC. Each country has a designated National Hub Contact Point (NHCP) who coordinates national-level exchanges and contributes to the development of synergies with related national and EU initiatives. NHs are crucial building blocks of the Partnership, essential to both the fulfilment and sustainability of PARC's main activities. Their importance is further underlined by the national co-funding of PARC, which highlights the need for strong, stable, and well-functioning NHs. These structures play a key role in facilitating two-way dialogue and information exchange between PARC and national stakeholders.

Under Task 2.3 'Sustainability', a process for mapping the needs of the NHs was developed at the beginning of PARC and will continue throughout the duration of the project. This includes annual surveys sent to NHCPs to track progress and regularly collect feedback and suggestions. In addition to the surveys, biannual NHCP meetings provide further opportunities to identify, discuss, and address evolving needs. The outcomes of these activities inform efforts to strengthen the NHs and feed into PARC's capacity-building activities under WP9 'Building infrastructural and human capacities. They are also used to support the follow-up of the PARC indicator framework, offering input on achieved outputs, outcomes, and long-term impact. The mapping process is thus a living, iterative mechanism that will continue until the end of PARC.

This is a living document dedicated to collect PARC good practices in stakeholder engagement and NHCP activities. This document will be updated over time and serve as a practical resource for the NHCPs. It is structured in two parts: good practices related to stakeholder engagement, and good practices related to NHCP activities.

PART A: Good practices in stakeholder engagement

In 2024, almost half (40.7%) of the National Hubs reported difficulties in engaging stakeholders. However, several National Hubs also shared success stories. To support others and encourage continued efforts in stakeholder engagement, we provide below a selection of good practice examples collected from the annual surveys on mapping the needs of the National Hubs.

These examples demonstrate that effective stakeholder engagement can be achieved through various types of initiatives.

1. Inclusion and collaboration with key stakeholders

The Swedish Medical Products Agency joined the governmental authorities hub and regularly participates in PARC discussions – strengthening collaboration with the pharmaceutical sector. *(Sweden)*

Sustainable national platforms are leveraged, such as the National Chemicals Management Association, which advises the relevant Minister and the government on Chemicals Management and brings together all key national authorities and stakeholders. *(Cyprus)*

New stakeholders were engaged through the preparation of an occupational HBM study, involving ministries, industry representatives, and workers. *(Cyprus)*

The Chemical Stakeholder Forum is used in many consultations and supports UK policy statements on chemicals. Members are invited to science days to share opinions on current and future PARC activities. *(UK)*

Collaboration was strengthened through the development of the third national HBM report and cooperation with related cohorts and networks. *(Austria)*

The Austrian Human Biomonitoring Platform was established in 2007 and became an advisory body to the Minister of the Environment in 2016. *(Austria)*

Running national projects helps maintain stakeholder motivation and ensures regular meetings. (*Latvia*)

In France, stakeholders are invited to present their activities of relevance to PARC at the NH meetings which increases also their visibility at the national level as well as the useful input for and from PARC. (*France*)

2. Stakeholder events and forums

Organisation of an information event for national stakeholders not yet involved in PARC, including presentations, Q&A sessions, and needs collection on communication about PARC. (*Germany*)

Organisation of a national PARC conference with 60 participants to raise awareness and explain all PARC WPs. (*Czech Republic*)

A dedicated NH meeting on Safe and Sustainable by Design (SSbD) brought together policy, science, and industry representatives. (*The Netherlands*)

Expansion of stakeholder dialogue events from 30 participants in 2023 to more than 150 in 2024, facilitated by effective hybrid formats and professional moderation. (Germany)

Integration of PARC as a permanent topic in the national chemicals forum to ensure continuous annual visibility and engagement. (Finland)

Use of existing scientific or policy conferences for engagement — for example, national chemical engineering conferences to consult stakeholders and gather opinions on PARC activities. (Greece)

The HBM-PT workshop serves as a key platform for disseminating NH and partner activities to stakeholders. (Portugal)

3. Awareness-raising and communication

Dissemination of PARC requests and information through NH members and national forums. *(Spain)*

Publication of a periodic newsletter highlighting national HBM research outputs, even from external institutions. *(Israel)*

Publication of quarterly newsletters covering events, news, and publications, with contributions from members. *(France)*

Dissemination of PARC activities to university students in Environmental Health. *(Czech Republic)*

PART B: Good practices in NHCP activities

The following examples illustrate effective approaches applied by NHCPs to enhance coordination, internal communication, and meeting structures within the NHs.

1. Organisation and structure of NH meetings

Dedicated NH meetings focused on specific topics (e.g. exposure monitoring), identifying collaboration areas and planning thematic follow-up meetings (e.g. PFAS). (*Luxembourg*)

Decision to keep NH meetings limited to scientists and regulators for open risk assessment discussions, with separate stakeholder events planned. (*Switzerland*)

Inclusion of young scientists presenting their PARC research through short oral communications during NH meetings. (Norway)

NH meetings structured to promote critical discussion, knowledge sharing, and synergy-building among partners and stakeholders. (*Denmark*)

Combination of one physical and two online meetings annually, improving knowledge-sharing and engagement across associated entities. (*Denmark*)

NH meetings organised with other associated entities depending on the subject, strengthening commitment and collaboration. (*Netherlands*)

The UK NH employs a three-tier meeting structure to enhance governance and knowledge mobilisation. (*UK*)

Organisation of a one-day seminar dedicated exclusively to scientific content, separate from administrative topics, which received highly positive feedback from participants. (*Slovenia*)

NH meetings held back-to-back with traditional coordination meetings for chemicals management and international issues. (*Czech Republic*)

2. Communication and information flow

Regular dissemination of PARC requests and information through NH networks. (*Spain*)

Development of internal functioning charters and plans for monthly newsletters collecting information from members. (*France*)

NHCP newsletters include national HBM work and publications from beyond their institutions. (*Israel*)

Booking a meeting times either as a reminder or as an actual meeting to answer surveys. This was agreed because e-mail reminders were not thought effective by the partners. (*Finland*)