

TRANSFORMING OPEN RESPONSIBLE RESEARCH AND INNOVATION THROUGH CHARM  
TORCH

D8.4 – TORCH: POST-PILOTING OF STRATEGY/POLICIES & COMMON RECOMMENDATIONS FRAMEWORK

Project Acronym	<b>TORCH</b>
Grant Agreement	101017229
Project Title	<b>Transforming Open Responsible Research and Innovation through CHARM</b>
Coordinator	University of Barcelona
Consortium	University of Barcelona Trinity College Dublin Utrecht University University of Montpellier Eötvös Loránd University Budapest
Website	<a href="https://www.charm-eu.eu/torch">https://www.charm-eu.eu/torch</a>

Deliverable	<b>D8.4</b>
Title of Deliverable	<b>Post-Piloting of Strategy/Policies &amp; Common Recommendations Framework</b>
Work Package	WP8
Work Package Leader	Dr Nina Shiel (Research Fellow, TCD)
Deliverable Type	Report (R)
Dissemination Level	Public (PU)
License	CC BY
Document Version	V5 (FINAL)
Due Date	December 2023
Submission Date	20 December 2023
Authors (Main Beneficiary)	Trinity College Dublin
Other Contributors	All Consortium Partners



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101017229

## DOCUMENT HISTORY

Date	Revision No	Prepared By	Description
24-11-2023	V1	Dr Nina Shiel (TCD)	First draft
27-11-2023	V2	Project Management Team	PMT final approval
6-12-2023	V3	Quality Committee	Review comments and approval
20-12-2023	V4	Vice Rectors Committee	VRs approval
20-12-2023	V5	Dr Nina Shiel (TCD)	Final version

## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY: POST-PILOTING OF STRATEGY/POLICIES &amp; COMMON RECOMMENDATIONS FRAMEWORK 4</b>	
<b>1. INTRODUCTION</b> .....	<b>7</b>
<b>2. METHODOLOGY</b> .....	<b>9</b>
<b>3. TOWARDS A COMMON R&amp;I AGENDA FOR CHARM-EU</b> .....	<b>13</b>
3.1 Context of the TORCH Common R&I Agenda.....	13
3.2 Scope.....	14
3.3 TORCH Strategic Priority Areas.....	16
No. 1: Working towards reforming research assessment.....	16
No. 2: Fostering equality, diversity and inclusivity (EDI).....	19
No. 3: Championing Open Science.....	20
No. 4: Promoting inter/transdisciplinary research driven by societal challenges.....	22
No 5: Intensifying R&I cooperation between universities.....	23
<b>4. CONCLUSION: COMMON RECOMMENDATIONS</b> .....	<b>26</b>

## LIST OF FIGURES & TABLES

<b>Figure 1.</b> Institutional centres of interconnected RRI	8
<b>Figure 2.</b> TORCH five strategic priority areas	11
<b>Figure 3.</b> The five Strategic Priority Areas and the Pilots	16
<b>Table 1.</b> Initial priorities and their rationales	9
<b>Table 2.</b> Recommendations arising from the mid-term review	10
<b>Table 3.</b> TORCH Common recommendations	28

## DEFINITIONS

**Alliance members:** University of Barcelona, Trinity College Dublin, Utrecht University, Eötvös Loránd University, University of Montpellier.

**CHARM-EIGHT∞:** CHARM-EU Expansion, Inter-institutional campus, Governance, Higher education, Transformation (ERASMUS2027 Project).

**CHARM-EU:** CHallenge-driven, Accessible, Research-based, Mobile European University.

**DEI:** Diversity, Equity and Inclusivity

**EDI:** Equality/Equity, Diversity and Inclusivity.

**GEP:** Gender Equality Plan.

**HEIs:** Higher Education Institutions.

**New Alliance members:** Åbo Akademi, Julius-Maximilians-Universität of Würzburg, Hochschule Ruhr West.

**RMA:** Research Management and Administration

**RRI:** Responsible Research & Innovation.

**SPA:** Strategic Priority Area

## EXECUTIVE SUMMARY: POST-PILOTING OF STRATEGY/POLICIES & COMMON RECOMMENDATIONS FRAMEWORK

In this document, we put forward our finalised set of five TORCH strategies/policies. For the sake of clarity, we have adopted the term **strategic priority areas (SPAs)** to refer to these strategies/policies. Together, they suggest the basis for the common research & innovation (R&I) agenda for the CHARM-EU alliance, as developed through the TORCH project.

- 1. TORCH SPA1: Working towards reforming research assessment.** All of our partner institutions have agreed to follow the CoARA commitments including recognising diverse contributions to research and adopting appropriate modes of evaluations.
- 2. TORCH SPA2: Fostering equality, diversity and inclusivity.** The purpose of this strategic priority area is to outline the principles and proposed actions to promote and champion intersectional gender equality within CHARM-EU, including its R&I dimension as established and further shaped by TORCH.
- 3. TORCH SPA3: Championing Open Science.** Our goal is mainstreaming the principles and promote the practices of Open Science linked with all research-related activities including training, rewards and recognition, and involvement of citizens.
- 4. TORCH SPA4: Promoting inter/transdisciplinary research driven by societal challenges.** The main purpose of this policy is to concretely contribute to the objective of the TORCH project: to have a transdisciplinary and intercultural R&I common agenda for CHARM-EU.
- 5. TORCH SPA5: Intensifying R&I cooperation between universities.** The purpose of this TORCH strategic priority area is to articulate the CHARM-EU Alliance partners commitment and pathway to a structured and collaborative approach that provides a framework for joint and shared R&I-related activities.

After this set of five was initially identified as pre-piloting strategies and policies (Deliverable 8.2), they have now been reviewed through the lens of WP9 Action Plans and Pilots and presented here in their final version.

The set of five strategic priority areas we present in this deliverable are agreed targets and ambitions. They are necessary for the CHARM-EU Alliance to fully realise its intention to become a full university of the future, with excellent and competitive research as well as research-informed education addressing global challenges. Even as our institutions are unanimous on the need for our continued collaboration in the research dimension, we are faced with major barriers regarding resources. Without a clear road map for competitive external funding geared towards European University Alliances, comparable to the Science with and for Society scheme of Horizon 2020 which engendered TORCH and other similar projects across the landscape of EUA research, we will be limited in terms of long term impact the results of our project can affect. While the member

institutions of the Alliance enact such gradual change, at the same time we will proactively investigate future opportunities for external funding.

This revision is also accompanied by **a set of common recommendations**, which have arisen as a result of the work conducted in WP9 as well as discussions that took place in the third annual forum held in Budapest on 24-25 October 2023. These recommendations relate to gaps and opportunities in the interconnected RRI (Responsible Research & Innovation) this project has identified and developed throughout all of our work packages, as highlighted by the pilots and action plans. Our recommendations are as follows, summarised:

1. Fully adopt a long term view. Recognise and openly acknowledge that cultural change and growth will take time.
2. Train, support, incentivise and reward diverse Open Science activities.
3. Facilitate capacity building for researchers.
4. Offer research development as well as research support.
5. Empower, champion and include RMA (Research Management & Administration) colleagues.
6. Treat the Alliance as a vehicle for creating broader connections across the European HE landscape.
7. Champion the alliances' important roles in research.
8. Institute an equality, diversity and inclusivity framework of monitoring changes on alliance level.
9. Commit to working towards reforming research assessment.
10. Employ known local hubs of interconnected RRI in the process of promoting and growing reforms.
11. Create and maintain a shared research agenda to increase inter/transdisciplinary research and to tackle barriers.
12. Continue targeted activities focused on raising awareness on CHARM-EU and its priorities on the widest possible range of university stakeholders.
13. Tackle ways of integrating Open Science in Research Assessment policies and Equity, Diversity and Inclusivity strategies together with inter/transdisciplinary research.

The purpose of the CHARM R&I agenda is to articulate the CHARM-EU Alliance partners' commitment and pathway to a structured and collaborative approach that provides a framework for joint and shared R&I-related activities. The strategic priority areas apply to the governance and management of the CHARM-EU R&I-related activities, to be undertaken by the TORCH current partners (UB, TCD, UU, ELTE, UM). CHARM-EU new partners (ÅA, JMU, HRW) are invited to take part

in forthcoming stages of the Alliance R&I common agenda development. They are aligned with the CHARM-EU institutional cooperation achieved so far via the ERASMUS+ and H2020 projects, as well as the CHARM-EU governance and management model for the Alliance (to be implemented during 2023-2027). The core principles of academic freedom and institutional autonomy of each Alliance partner with regards to their organizational models and administrative regulations, R&I policies and strategy plans, as well as management of human resources, offices and infrastructures, will be promoted and protected.

Besides institutional and alliance level, we also wish to extend our learnings externally. Our intention is to share our R&I agenda, particularly the recommendations that have arisen in its development, with other European Universities and ideally with the whole European research, development and innovation ecosystem. The full transformative agenda of CHARM-EU will pursue policy recommendations as one of the main outcomes of the alliance activities, both from the education and the research dimensions in a joint perspective. Our analysis of the transformational modules and their levels of current and potential interconnectivity has given us common ground to construct a common set of recommendations for the alliance and other universities to develop a best practice connected RRI framework which facilitates both research and researcher excellence. Together with the five strategic priority areas, this set of recommendations will be used to identify and pursue goals that will drive CHARM-EU future developments. In order to ensure that our recommendations and future guidelines remain directly relevant to other alliances and institutions, we intend to pay close attention to international ERA-level discussions on related topics and align CHARM-EU policies with them.

## 1. INTRODUCTION

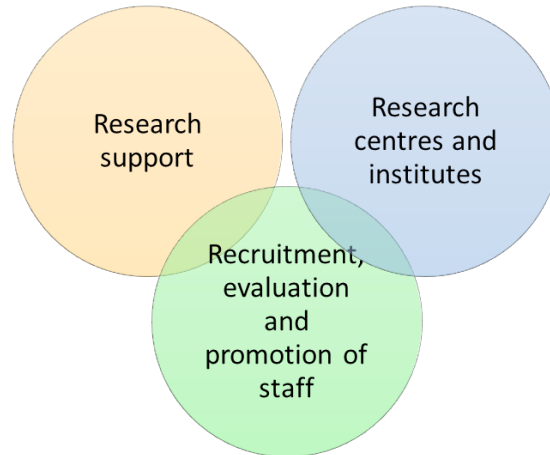
In this deliverable, we put forward **our finalised set of five strategies/policies**. For the sake of clarity, we have adopted the term **strategic priority areas (SPAs)** to refer to these strategies/policies. Together, they suggest the basis for the common research & innovation (R&I) agenda for the CHARM-EU alliance, as developed through the TORCH project. After this set of five was initially identified as pre-piloting strategies and policies (Deliverable 8.2), they have now been reviewed through the lens of WP9 Action Plans and Pilots and presented here in their final version. This revision is also accompanied by **a set of common recommendations**, which have arisen as a result of the work conducted in WP9 as well as discussions that took place in the third annual forum held in Budapest on 24-25 October 2023. These recommendations relate to gaps and opportunities in the interconnected RRI (Responsible Research & Innovation) this project has identified and developed throughout all of our work packages, as highlighted by the pilots and action plans.

This deliverable has been revised by members of WP8 and WP9 as well as members of the Project Management Team, to demonstrate our mutually agreed understanding of the areas that ought to be our R&I priorities in the coming years. The material that was present in the pre-piloting version of this document, in D8.2, and that is still valid and relevant, has been retained. Additions and changes have been inserted according to our knowledge and understanding as evolved over the past ten months since the submission of D8.2.

In Deliverable 8.1 Interconnectivity Analysis, we identified four primary areas in which we hypothesised a **high level of interconnections** to exist between the TORCH cross-cutting principles, common research agenda, collaboration with non-academic sectors, open science and public engagement: University structures and supports; Research centres/institutions; Evaluation and assessment; and Notable projects and initiatives. Under each of these areas we agreed to identify a set of primary interconnections at present and in likely future scenarios. In all institutions, the office or offices involved in (1) **research support** was identified as a major hub of interconnected responsible research & innovation and related areas. (2) **Research centres and institutes** present another category of strong interconnectivity, with interconnections typically emerging between the common science agenda, collaboration with industry and public engagement. Another opportunity to consider interconnections can be found in (3) **recruitment, evaluation and promotion of staff**, particularly with regard to championing equal opportunities to all and driving forward the developing reform of research assessment.

Where we saw potential for development included increased coherence and comprehensiveness of research supports by means of increased concentration of supports under one support locus or by creating closer, deliberate connections and communication channels between existing support functions. While the TORCH cross-cutting principles of inter/transdisciplinarity, research ethics & integrity, and gender-aware research & innovation are themes typically well-known and present across research support functions, we observed that they, together with the common science agenda proposed in this Project, are not yet realised to the fullest possible extent in the areas of public engagement and collaboration with industry. Similarly, we did not see evidence of research

ethics & integrity and gendered innovation fully permeating research centres and institutes, even as these topics undoubtedly hold strong awareness within these centres/institutes as areas *related and important to*, but not necessarily *fully integrated elements of* research. In contrast, gendered innovation and research ethics & integrity are strongly present in the principles and practices of recruitment, evaluation and promotion of staff.



**Figure 1.** Institutional centres of interconnected RRI.

As European-wide research assessment reform is starting to take shape with the launch of CoARA, Coalition for Advancing Research Assessment, in 2023, it seems likely that this area will feature many more interconnection nodes. Elements such as Open Science, public engagement and Citizen Science, collaboration with both academic and non-academic sectors and inter/transdisciplinary research will feature more strongly in all areas of research assessment.

The set of five strategic priority areas we present in this deliverable are agreed targets and ambitions. They are necessary for the CHARM-EU Alliance to fully realise its intention to become a full university of the future, with excellent and competitive research as well as research-informed education addressing global challenges. Even as our institutions are unanimous on the subject of our continued collaboration in the research dimension, we are faced with major barriers regarding resources.

The Science with and for Society scheme of Horizon 2020 brought about TORCH and other similar projects across the landscape of EUA research, and activated a big amount of internal resources of the Universities. Without a similar road map for competitive external funding geared towards European University Alliances, there will be a very limited long term impact of such projects. In our discussion at the third Annual Forum in Budapest in October 2023, we agreed to continue working on change at institutional and at Alliance level using a “plus-one” approach: to break down the effort and resources needed for large scale change into smaller steps, and, following these steps, add “one more” change or adjustment in our respective ways of conducting and enabling research when such small changes are possible. While the member institutions of the Alliance enact such gradual, slow change, at the same time we will proactively investigate future opportunities for external funding.



## 2. METHODOLOGY

In June 2022, after two years' COVID-19 induced hiatus in physical meetings, the Project Management Team met face-to-face in Budapest and we were able to dedicate a substantial part of the meeting to discuss the implications of the findings in the Work Packages 3-7 as well as the resulting D8.1 Interconnectivity Analysis to the rest of Work Package 8 in close connection with Work Package 9.

Based on the previous work across the Project, and working together, we shortlisted a set of priorities that we felt had the potential to be developed further in some manner (either as strategic priority areas or associated actions) during the remainder of the project and beyond. These priorities were identified as a result of our work in D8.1 as well as in the first phase of the Project, which involved a set of scoping exercises and landscape analyses across the full breadth of the RRI structures, processes and culture in the original five member institutions of CHARM-EU. This scoping research identified existing strengths as well as important gaps and potential for future development. We compiled the shortlist using concrete ideas that we felt were the most suitable to address the existing gaps and the future potential.

The initial priorities and their rationales are shown in Table 1.

**Table 1.** Initial priorities and their rationales.

Initial priority identified	Rationale
Manifesto on research assessment, including rewards, recognition and human resource strategies in relation to research assessment.	Clear expression of our commitment to the reform of research assessment.
Work towards enhanced equality data.	Need to allocate greater attention to our current varying practices of collecting and using equality data.
Inclusive Gender Equality Plan for CHARM.	Aligning our proposed Gender Equality Plan for CHARM with the intersectional approach recommended by the European Commission.
Training on Open Science.	Need for training recognised during the scoping period.
Focus on transdisciplinary research and Open Science permeated by Equality, Diversity & Inclusivity.	Increase in practical applications of the TORCH intersecting cross-cutting principles.
Open Science Rewards and Recognition Toolbox.	We envisioned this as a practical way to incentivise Open Science among researchers.
Training on Citizen Science.	Need for training recognised during the scoping period.
Joint strategy to support the development of research challenges.	Mutually complement our respective existing needs and strengths in relation to providing research support, to enable collaborative tackling of research challenges.
Integrated support for interdisciplinary research.	Need for dedicated interdisciplinary support at institutional level identified during the scoping period.
TORCH R&I Days.	Greater visibility for the Alliance research as well as providing networking and matchmaking opportunities.

As discussion on these priorities proceeded over the following weeks, it became clear that while these priorities provided a starting point for us, they were a catalogue of our needs which signposted, and therefore could be grouped under, broader areas of concern, i.e. the kind of strategic priority areas we were seeking to identify. As per the project plan to use pilots and action plans to help refine our future strategic approach, we adopted the above list as potential pilots and action plans to be considered under WP9.

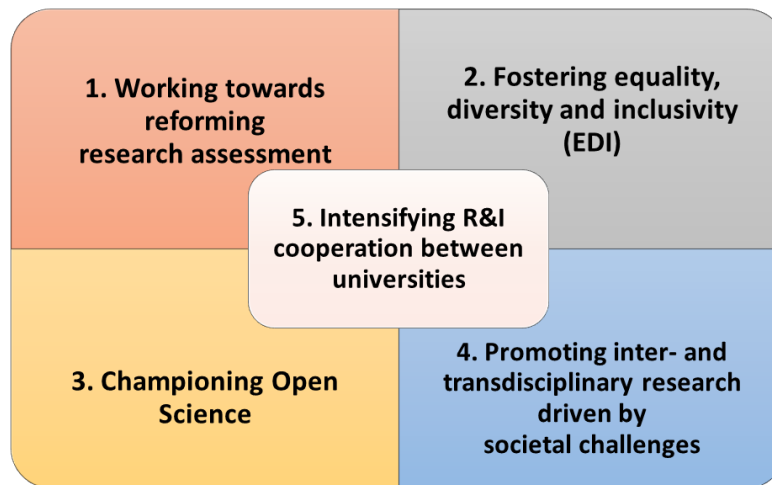
Another significant driver in our direction was the Project mid-term review in September 2022 with the recommendations for the second half of the Project provided in the result review letter. Five out of six recommendations are relevant to work packages 8 and 9, and with the level of ambition of the alliance about joint impact, with the sixth encouraging greater visibility of the Project across the common communication tools used for the Alliance. The five recommendations relevant to this deliverable are as summarised in Table 2.

**Table 2.** Recommendations arising from the mid-term review.

1. It is recommended that gender (and intersectionality) are more comprehensively assessed in the various transformation modules.
2. The aspiration to develop a common gender equality plan is commended; however, it is recommended that the future gender equality plan is broadened to be an Equality, Inclusion and Diversity strategy for the alliance that is accompanied by clear targets for issues such as gender pay gap, and the representation of women and those from minority ethnic backgrounds.
3. TORCH is one of the projects well placed to lead on pioneering a new researcher assessment framework across the Alliance. It is recommended that TORCH be ambitious in this regard, implementing with leadership support a pilot aimed at trialling a comprehensive new researcher assessment framework across the alliance, in line with the project's principles.
4. It is recommended that colleagues with expertise in co-production and co-design are identified across the alliance and included as appropriate in the research challenge proposals (taking forward those identified in deliverable D4.1)
5. Established European networks (e.g. Enterprise Europe, Start Up Europe, EURAXESS, etc.) can support the project to facilitate business - academic interactions and it is recommended that an analysis of which of these networks could be useful to the alliance is undertaken.

Based on the initially identified priority areas and the requirements of the review recommendations, we isolated five strategic priority areas considered to be the most relevant in terms of shaping the Alliance's future in research. This set of five was distributed across the consortium members for closer development, with each institution taking the lead of developing one of the five. The division of work was based on each respective institution's existing expertise and/or specific focus during the TORCH project:

1. **Working towards reforming research assessment** led by Utrecht University. UU has been spearheading work on reforming research assessment within the national Dutch context as well as contributing to the European arena. Following the position paper, *Room for Everyone's Talent*<sup>1</sup> published jointly by the Dutch public knowledge institutions and funders of research (VSNU, NFU, KNAW, NWO and ZonMw), Utrecht University formulated a new model for Recognition and Rewards: TRIPLE, focused on team effort, leadership, professional performance and impact.<sup>2</sup>
2. **Fostering equality, diversity and inclusivity (EDI)** led by Trinity College Dublin. TCD led TORCH WP3 which was focused on the three cross-cutting principles of Gendered Innovation, Research Ethics & Integrity and Interdisciplinary Research. It made further sense for TCD to lead this element due to EDI being locally a current visible strategic priority in the preparation to upgrade the university's Athena SWAN award.
3. **Championing Open Science** led by Eötvös Loránd University.; During the first phase of the project, ELTE led WP6 focused on Open Science. This corresponded to the latest results of ELTE's strategic efforts in strengthening open science activities at the university in the past years, significantly linked with its activities and based on its achievements within the TORCH project.
4. **Promoting inter- and transdisciplinary research driven by societal challenges** led by University of Montpellier. During the first phase of the project, UM had led WP5 on strengthening cooperation between universities and enterprises.
5. **Intensifying R&I cooperation between universities** led by UB, the coordinator of CHARM-EU and the TORCH project, as well as the leader of TORCH WP4 Common Science Agenda. Due to its overall leading role, it was natural for UB to take the lead in developing this area.



**Figure 2.** TORCH five strategic priority areas.

<sup>1</sup> Universities of the Netherlands, NFU, KNAW, NWO and ZonMw (2019), Room for everyone's talent. Towards a new balance in the recognition and rewards of academics. Available at:

[https://www.nwo.nl/sites/nwo/files/media-files/2019-Recognition-Rewards-Position-Paper\\_EN.pdf](https://www.nwo.nl/sites/nwo/files/media-files/2019-Recognition-Rewards-Position-Paper_EN.pdf)

<sup>2</sup> Utrecht University. (2021). From MERIT to TRIPLE. Available at: <https://www.uu.nl/en/news/from-merit-to-triple>

Each of the leads of the five strategic priority areas worked on their assigned area with colleagues in their own institutions as well as across the consortium. The work package team used regular online meetings and online communication to discuss the progress of the work. Together, these five strategic priority areas form the backbone of the TORCH/CHARM-EU common research agenda.

### 3. TOWARDS A COMMON R&I AGENDA FOR CHARM-EU

#### 3.1 Context of the TORCH Common R&I Agenda

The European Universities initiative seeks to create a common long-term structural, sustainable and systemic cooperation on education, research and innovation for HEIs. The initiative provides a framework for Alliances to engage in transnational collaboration through diverse programmatic funding tools (ERASMUS+, Horizon Europe, Digital Europe, and other EU and national instruments) (European Commission, 2022a<sup>3</sup>).

The European Council and Commission encourage deeper cooperation and the pooling of knowledge and resources to deepen cooperation between HEIs, and invite the Member States to remove obstacles to more compatible higher education systems (European Council, 2021<sup>4</sup>; 2022a<sup>5</sup>; 2022b<sup>6</sup>). This provides a framework for a more effective transnational cooperation structure, by which interconnected HEIs are better ready to fulfil all their missions and tackle the great societal challenges. Furthermore, it opens up an “opportunity for HEIs to explore the necessity, benefits, risks and feasibility of setting up institutionalized cooperation instruments, such as a possible legal status for Alliances” (European Commission, 2022b<sup>7</sup>; European Council, 2022b<sup>8</sup>). In that regard, the European Commission is testing new instruments for policy experimentation (i.e. joint European

<sup>3</sup> European Commission (2022a). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions on a European Strategy for universities. COM/2022/16 final Document 52022DC0016. Luxembourg: Publications Office of the European Union. Available at <https://education.ec.europa.eu/sites/default/files/2022-01/communication-european-strategy-for-universities-graphic-version.pdf>

<sup>4</sup> European Council (2021). Council conclusions on the European Universities initiative – Bridging higher education, research, innovation and society: Paving the way for a new dimension in European higher education. Luxembourg: Official Journal of the European Union, 10-6-2021 (2021/C 221/03). Available at [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.C\\_.2021.221.01.0014.01.ENG&toc=OJ%3AC%3A2021%3A221%3ATOC](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.C_.2021.221.01.0014.01.ENG&toc=OJ%3AC%3A2021%3A221%3ATOC)

<sup>5</sup> European Council (2022a). Council Recommendation of 5 April 2022 on building bridges for effective European higher education cooperation. Luxembourg: Official Journal of the European Union, 13-4-2022 (Text with EEA relevance, 2022/C 160/01). Available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32022H0413%2801%29>

<sup>6</sup> European Council (2022b). Council conclusions on a European strategy empowering higher education institutions for the future of Europe. Luxembourg: Official Journal of the European Union, 21-4-2022 (2022/C 167/03). Available at [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52022XG0421\(02\)](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52022XG0421(02))

<sup>7</sup> European Commission (2022b). Proposal for a Council Recommendation on building bridges for effective European higher education cooperation. Strasbourg, 18/1/2022 COM(2022). Available at <https://education.ec.europa.eu/sites/default/files/2022-01/proposal-council-recommendation-bridges-european-higher-education-cooperation.pdf>

<sup>8</sup> See 4.

degree label<sup>9</sup>; institutionalized EU cooperation instruments to explore the feasibility for a possible European legal status for alliances<sup>10</sup>).

As confirmed from early stage tasks and outcomes, Alliances face challenges and barriers concerning multilateral transnational cooperation mainly related (but not limited) to: 1) diverse institutional policies, practices and organizational models of the partners; 2) restrictive regulatory and funding frameworks at the level of HEIs systems (European University Association, 2022<sup>11</sup>; TORCH Consortium, 2022<sup>12</sup>).

The ERA Policy Agenda 2022-2024 lays out a number of priority actions for that period, some of which provide a framework to strengthen future cooperation among Alliances, namely: Action 13 (“Empower Higher Education Institutions to develop in line with the ERA, and in synergy with the European Education Area”), and Action 17 (“Enhance the strategic capacity of Europe’s public research performing organisations”) (European Commission, 2021<sup>13</sup>).

Intensifying R&I cooperation between universities involves not only developing aligned policies and transformative actions on strategic areas (research assessment; equality, diversity and inclusivity; Open Science; inter- and trans-disciplinary challenge-driven research), but also establishing mutually beneficial partnerships to efficiently share knowledge and competences, exploring efficient governance models that facilitate the sharing of resources and capacities, the streamlining of administrative processes to support research activities, the creation of joint structures, and the establishment of mutual recognition agreements.

### 3.2 Scope

In this deliverable, under this section 3, we present each of the set of five strategic priority areas in detail, along with certain actions associated with each. These actions are derived from the list of initial priorities [Table 1] now properly connected to each of the strategic priority areas of the common R&I agenda. These actions were put forward as options for pilots to be undertaken in WP9

<sup>9</sup> See call: [Pilot a joint European degree label](#).

<sup>10</sup> See call: [Pilot institutionalized EU cooperation instruments to explore the feasibility for a possible European legal status for alliances of higher education institutions](#).

<sup>11</sup> European University Association (2022). The European Universities Initiative and system level reforms: Current challenges and considerations for the future. Geneva: EUA Publications. Available at [https://eua.eu/downloads/publications/briefing\\_eui%20impact%20on%20system%20level%20reforms.pdf](https://eua.eu/downloads/publications/briefing_eui%20impact%20on%20system%20level%20reforms.pdf)

<sup>12</sup> TORCH Consortium (2022). ERA Policy Brief: TORCH Project. Available at <http://diposit.ub.edu/dspace/bitstream/2445/188554/1/TORCH%20D10.6%20-%20Short%20Policy%20Brief%201.pdf>

<sup>13</sup> European Commission (2021). European Research Policy Agenda: Overview of the actions for the period 2022-2024. Luxembourg: Publications Office of the European Union. Available at [https://ec.europa.eu/info/sites/default/files/research\\_and\\_innovation/strategy\\_on\\_research\\_and\\_innovation/documents/ec\\_rtd\\_era-policy-agenda-2021.pdf](https://ec.europa.eu/info/sites/default/files/research_and_innovation/strategy_on_research_and_innovation/documents/ec_rtd_era-policy-agenda-2021.pdf)

or action plans to be drawn up for the future, as part of the same work package, and need to be read in context with D9.5 Pilots Final Report and D9.2 Action Plans.

The purpose of these TORCH policies is to articulate the CHARM-EU Alliance partners commitment and pathway to a structured and collaborative approach that provides a framework for joint and shared R&I-related activities. It is in line with the expectations of the European context set in the aforementioned documents and aims to ensure a long-term sustainable and effective collaboration within the Alliance, considering its [Mission & Vision](#) and [Cross Cutting Principles](#).

It is worth noting that the strategic priority areas do not, and cannot, exist in clearly defined siloes. On the contrary, our approach throughout TORCH has centred around locating and interrogating existing and potential interconnections, as we have shown in previous work packages and previous deliverables. The collection of strategies/policies presented in this document, similarly to the pilots and action plans that sit under each, do and *should* overlap and inform each other. For example, we could not consider a reform of research assessment without including issues related to equality, diversity and inclusivity. Comparably, as another example, issues relating to inter/transdisciplinary research inevitably must involve considerations on Open Science and intensifying R&I cooperation between universities. Each of the elements of the R&I agenda intersect with and inform one another.

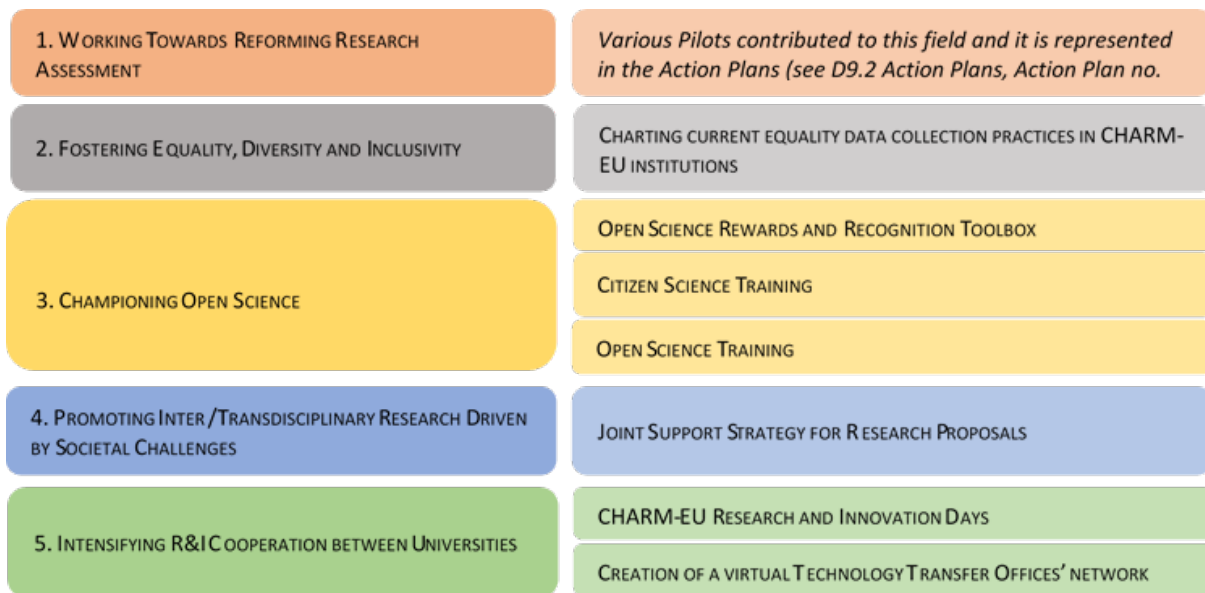
The strategic priority areas of the common R&I agenda apply to the governance and management of CHARM-EU activities relating to research & innovation. While this agenda was developed by the founding partners of the CHARM-EU alliance who are also the members of the TORCH project, UB, TCD, UU, ELTE, and UM, the scope of the agenda also extends to those who have more recently joined the growing Alliance. These newer partners, ÅA, JMU, HRW and UiB, are invited to participate in adopting this agenda and in shaping its future developments in the frame of the CHARM-EIGHT∞ Project as the immediate continuation of the Alliance, or any other suitable project. In developing priorities, we have taken cognisance of any such policies and strategies which are also relevant for the education mission in order to ensure CHARM-EU level consistency and feasibility. We are strongly aware that having policies developed in a siloed manner for separate missions would not serve the progression of the Alliance well.

These strategic priority areas are aligned with the CHARM-EU institutional cooperation achieved so far via the ERASMUS+ and H2020 projects, as well as the CHARM-EU governance and management model for the Alliance (to be implemented during 2023-2027). The latter is designed to further deepen, strengthen, intensify and expand institutionalised cooperation, reflecting a long-term commitment to moving away from project governance to Alliance governance.

Throughout this project, as emphasised in previous deliverables across the work packages, we have aspired to remain sensitive to different institutional needs and local priorities. We are conscious that our institutions will encounter challenges at very different levels as we collectively and respectively work towards fulfilling our common R&I agenda. As an example, increasing and mainstreaming specialised interdisciplinary research support will be much easier for an institution

with an existing, established research support office than for an institution with fewer resources available for general research support in the first place. Therefore, when we make recommendations with the view of building up the Alliance R&I agenda further, it is necessary to acknowledge that each member institution will follow these recommendations at a different pace, according to their circumstances. The core principles of academic freedom and institutional autonomy of each Alliance partner with regards to their organizational models and administrative regulations, R&I policies and strategy plans, as well as management of human resources, offices and infrastructures, will be promoted and protected.

### 3.3 TORCH Strategic Priority Areas



**Figure 3.** The five Strategic Priority Areas and the Pilots.

#### No. 1: Working towards reforming research assessment

TORCH review in September 2022 recommended that TORCH is one of the current European projects well placed to lead on pioneering a new researcher assessment framework across the Alliance, particularly given the pathfinding work already done in the area of recognition and rewards by one of its partners, the University of Utrecht. TORCH, as a project of the CHARM-EU alliance and funded by the Science with and for Society Horizon 2020 scheme, has no operative function after the end of 2023, as no equivalent competitive funding instrument to secure continuation has been made available. After extensive discussions, we concluded that the period of approximately 14 months following the mid-term review is **only enough to start the planning procedure of the changes encouraged in the review** but certainly not to start piloting them. As shown in WP3, specifically in D3.1, when we included in our discussion elements of research assessment through the lens of the three cross-cutting principles (gendered innovation, research ethics & integrity, and inter/transdisciplinary research), and also in D8.1, this is an area that has many interconnections



across each and any of our institutions. Changes would potentially impact all of these areas, and, without proper preparation, would lead to confusion, disruption, and even to possible legal challenges in situation where unfairness was being felt.

Further, all TORCH member institutions are signatories of the CoARA, Coalition for Advancing Research Assessment (<https://coara.eu/>), indicating that they are already prepared to work together towards reforming research assessment on a systemic level, but also *in concert* with the other signatories of the CoARA Agreement. The first General Assembly meeting of the CoARA took place on 1 December 2022, after we had submitted D8.2, Pre-piloting Strategies and Policies, and after the TORCH mid-term review including the recommendations was received. This being the case, we have preferred to wait with concrete actions in order to proceed in parallel with CoARA recommendations and guidelines at such a time as these are fully available. To put it differently, the Alliance preferred to use the level of ambition with which it had been working in the first half of the project to get involved in related European discussions instead of risking to pursue separate, parallel solutions that might turn out to be contradictory to jointly agreed and implemented European solutions. Such a result could have been counterproductive in terms of our purposes and a significant waste of resources.

Nonetheless, as an alliance, our commitment to CoARA also demonstrates our commitment to research assessment reform, and through TORCH we have identified it as one of our strategic priority areas integral to the CHARM-EU R&I agenda.

As signatories, we have fully agreed to following the CoARA commitments, as reproduced below.<sup>14</sup> These commitments also serve to illustrate our objectives under this strategic priority area.

1. Recognise the diversity of contributions to, and careers in, research in accordance with the needs and nature of the research.
2. Base research assessment primarily on qualitative evaluation for which peer review is central, supported by responsible use of quantitative indicators.
3. Abandon inappropriate uses in research assessment of journal- and publication-based metrics, in particular inappropriate uses of Journal Impact Factor (JIF) and h-index.
4. Avoid the use of rankings of research organisations in research assessment.
5. Commit resources to reforming research assessment as is needed to achieve the organisational changes committed to.
6. Review and develop research assessment criteria, tools and processes.

<sup>14</sup> Coalition for Advancing Research Assessment (CoARA) (2022), The Commitments. Available at <https://coara.eu/agreement/the-commitments/>

7. Raise awareness of research assessment reform and provide transparent communication, guidance, and training on assessment criteria and processes as well as their use.
8. Exchange practices and experiences to enable mutual learning within and beyond the Coalition
9. Communicate progress made on adherence to the Principles and implementation of the Commitments.
10. Evaluate practices, criteria and tools based on solid evidence and the state-of-the-art in research on research and make data openly available for evidence gathering and research.

As part of planning associated actions under this priority area, we discussed an ambition to link inter/transdisciplinary research, Open Science, and equality, diversity and inclusivity. While this topic is a clear indication of the intersections of inter/transdisciplinary research, Open Science and EDI, we agreed that due to its cross-cutting nature, we expected to see these elements connect throughout our R&I agenda rather than in an isolated action. We see diversity and inclusiveness at the top of the agenda in strengthening public engagement and transdisciplinary science as part of the broader open science movement.

As the R&I agenda evolves and grows in the future, it may become more relevant to explore creation of mechanisms to increase inclusiveness, engage the un-usual suspects, diversify geographical representation and societal stakeholders, and be more active in relating public engagement to the debates on internationalization. Any specific future actions, which may be realised under any of the strategic priorities, might include expanding practices to broaden the open science movement and create further links to equality, diversity, and inclusivity, for example in terms of hiring and promotion policy or inclusion of stakeholders from diverse backgrounds in research and educational projects.

### **Associated actions**

- **Action Plan: Creating a Research Assessment Manifesto for the Alliance**

This action plan is detailed in D9.2. We had originally envisioned creating a document on guidance towards research assessment, implementing the necessary rewards and recognition practices in conjunction with OS practices, EDI, Public Engagement, etc. by the partners in the Alliance. As the development of such a document would involve organising a number of focus sessions with partners to discuss experiences, best practices and pitfalls, before the creation of the overall document, and considering the broader European context of research assessment as discussed above, we agreed that it would be better to create an action plan towards creating this manifesto, rather than creating the document itself at this stage.

When realised, this document will cover practical issues such as rewards and recognition and previous work done in TORCH, including human resources strategies intended to promote, incentivise and support researchers in relation to research assessment. This Manifesto will renew, deepen and extend (with the new partners) the commitment to CHARM-EU and its principles as a

testbed university for innovation on public engagement and transdisciplinary science and the Open Science agenda in Europe and beyond. As all TORCH members have signed up to CoARA, learnings from being part of such a community will be brought to the development of a manifesto. In addition, we will mention other frameworks which are used to help develop new approaches to research assessment such as Scope<sup>15</sup>.

## No. 2: Fostering equality, diversity and inclusivity (EDI)

In the first half of TORCH, we had suggested developing a common gender equality plan with a research focus for the CHARM-EU Alliance. Our aspiration was commended in the mid-term review; however, it was recommended that the future gender equality plan be broadened to be an Equality, Inclusion and Diversity strategy for the alliance, with an intersectional approach. This would be in line with the European Union Gender Equality Strategy 2020-2025, which pursues a dual approach of gender mainstreaming combined with targeted actions, and intersectionality as a horizontal principle for its implementation.<sup>16</sup>

In TORCH, and in CHARM, EDI is at the heart of research excellence. TORCH WP3 investigated the presence of gender awareness in each partner institution's support structures and institutional processes as one of the cross-cutting principles. CHARM-EU's teaching and learning in its joint Masters in Global Challenges for Sustainability programme is anchored in inclusivity, which is also one of CHARM-EU's core values. The Alliance has already established a Diversity, Equity & Inclusion (DEI) Office as an organisational structure to ensure that diversity and inclusivity sit at the core of the Masters and the work packages of the Erasmus+ funded CHARM-EIGHT project. Therefore, it is logical, as well as desirable, to expand EDI/DEI<sup>17</sup> to address and include R&I activities within the Alliance.

The purpose of this strategic priority area is to outline the principles and proposed actions to promote and champion intersectional gender equality within CHARM-EU, including its R&I dimension as established and further shaped by TORCH. Following the commitments and recommendations expressed by the European Commission, this strategy intends to foster appropriate principles and actions in relation to the intersection of gender with other personal characteristics or identities and potential grounds for discrimination and inequality. Within this work, this strategy intends to ensure equal opportunities, non-discrimination, and inclusive work

<sup>15</sup> International Network of Research Management Societies (INORMS), (2023), SCOPE Framework for Research Evaluation. Available at: <https://inorms.net/scope-framework-for-research-evaluation/>

<sup>16</sup> European Commission. (2021) Gender equality strategy. Achievements and key areas for action. Available at: [https://commission.europa.eu/strategy-and-policy/policies/justice-and-fundamental-rights/gender-equality/gender-equality-strategy\\_en](https://commission.europa.eu/strategy-and-policy/policies/justice-and-fundamental-rights/gender-equality/gender-equality-strategy_en)

<sup>17</sup> Both acronyms are widely used in anglophone countries and communications. "DEI" is typically used in North American contexts, and "EDI" is more often used in the UK and Ireland. While it will be desirable to settle on one in the future of CHARM's R&I agenda, in this report, as throughout TORCH, we are primarily using EDI.

cultures for everyone, regardless of their sex, gender identity and expression, sexual orientation, age, racial or ethnic origin, socio-economic status, disability, and other similar grounds.

Objectives:

- Foster an open, welcoming atmosphere where diversity is recognised, respected, and seen as a source of strength and benefit to the CHARM-EU community and beyond.
- Create an environment of inclusive research & innovation where barriers to success are removed and individuals' access and participation needs are addressed and catered to.
- Continuously improve our inclusive environment, in which the unique lived experiences of each individual are recognised, respected and embraced, and in which everyone feels accepted as an intrinsic and valued part of the team, with valuable contributions to offer.
- Demonstrate leadership on EDI among European University Alliances and globally.

#### Associated actions

- **Pilot: Charting current equality data collection practices in CHARM-EU institutions**

This pilot is detailed in D9.5. Currently, there is no common practice between the Alliance members regarding collection of personal data relating to ethnicity, race, sexuality, gender identity, religion or similar, so practices between vary greatly. In many EU institutions, data on ethnic/racial background is not collected due to fear of potential misuse. The Dutch Young Academy has observed that while there is no legal prohibition in the EU against collecting such information, data protection law does require a legal basis to be created first. Therefore, collecting data for antidiscrimination purposes as well as making such data actionable has become a question of political will. As we move on and work towards further developing the CHARM Alliance, it is necessary to consider how to best collect data to represent the intersectional nature of EDI, including data on gender pay gaps and relevant demographic data on staff, where possible.

- **Action Plan: Equality, Diversity & Inclusivity Plan for CHARM (Intersectional Gender Equality Plan)**

This action plan is detailed in D9.2. As per the Commission's proposal as of 2021, in line with the Horizon Europe programme objectives, we intend to develop an inclusive Gender Equality Plan/Equality, Diversity and Inclusivity Plan for the CHARM Alliance. An inclusive GEP seeks to foster equal opportunities, non-discrimination, and inclusive work culture for everyone, regardless of gender or other personal characteristics or identities and potential grounds for discrimination and inequality.

### No. 3: Championing Open Science

Mainstreaming the principles and promote the practices of Open Science linked with all research-related activities is of central importance for the CHARM-EU Alliance, primarily in the framework of

joint projects of the Alliance (educational, R&I or any other field); and in case of activities carried out by one of the members or in the cooperation of two or more members of the alliance that are in any way linked with any of the Alliance's scope, operation or principles. Furthermore, it is the purpose of the Alliance to provide Open Science guidance to the highest possible extent to the member universities for their research-related activities carried out outside the scope of the CHARM-EU cooperation; and also to all higher education institutions in Europe and beyond that wish to follow similar principles in their research-related activities.

Strengthening and maintaining Open Science in the CHARM-EU Alliance should benefit not just the involved researchers, but the member institutes and the wider public as well. It contributes to:

1. Dissemination and development of joint research-related activities of the Alliance as a whole;
2. internal transformation of the member universities on the field of Open Science;
3. development of European and global higher-education in general providing space for examples, good practices, and a test-bed for various activities related to Open Science;
4. national governments' and the European higher education authorities' activities of supporting Open Science on national and international levels;
5. professional development of individuals (within and outside of CHARM-EU member universities) who would like to improve their professional activities related to Open Science.

The objectives of the Open Science Strategy of the CHARM-EU Alliance cover four main aspects of mainstreaming Open Science in the operation of each institution:

1. Training on Open Science: enabling students and staff to apply Open Science practices in their regular research activities;
2. Rewards and recognition of Open Science: recognising the efforts of staff members to apply Open Science practices promoted by their institution;
3. Citizen Science: promoting the involvement of citizens, local communities, and the wider society in research processes and research communities
4. Linking Open Science with the Equity, Diversity and Inclusivity principles of the Alliance as well as with its Research Assessment policies.

### **Associated actions**

- **Pilot: Open Science training**

This pilot is detailed in D9.5. Building an Open Science ecosystem requires thoughtful investment in building the capacity of Open Science, with a focus on human resources, training, education and the development of digital skills for new technologies. Systematic and continuous skills development and capacity building need to be extended to research on the issues and values of Open Science and

its practical applications in the areas of digital literacy, digital collaboration practices, responsible research data management. The Alliance believes that the skills needed to ensure interaction with society should be considered an essential component of research competence and aims to integrate them into its training programmes, as well as to frequently provide the opportunity of learning about and discussing questions related to Open Science at dedicated international online or hybrid events.

• **Pilot: Open Science rewards and recognition toolbox**

This pilot is detailed in D9.3. In the scientific ecosystem, institutions have important responsibility to support good and open science by adjusting their rewards and initiatives. Building on the principles of Open Science, reward systems should promote transparency, accessibility, reproducibility, and the sharing of methods and results should inspire further research and innovation projects. Relevant actions might include promoting alliance-level Open Science activities and practices; establishing a panel that monitors and recognises individual contribution to Open Science first on alliance-level activities and in terms of the wider research community of the members on the long run; and integrating Open Science principles in HR and career frameworks as an explicit element in recruitment, performance evaluation and career advancement policies. At the same time, the recognition methodologies related to Open Science must also take into account that efforts on this field usually mean involvement in a very coherent team work that may require alternative reward policies.

• **Pilot: Citizen Science training**

This pilot is detailed in D9.5. Citizen participation in the research ecosystem allows direct, active and participatory research. It thus builds trust in science, shaping public opinion and increasing citizens' scientific knowledge and awareness. The Alliance supports the organization of training courses and information sessions that help researchers and students learn and master the theoretical and practical information related to Citizen Science; and promotes the citizen science activities of its staff and students.

**No. 4: Promoting inter/transdisciplinary research driven by societal challenges**

We identified two main driving forces for innovation in research policy as:

- Transdisciplinary research as a motor for societal impact: by combining forces within the university and with external partners, we can answer complex societal questions and engage public more into science.
- Open science as a driver of cultural change in science: new forms of Recognition and Rewards, enforce FAIR Data, Open Access and Public Engagement.

Open Science, public engagement, transdisciplinary research are terms that are linked in multiple levels. Open Science means providing access to scientific results and increasing the relevance of science for solving societal challenges. Engagement of the public, collaboration between different

scientific disciplines and the non-academic world, and the co-production of science are important. However, one of the main challenges in conducting public engagement is stimulating participation and increasing the motivations of relevant actors, including researchers, universities, and societal actors. It is therefore vital to consider different interests, balance trade-offs and synergies, and optimise resources. Only by reconnecting these different principles through concrete actions, we can reach our overall objective: construct a transdisciplinary, challenge driven research and innovation in line with Alliance's Mission & Vision and Cross Cutting Principles. The main purpose of this policy is to concretely contribute to the objective of the TORCH project: to have a transdisciplinary and intercultural R&I common agenda for CHARM-EU.

Innovation in research policy is driven by two clusters: transdisciplinary research for societal impact, and open science as a driver of cultural change in science. By combining forces within the university and with external partners, we can answer complex societal questions and engage public more into science. By embracing open science, we achieve new forms of Recognition and Rewards, enforce FAIR Data, and promote Open Access and Public Engagement. We shape these two important driving forces within the context of a guiding principle of Equality, Diversity and Inclusivity within our institutions and with the outside world.

#### Associated actions

- **Pilot: Joint strategy to support the development of research challenges identified in TORCH's WP4 (in connection with SPA No. 5)**

This pilot is detailed in D9.3. TORCH WP4 (Common Science Agenda) produced a series of research proposals, developed by multi-disciplinary and gender balanced research groups from the five Alliance partners, under an SDG-driven approach. Our aim is to devise and test a joint strategy to support the team of researchers in charge of developing one of these challenges towards its implementation as a research project via European funding.

- **Action Plan: Joint Support Strategy for Research Projects**

This action plan is detailed in D9.2. A common theme across all CHARM institutions during the analytical phase, as seen in the outputs of WP3, was the importance of inter/trans/multidisciplinary research in the vision, goals and strategic priorities of the institutions, but we found that in practice, interdisciplinary ambitions tend to fall on individual researchers or respective research groups/institutions. There are few centrally driven and coordinated initiatives to champion and progress interdisciplinary research in a pragmatic and practical way. Examples of initiatives might include specialised research support officers, seed funding, interdisciplinary funding application and success tracking, and targeted career and research development training, among others.

#### No 5: Intensifying R&I cooperation between universities

The purpose of this TORCH strategic priority area is to articulate the CHARM-EU Alliance partners commitment and pathway to a structured and collaborative approach that provides a framework for joint and shared R&I-related activities. It is in line with the expectations of the European context

and aims to ensure a long-term sustainable and effective collaboration within the Alliance, considering its Mission & Vision and Cross Cutting Principles.

This SPA reinforces current rules and regulations regarding R&I collaboration within the Alliance, and paves the way for exploring cooperation models in a mutually beneficial setting. It will contribute to, for instance: fostering R&I joint strategies and effective governance; enhancing financial sustainability; supporting jointly developed applications to EU R&I programme or other relevant funding calls; developing a common approach on human capital (academic staff mobility, joint positions and recruitment processes); easing access to infrastructures; gaining visibility through a heightened unique identity/image; improving and creating unified processes across various facets of Research support; integration of different types of partners and stakeholders; sharing and connecting of ecosystems and testing of transformative actions.

### Associated actions

- **Pilot: Creation of a Virtual Technology Transfer Offices' network (TTOs)**

This pilot is detailed in D9.3. Creation of a joint virtual network for sharing tools and advices on partnerships with enterprises, contract, research valorisation, Knowledge & Technology Transfer and business development between the Alliance Universities (for instance on a Sharepoint interface). This network could be composed of representatives from each university in different areas, such as contract management, technology transfer, business development.

- **Pilot: Joint strategy to support the development of research challenges identified in TORCH's WP4 (In connection with Policy No. 4)**

(See description above)

- **Pilot: CHARM-EU Research & Innovation Days**

This pilot is detailed in D9.5. TORCH organised a pilot series of virtual workshops and seminars around relevant topics with a clear inter-/multi-disciplinary approach. Once a year, a physical event would be held with a focus on those topics that created among our community and stakeholders. Mobility grants for researchers' short visits to different institutions of the Alliance would be a very effective complement to this action.

- **Action plan: Expedited Research Ethics Approval Pathway**

This action plan, detailed in D9.2, is proposed in order to decrease delays caused by research projects involving more than one CHARM partner needing to secure individual ethics approvals in each affected institution. Particularly in relation to the projects undertaken by the CHARM joint Masters students and in other other short term project, this process can cause significant issues in terms of meeting deliverables and other deadlines. On an assumption that it is not possible to institute a joint alliance level mutual approval, recognising ethical approvals granted in one institution to relevant CHARM proposals across the Alliance, setting down a "fast track" ethical



approval for such proposals would streamline the process and reduce the administrative load across the board. This topic would initially require assessing the feasibility of such an expedited process, followed by consideration of the practical steps necessary.

• **Action Plan: CHARM-EU Research Infrastructure Catalogue**

This action plan is detailed in D9.2. Creating a catalogue of research infrastructures already available in our institutions understanding what could be shared (identifying any barriers and working to overcome them) devising a protocol through which members of the Alliance could use them in preferential conditions to advance the common science agenda. In the medium-long run, the Alliance could also imagine to have common research infrastructures to more complex funding and access schemes depending on the success of this initiative.

#### 4. CONCLUSION: COMMON RECOMMENDATIONS

One of the specific objectives in TORCH is to design a durable and sustainable common strategy through proposing recommendations to the different governance institutions. This objective is focused in and around WP8. In this work package we have merged the conclusions from the analysis of the transformational modules in a way to ensure the consistency of the strategy for CHARM-EU. Through the implementation of pilots and action plans in WP9, at alliance level and at institution level, we have drawn conclusions which provided feedback to the common strategic priority areas as described above. Working at alliance level has been necessary in order to facilitate the movement towards an overall integrated alliance support structure for the future governance of CHARM-EU. At the same time, these pilots and action plans also feed back to the transformational agenda for fine tuning and redesigning the recommendations and guidelines for implementation at local level, identifying successful strategies and models for modernisation of the institutions research and innovation dimension.

Besides institutional and alliance level, we also wish to extend our view externally. Our intention is to share our R&I agenda, particularly the recommendations that have arisen in its development, with other European Universities and ideally with the whole European research, development and innovation ecosystem. The full transformative agenda of CHARM-EU will pursue policy recommendations as one of the main outcomes of the alliance activities, both from the education and the research and innovation dimensions in a joint perspective. Our analysis of the transformational modules and their levels of current and potential interconnectivity has given us common ground to construct a common set of recommendations for the alliance and other universities to develop a best practice connected RRI framework which facilitates both research and researcher excellence. Together with the five strategic priority areas, this set of recommendations will be used to identify and pursue goals that will drive CHARM-EU future developments. To ensure that our recommendations and future guidelines remain directly relevant to other alliances and institutions, we intend to pay close attention to international ERA-level discussions on related topics and align CHARM-EU policies with them.

In table 3, we present the recommendations we are putting forward together with their associated strategic priority areas as well as their most appropriate application level. That being said, it is necessary to remember that these recommendations are the product of analyses of intersecting topics and areas. They do not, and should not be expected to, exist in silo-like circumstances in which each recommendation would only be defined by one priority area and one level of application. Further, we expect and encourage other institutions and alliances to employ these recommendations within those strategies, policies and applications that are suitable for their own circumstances.

Our recommendations are as follows:

- 1. Fully adopt a long term view.** Recognise and openly acknowledge that cultural change and growth will take time. Be realistic about available resources and cost-benefit analysis. Focused

(small) and sustained initiatives are likely to be more fruitful. Be prepared to extract gains and learnings from failures. Encourage learning by doing, and make it clear that failure is acceptable.

- 2. Train, support, incentivise and reward diverse Open Science activities,** as detailed above.
- 3. Facilitate capacity building for researchers.** It is necessary to train researchers on what it means to be a PI (Principal Investigator), how to lead/participate in a project, and how to apply for funding. Further, researchers need opportunities to apply for seed funding and other smaller schemes in order to gain experience towards higher value funding.
- 4. Offer research development as well as research support.** In addition to providing help with budgets and administration relating to research funding, invest enough resources in RMA professionals to enable them to conduct horizon scanning to allow for a longer proposal development time, matchmaking, networking events (seminars, workshops) for individuals and other activities that lead to greater excellence and success in the future.
- 5. Empower, champion and include RMA (Research Management & Administration) colleagues.** Our research support colleagues are experts in their fields. In order to maximise funding success and research excellence, we need this expertise to be available to us to guide, advise and help shape our work. It is necessary to ensure that research support/research development staff are fully respected for their expertise, championed within institutions, and included at the tables where decisions are made. We strive to collaborate rather than simply expect support. It is important that the human capital achieved with the investment of the project does not depreciate over time.
- 6. Treat the Alliance as a vehicle for creating broader connections.** European University Alliances should not be thought of as “closed clubs” advocating for unfair advantage in the arena of research funding. We need to continuously demonstrate that we can operate as a positive force. We welcome connections from outside the alliance, and can offer an inter-institutional pool of enthusiastic and committed researchers for collaborations.
- 7. Champion the alliances’ important roles in research.** Continue to lobby for European and national level competitive funding for capacity building. We are not looking to commandeer funds for research with an unfair advantage. Instead, we require funding to continue our work started in the Horizon 2020 Science with and for Society programme. Alliances need to embrace a multi-mission approach (research as well as education) in order to fully contribute to the European higher education and research ecosystem, and they need the means to do so. To this end, it is essential to widely communicate the research achievements of TORCH (as well as other alliances), and to link our activities to the ERA policy agenda.
- 8. Institute an equality, diversity and inclusivity framework of monitoring changes on alliance level.** Our suggested R&I related additions to the CHARM-EU Inclusivity Plan will need monitoring and evaluating, and a common framework will enable this with coherency.

- 9. Commit to working towards reforming research assessment.** We will remain committed to the CoARA principles and proactively explore ways to practically integrate them with interconnected RRI.
- 10. Employ known local hubs of interconnected RRI in the process of promoting and growing reforms.** In TORCH Deliverable 8.1 we identified certain institutional areas as very high nodes of intersecting Responsible Research and Innovation, on a present and potential basis. These areas were research support; research centres and institutes; and recruitment, evaluation and promotion of staff. The work on reformed processes, structures and assessment should begin at these hubs for the most effective initial impact, while at the same time supported and championed by senior management.
- 11. Create and maintain a shared research agenda to increase inter/transdisciplinary research and to tackle barriers.** We have identified our joint research strengths across the alliance, where we are collectively strong and where we complement each other. This will inform us in relation to pursuing research excellence and more success in research funding.
- 12. Continue targeted activities focused on raising awareness on CHARM-EU and its priorities on the widest possible range of university stakeholders.** In addition to researchers and RMA staff, this includes management, support staff, academics, and PhD and other research students.
- 13. Tackle ways of integrating Open Science in Research Assessment policies and Equity, Diversity and Inclusivity strategies together with inter/transdisciplinary research.** This recommendation underlies all the other recommendations as well as our work in TORCH at large. As the RRI we focus on is interconnected, so, too, must our reforms, particularly in relation to research assessment, be interconnected.

**Table 3.** TORCH Common recommendations.

Recommendation	Strategic Priority Area	Level (Institution/ Alliance/EU)
1. Fully adopt a long term view: change and growth will take time. Be realistic about available resources and cost-benefit analysis. Extract gains and learnings from failures. Encourage learning by doing.	5	Alliance
2. Train, support and incentivise diverse Open Science activities.	3	Institution/Alliance
3. Facilitate capacity building for researchers: training on how to be a PI, how to lead/participate in a project, applications for seed funding and other smaller schemes.	1, 2, 3, 4	Institution
4. Offer research development as well as research support: Horizon scanning to enable longer proposal development time, matchmaking, networking events (seminars, workshops) for individuals and support.	4	Alliance
5. Empower, champion and include Research Support Offices.	4	Institution/Alliance
6. Treat the alliance as a vehicle to create broader connections across the European HE landscape. We are not a closed club, but can operate as a positive force. Pool of enthusiastic and committed researchers.	5	EU

7. Champion the alliances' important roles in research: we need funding for capacity building, not for research itself. Communicate research achievements of TORCH. Connect to ERA policy agenda.	5	EU
8. Institute an equality, diversity and inclusivity framework of monitoring changes on alliance level.	2	Alliance
9. Commit to working towards reforming research assessment.	1	Alliance
10. Employ known local hubs of interconnected RRI in the process of promoting and growing reforms. (Research support, research centres/institutes)	1, 2, 3, 4	Institution
11. Create and maintain a shared research agenda to increase inter/transdisciplinary research and to tackle barriers	4, 5	Alliance
12. Continue targeted activities focused on raising awareness on CHARM-EU and its priorities on the widest possible range of university stakeholders (management, support staff, academics, PhD students)	1, 2, 3, 4	Institution
13. Tackle ways of integrating Open Science in Research Assessment policies and Equity, Diversity and Inclusivity strategies together with inter/transdisciplinary research.	1, 2, 3, 4	Institution/Alliance/EU