

A4L_ACTIONS

Alliance for Life Sciences: From Strategies to Actions in Central and Eastern Europe

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1 EXECUTIVE SUMMARY

This Policy Paper on the Efficiency of the Spreading Excellence and Widening Participation Measures (Widening / WIDESPEAD/ WIDERA measures) represents the findings and recommendations of the Alliance for Life Sciences (Alliance4Life). The alliance is a strategic partnership of twelve progressive life science institutions and universities from eleven widening countries, all of them located in the newer EU member states of Central and Eastern Europe (CEE). The paper is based on Alliance4Life's experience with the widening measures Twinning, Teaming, and ERA chairs and reflects the related challenges on national and European levels in terms of complementary funding and sustainability.

The aim of this document is to contribute to the **strategic planning of Horizon Europe** for the next period of **2025-2027** as well as **the next Horizon programme beyond 2027**. It represents a continuation of Alliance4Life's contributions to the EU and national research policy, following previous Alliance4Life's recommendations for Horizon Europe provided via the policy paper **"Widening Participation and Strengthening the ERA,"** which was issued in February 2021.¹

The document is based on interviews with representatives of Alliance4Life's member institutions who shared their experience as applicants and/or beneficiaries of **Teaming, Twinning, and ERA Chairs in the field of life sciences**. Altogether **143 widening actions** were applied for by Alliance4Life members, and **40 were funded**. These applications and funded actions **initiated 15 further applications** (see Annex 3). Twelve structured interviews (see Annex 1) were conducted, which were focused on the following aspects: (1) major impact of participation in widening actions, (2) implementation aspects of widening instruments, and (3) recommendations at European, national, and institutional levels.

The interviewees considered the **main value added of participation** in widening actions in improved scientific cooperation between existing partners and opportunities for new partners; more grant writing and administrative capacity; increased mobility of researchers, including PhD students; and ability to attract distinguished researchers for the duration of grant implementation. Both positives and negatives have been mentioned with the widening actions implementation. **Concerns were mentioned** that resources in widening projects went mainly toward networking, travel, various events, project reporting, etc., and that a bigger proportion of funding to support research activities would be more effective in improving the R&I gap. The interviewees criticized lacking **sustainability of widening actions** due to **missing long-term funding pipelines** and limited use of **downstream funding synergies**.

The following main concluding recommendations have been formulated for the EU, national and institutional levels:

- Changing the EU widening paradigm from supporting to empowering
- Improving coordination between the EU and national levels on the concertation of R&I capacities
- Better coordination of calls, utilising synergic effects of funding, including Seal of Excellence
- Speeding-up strategic reforms and changes at national, regional, and institutional levels

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¹ https://alliance4life.ceitec.cz/news/widening-participation-and-strenthening-the-era/

2 INTRODUCTION

Since 2004, the European Union has almost doubled in size, incorporating, among others, eleven new Member States from CEE. Since **the EU enlargement in 2004**, the challenge has been and continues to be addressing the significant and growing gap in research and innovation (R&I) between Western and Eastern Europe. The gap among the EU Member States remains significant. While the overall EU innovation score improved relative to all competitors except for China from 2021-2022, the internal innovation **gap increased**, and the **innovation performance of eight MS declined**.

The R&I gap also covers participation in the EU Framework programmes. Therefore, for **Horizon 2020**, so-called "widening countries" have been identified which were lagging behind in R&I, and dedicated widening measures have been introduced to **support excellence** in these countries. The widening actions reflect the fact that while the EU continues to be a global leader in R&I², it must continue to support the excellence in widening countries and institutions to address the internal gaps in this area to remain competitive³.

The Horizon 2020 programme allocated 1.2% (EUR **935 million** of 76.4 billion) of the funding to widening countries, and the current Horizon Europe programme has allocated 3.1% (EUR **2.95 billion** of 1.211 trillion).⁴ Thanks to the increased funding, the participation of widening countries in Horizon 2020 increased,⁵ and the **widening measures**⁶ included in the Horizon 2020 programme **have shown success** as tools for supporting the R&I potential of widening countries. However, the gap in participation in Horizon 2020 remains a significant challenge to reaching the Commission's 2024 objectives and achieving an efficient and competitive **European Research Area**.

Therefore, this D5.2 Policy paper on the efficiency of WIDESPREAD Measures suggests areas for further improvement to build on and improve the existing widening instruments to increase their efficiency. It has engaged representatives of the Alliance4Life members who shared their experience as applicants and/or beneficiaries of **Teaming, Twinning, and ERA Chairs in the field of life sciences**. Altogether **143 widening actions** were applied for by Alliance4Life members, and **40 were funded**. These applications and funded actions **initiated 15 further applications** (See Annex 3). Twelve structured interviews (see Annex 1) were conducted, which were focused on the following three aspects:

- 1. Major impact of the widening actions on institutions' perceived positions in the European and global R&I communities;
- 2. Institutional, national, and international implementation aspects of widening instruments;
- 3. Policy recommendations at European, national and institutional levels.

² European Commission, Directorate-General for Research and Innovation, Science, research and innovation performance of the EU 2022: building a sustainable future in uncertain times, Publications Office of the European Union, 2022, https://data.europa.eu/doi/10.2777/78826

³ <u>European Innovation Scoreboard 2022, https://op.europa.eu/en/publication-detail/-/publication/f0e0330d-534f-11ed-92ed-01aa75ed71a1/language-en/format-PDF/source-272941691</u>

⁴ Data from the <u>Special Report 15/2022: Measures to widen participation in Horizon 2020 were well designed but sustainable change will mostly depend on efforts by national authorities.</u>
https://www.eca.europa.eu/en/Pages/DocItem.aspx?did=61346

⁵ In 2018 it was found that 4.2% of the total Seventh Framework Program budget went to widening countries. This had increased to 5.1% on average as of February 2021. <a href="https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/widening-participation-and-spreading-excellence_en_and-open-calls/horizon-europe/widening-participation-and-spreading-excellence_en_and-open-calls/horizon-europe/widening-participation-and-spreading-excellence_en_and-open-calls/horizon-europe/widening-participation-and-spreading-excellence_en_and-open-calls/horizon-europe/widening-participation-and-spreading-excellence_en_and-open-calls/horizon-europe/widening-participation-and-spreading-excellence_en_and-open-calls/horizon-europe/widening-participation-and-spreading-excellence_en_and-open-calls/horizon-europe/widening-participation-and-spreading-excellence_en_and-open-calls/horizon-europe/widening-participation-and-spreading-excellence_en_and-open-calls/horizon-europe/widening-participation-and-spreading-excellence_en_and-open-calls/horizon-europe/widening-participation-and-spreading-excellence_en_and-open-calls/horizon-europe/widening-participation-and-spreading-excellence_en_and-open-calls/horizon-europe/widening-participation-and-spreading-excellence_en_and-open-calls/horizon-europe/widening-participation-and-spreading-excellence_en_and-open-calls/horizon-europe/widening-excellence_en_and-open-calls/horizon-europe/widening-excellence_en_and-open-calls/horizon-europe/widening-excellence_en_and-open-calls/horizon-europe/widening-excellence_en_and-open-calls/horizon-europe/widening-excellence_en_and-open-calls/horizon-europe/widening-excellence_en_and-open-calls/horizon-europe/widening-excellence_en_and-open-calls/horizon-europe/widening-excellence_en_and-open-calls/horizon-europe/widening-excellence_en_and-open-calls/horizon-europe/widening-excellence_en_and-open-calls/horizon-europe/widening-excellence_en_and-open-calls/horizon-europe/widening-excellence_en_

⁶ Widening measures refer to Teaming, Twinning, ERA Chairs, and COST actions, all of which have different aims in addressing R&I gaps.

Each member institution of Alliance4Life selected project managers, researchers, or administrative representatives to share their experiences with widening instruments for this report (see Annex 3). This report combines the experience of Alliance4Life's members and, in several cases, also of the whole institution. (If the Alliance4Life's members are parts of universities, typically faculties or university research institutes, which did not have direct experience with widening applications and participation, they cooperated with other parts of their institution at large to share the local perspective.) The representatives answered questions about developing trends to assess the impact, implementation, and needs for the future success of widening instruments to support excellence and decrease the gaps in research, funding, and accessibility for widening countries.

3 IMPACT OF PARTICIPATION

The level of participation in the widening actions of Teaming, Twinning, and ERA chairs varied among Alliance4Life's members and countries. In general, more success stories and optimism were shared from **Twinning** applications⁷, **ERA chairs** applications were seen as increasingly important⁸, and **Teaming** was seen as a logical 'next step' *after* receiving Twinning and/or ERA Chair funding, and after the institutional capacity for grant writing was developed⁹. However, when comparing the data of total actions submitted and funded, the ratio is about **one in every three applications funded** for all three tools (see Annex 3). At the same time, **Twinning** applications (whether successful or not) were more likely to **lead to future project applications** with the same partners.¹⁰

Interviews with Alliance4Life's representatives supported the opinion that the impact of participation in widening actions, namely the impact in terms of involvement in further Horizon research and innovation actions (RIA), was dependent on cooperation at institutional, national, and European levels. Stronger linkages, or actions that are co-funded and **supported via parallel actions** or receive positive evaluations (such as the "**Seal of Excellence**" label) despite insufficient budget, were seen as very important.¹¹

In concrete terms, the interviews provided the following feedback:

Institutional Learning

Applicants learned through the application process and later through partnerships. This encouraged more sustainable transformations such as the development of **grant writing offices** or pieces of training; in some cases, however, this learning process remained the initiative of single, active individuals.

European Evaluation / National Financing

There was a division in how respondents found the European-national cooperation, i.e., financial synergies, supportive policies, communication, and evaluation. The feedback is shown below in Figure 1. The interviews revealed **important concerns about sustainability**, as a Czech respondent noted: "If we have shown our quality, there should be a continuation of support provided to the existing Centres of Excellence instead of establishing further new

⁷ 9 of the 12 respondents shared between 1 and 10 successful Twinning applications.

⁸ 5 of the 6 respondents who experienced applying for ERA chair possitions were funded for at least one postition. Half of the respondents had not experienced an ERA application but saw it as important to developing their institution.

⁹ Nearly all respondents had experience with Teaming applications, but only 4 had a successful application.

¹⁰ Annex 3 shows that of the 9 widening applications that initiated new applications, 7 were twinning and 2 teaming.

¹¹ It was specifically mentioned by Osvalds Pugovičs of the Latvian Institute of Organic Synthesis that "there is no formal term Seal of Excellence in Latvia", but achieving the threshold for national funding (when available) was still important and remained a reoccurring theme in several interviews.

Centres, which creates risk for the long-term sustainability of widening measures."¹²; Continuation, however, does not appear to be supported equally in widening countries. The practice of using the **Seal of Excellence** is very good; however, not at the same level in widening countries. Therefore, **there is still potential** for sharing good practices among widening countries with this useful instrument.

Downstream Synergy

The implementation of widening actions is connected with synergies on national levels, especially in the case of **Teaming with complementary funding**, especially from the European Structural and Investment Funds (ESIF). In several countries, this synergy has been **perceived as limited** (in Slovakia, Poland, and Bulgaria), and the coordination between the EU and national level was not ideal, including the timing of complementary calls. It was noted that linkages, where European calls are adjusted to by national authorities and coordinated in institutions, still continue to develop.

Country	Croatia, Estonia, Latvia, Lithuania, Romania	Czech Republic, Slovenia	Slovakia, Poland, Bulgaria
Positives	National ESIF and refunding instruments were supportive in the field of health and life sciences.	The national funding body gave priority to projects with international collaboration. Promoting the cause had a positive impact (Slovenia) ^{13.} ESIF supported starting large projects with the impact on excellence in life sciences (Czech Republic)	'Pleasant' communication between national authorities and institutions (Slovakia). Helpful to be a member of national organizations ¹⁴ . National co-funding by the Ministry of Education and Science (Poland).
Negatives	National funding opportunities were not always adequate for maintaining expensive equipment/enabling international research.	Too soon to tell what impact changes will have because structural changes take 5-10 years to take effect. National funding fails to support the continuation and maintenance of successful projects ¹⁵ . Transferring complementary ESIF funding to the next ESIF programming period would enable the utilization of Teaming complementary funding more effectively (Czech Republic) ¹⁶ .	Structural funding/national support for international partnerships were "very rare and unique" ¹⁷ . Clearer decision making at the national level and symmetry between national and EU funding calls are needed (Bulgaria) ¹⁸ (Slovakia). No structural funds and a lack of synergy with Horizon 2020 and this is not expected to change (Poland) ¹⁹ .

Figure 1: Range supportive cooperation perceived by respondents

¹² Zlatuše Novotná, Masaryk University/CEITEC, Brno, Czech Republic.

 $^{^{13}}$ Noted by Professor Samo Ribarič of the University of Ljubljana.

¹⁴ Interview with Alena Gabelová and Božena Smolková of the Biomedical Research Center of the Slovak academy of Sciences.

¹⁵ Respondents from both the Central European Institute of Technology and Anne's University Hospital in Brno expressed that structural funds had helped them purchase equipment 5-10 years ago, yet there are not enough funds for updating and maintaining equipment.

¹⁶ Zlatuše Novotná, Masaryk University/CEITEC, Brno, Czech Republic.

¹⁷ Shard by representatives of the Biomedical Research Center of the Slovak Academy of Sciences (BMC SAS).

¹⁸ Magdalena Kasnakova from the Medical University of Sofia shared that "there aren't any efforts to unify experts at the national level and responsible ministries and local authorities are not involved in the process of developing effective partnerships.

¹⁹ Aneta Andrzejczyk from the Medical University of Lodz in Poland.

Thus far, the main value added of participation in widening actions are seen as follows:

- Improved scientific cooperation between existing partners and opportunities for new partners;
- More grant writing and administrative trainings and support for researchers including PhD students:
- Increased mobility of researchers, including PhD students;
- An increased ability to attract distinguished researchers for the duration of the grant implementation;
- International way of thinking and increasing openness of individuals to apply for international projects.

The most noticeable changes for participants were related to **administrative capacity**. This change varied in the context of different countries and was perceived as more sustainable or **likely to produce transformative practices** at different institutions. By and large, however, it was considered that more applications lead to successful applications (eventually), and that "funding attracts funding"²⁰, be it at the institutional, national, or European level. So far, this remains true largely in the case of Twinning actions.

4 IMPLEMENTATION

In terms of cooperation, participation in widening actions was seen to strengthen existing internal and external networks and expand trusted networks. In the experience of one participant in a widening project from the Medical University of Lodz in Poland: "The university often participates in existing projects and networks because they know how to do it. The gap is growing because our researchers are not innovative enough, and they do not have the same idea of innovation. In many cases, the old guard is not changing". This respondent and others shared how, by participating in new opportunities such as widening actions, "young researchers become more fluent in understanding European projects. When another project comes along, they are not afraid to take the opportunity, and there is a snowball effect"²¹.

Use of Resources:

• Most resources in Widening projects went towards networking, travel, various events, project reporting, and (in the case of Teaming phase I) proposal preparation. This "soft money"²² use of resources takes time to create an impact on research and innovation excellence. Time and resources spent on administrative processes and networking are more efficient when they demonstrate their direct impact on increasing opportunities for scientific research. Therefore, a bigger percentage of the budget eligible for research activities would be welcomed.

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²⁰ Noted by Taivo Raud of Tartu University.

²¹ Explained by Aneta Andrezejczyk from the Medical University of Lodz in Poland.

²²Zlatuše Novotná from Masaryk University in the Czech Republic referred to soft money as money put towards networking, travel, and various events. The idea that 'softer' resources were occurring in widening measures projects was supported in several interviews.

• Widening institutions use a lot of administrative resources to attract new talent to fill ERA chair positions or form new partnerships for Teaming and Twinning, and this process can be more efficiently supported at the national and the EU levels²³. There are still important obstacles to finding project partners and attracting new talent due to regional differences, wage differences, and the visibility of institutions in widening countries. It was mentioned that "money is not the right thing to start with. It helps, but something more substantial should be done to overcome the prejudice and add credibility." ²⁴.

4.1 MAIN SUCCESSES

The first main success could be seen in terms of the number of grants applied for and successfully achieved (See Annex 3). Four out of twelve interviewees shared receiving ERA chairs, Teaming, or new Horizon funding as the main success. Those who were not as successful in having widening projects funded claimed their main success to be in increasing their potential for the next round through increased structural funding or support from national and international contacts for future applications. There was also a consensus that focusing on the application process helped improve the level of



experience for young professionals and **bring in new personnel**; however, this was not always the case due to wage differences and lack of institutional funding. Those who had successfully participated in widening projects and applications said that the greatest success of their participation has been the **increase in pieces of training** to raise the competencies of researchers and staff. Furthermore, there was agreement that achieving a greater level of **funding increased the overall motivation** for participation by experts and institutions alike.

4.2 MAIN FAILURES

The main failures can be categorized as follows: lack of incentives, insufficient resources, and limited cooperation (Figure 2).

Lack of incentives

A lack of incentives was mentioned as preventing institutions from attracting new talent (ERA chairs, and PhD students), participating in networks and training, and sharing project failures²⁵. **An increase in research funding** was seen as a way to motivate researchers' participation in widening actions and in EU projects in general²⁶. **Recruiting** is also an ongoing obstacle due to the **lower wages** in widening

²³ The Estonian respondent (Taivo Raud from the University of Tartu) was the only one to mention how national synergy helped in this process. Although finding the candidate was not a problem, retaining the person and the knowledge they bring to the institution is.

²⁴ Expressed by Petr Rychtecký from St. Anne's University Hospital Brno/International Clinical Research Center (Czech Republic).

²⁵ Iuliana Ceausu of the University of Medicine and Pharmacy "Carol Davila" Bucharest noted that: "there are many failures but people were not encouraged to share them, so we have not reported failures until now. To collaborate these should be reported"

²⁶ "It is hard to recruit PhD students due to the lack of research funding, and case by case funding for research is not sustainable to improve this". From interview with Smiljka Vikić-Topić and Lozika Mašić, University of Zagreb School of Medicine and Ivan Petrović, University of Zagreb, Faculty of Electrical Engineering and Computing, Croatia.

countries and **less visibility** of or knowledge about widening institutions. Therefore, more incentives in the form of research funding and cooperation, and **training** for research-based project writing are needed.

Insufficient resources

The main resources lacking were related specifically to the field of health and life sciences²⁷. In the case of Alliance4Life, several respondents found that, although there was the expectation that internal resources would be enough for applying for projects and the funding would support research, there were often **not enough resources** to meet administrative needs, motivate research professionals, and purchase equipment **to ensure sustainability**.

Limited cooperation

In some cases, there was **not enough time** in the case of widening actions such as Twinning (with a three-year project to create a network, organize training, and publish results) to create a sustainable result. The **lack of national cooperation** with EU calls was also problematic. One respondent even noted that: "It would be useful if the European Commission would require national governments to provide support from ESIF"²⁸ to **increase synergy for sustainable funding**. In terms of institutional regional synergy, it was mentioned that the EU needs to work more closely with independent institutions, countries, and regions to create stronger institutional-national-EU links²⁹.

²⁷ "Different fields of research have different costs. Some research (such as those in health and life sciences) is simply more expensive". Samo Ribarič of the University of Ljubjana in Slovenia.

²⁸ Samo Ribarič of the University of Ljubljana.

²⁹ Taivo Raud, Tartu University, Estonia

Incentives	Resources	Limited cooperation
Project Managers: Lack of reporting because there are no incentives to report and learn from failures. (Failures may be seen negatively)	Different fields of research have different costs, some research is simply more expensive.	Lack of institutional synergy and reporting/sharing means we are not learning from internal resources.
PHD Students: Without research funding, students are not encouraged.	The institution is not mature enough for the application process.	The lack of national synergy between ESIF and EU measures was challenging.
Researchers/Research: Case by case funding is not sustainable.	Teaming has too high of expectations and not enough funding to meet these expectations.	3 years was not enough to have a sustainable impact for Twinning.
ERA CHAIR/Professors/Partners: Difference in wage levels and perceptions make it difficult to attract ERA chairs	Unequal distribution of resources in one country. Grants are concentrated in larger institutions, usually in larger cities.	It would be useful if the EC would require national governments to provide support from ESIF to ensure sustainability.
Learning by doing helps researchers and PhD students develop their career	Institutional resources turned out to be insufficient for the application.	More lobbying in Brussels and regular communication are needed.
Trainings on how to manage research- based projects and secure research funding would be more attractive/sustainable.	Currently no training on writing excellence/scientific parts of projects which are essential to sustainability after the action is completed (so that ERA chairs stay or are replaced with high-quality researchers and partnerships continue).	Existing synergy is not supporting enough to enable a transition to a leadership role in building a consortium.

Figure 2: Main Failures according to interviews with representatives of Alliance4Life³⁰

5 RECOMMENDATIONS AND CONCLUSIONS

The Alliance for Life Sciences is a **unique alliance operating in all CEE widening countries** that experience similar peculiar conditions resulting from decades of scientific, cultural, and economic separation from advanced Europe. It also represents a **critical mass of widening instrument beneficiaries** (see Annex 3). Members are twelve progressive health research institutions and main universities located in eleven CEE countries, which share the **vision of improving together**.

Alliance4Life appreciates widening instruments that showed a positive impact on their institutional progress in terms of research excellence, research cooperation, and managerial governance. However, based on interviews with Alliance4Life's members, we can conclude that the widening concept needs to be properly discussed within the further consultation process at the EU and national levels and updated for the next strategic programming period. Our major concern is the mostly outdated concept of "leaders and followers" as well as the mostly insufficient complementary and synergic efforts, which do not ensure both maximum effect and long-term sustainability of widening measures. In order to contribute to the consultation process, Alliance4Life suggests the following recommendations to be considered at the EU, national and institutional levels:

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³⁰ All statements are taken or paraphrased from interviews with individuals with experience in applying for European funding or using Widening instruments in fields related to health and life sciences in Widening countries.

5.1 CHANGING THE EU WIDENING PARADIGM FROM SUPPORTING TO EMPOWERING

Alliance4Life appreciates the widening measures being focused on collaboration with advanced partners in R&I, as this aspect is a crucial enabler for excellence. However, the approach of having access to excellence should be changed to **empowering widening institutions to be excellent themselves** and improve their own performance, increase capacities, and become R&I leaders.³¹

We welcome the possibility of engaging in deeper partnerships with leading European institutions, primarily through Twinning and Teaming. However, **Coordination and Support Actions** (CSAs) provide only a minor share of resources to be spent on research activities (the new schemes of Horizon Europe WIDERA programme are also CSAs – Excellence Hubs, European Excellence Initiative, and ERA Talents). We suggest establishing schemes that allow the pursuit of the actual R&I activities, i.e., not only coordination activities, via **Research and Innovation Actions** (RIA). Inspiration can be ERC Synergy Grants or EIC Pathfinder. Such schemes will allow the **researchers to become the driving force** interested in the projects instead of administrative managers as usual in the current architecture of CSAs, namely Teaming, and Twinning, and to overcome the significant **gap in leadership ambitions and abilities** in widening countries.

The leadership of researchers from widening countries is of concern. Current collaborative schemes in widening (except Excellence Hubs) use the concept of "leaders" based in non-widening countries transferring their knowledge and skills to the "followers" from widening countries. The schemes thereby promote the self-identification of researchers in widening countries as "followers", even though they formally are coordinators. Instead, researchers from widening countries need to learn to identify themselves as leaders — the lack of coordinators from widening countries in RIA and IA projects is the most striking gap in participation in the Framework Programmes. Moreover, in widening countries, there are already Centres of Excellence (CoEs) capable of progressing based on sharing and learning from each other. Therefore, we would welcome new or revised schemes which would not require the division of partners into "leaders" and "followers". As part of that, having a partner(s) from non-widening countries, should not be an eligibility requirement.

5.2 COORDINATION BETWEEN THE EU AND NATIONAL LEVELS ON THE CONCERTATION OF R&I CAPACITIES

Alliance4Life suggests close coordination be introduced between the European Commission and national authorities in charge, especially the **establishment of new Centres of Excellence**. CoEs exist as a result of European Structural and Investment Funds (ESIF) as well as of Teaming, and their **sustainability depends on public budgets** as well as on the existence of **innovative industries** in widening countries. The establishment of further new CoEs means that institutional financing from national sources is even more diluted. This often results in temporally ad hoc schemes that formally fulfill project criteria, but have little chance of sustainability beyond the required period. As a consequence, it impairs efforts to **build institutions with a strong brand and history**, the visibility of which would attract talent and international collaboration.

Alliance4Life considers it essential to recognise the existing CoE in widening countries and to support the quality that has already proved its potential and viability. Establishing a new excellent research centre without strategic coordination between European and national (and ideally also regional) levels leads to limited impact in a long term. Balancing the approach from supporting new initiatives

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³¹ Paraphrased from interview with Taivo Raud of Tartu University: "In the new period, it is said to improve access to excellence. So, it is saying we need access to excellence somewhere else. It gives the wrong impression. We ourselves want to be excellence not just access it elsewhere. We want to improve our own performance, increase our own capacities and be our own leaders."

and centres to working with the already established ones also includes their **participation in the research policy development processes at the EU level**, including inviting them to relevant bodies where mostly advanced EU countries are represented.

5.3 BETTER COORDINATION OF CALLS, UTILISING SYNERGIC EFFECTS OF FUNDING, INCLUDING SEAL OF EXCELLENCE

The current gap in R&I needs the national and EU synergic and complementary effects to be improved. If ESIF funding organized by national institutions is generally organized separately from the EU funding schemes, widening institutions do double work by trying to coordinate between national and European calls³². While some national organizations do coordinate more closely with EU calls, and some calls require national co-funding, more coordinated efforts by European and national funders in terms of scheduling calls for proposals and harmonizing the application process could lessen the administrative burden on widening institutions. For Teaming, e.g., a helpful approach would be allowing the extension of ESIF funding or "phasing" procedure, enabling a transfer of the complementary ESIF funding to the next ESIF programming period.

We consider synergies between different funding instruments on the EU and national levels to be **vital to achieving sustainability of widening instruments**. Synergies have been a matter of discussion for a long time on the political level, with a limited impact on their actual implementation. There must always be two players involved in implementing synergies, thus bridging two distinct sets of rules in relation and mutual understanding. To use the potential of synergies fully, the following aspects have to be addressed:

- Legal aspects need for guidance and interpretation of rules, an extension of the Guidance
 on Synergies launched in 2022 to other EU funding instruments, i.e. considering not only
 ERDF but also European Social Funds, Recovery and Resilience Facility, and Erasmus to
 provide a potential for effective synergy.
- Sharing information and best practices is the key to making synergies a reality. This is true on the European and national levels and between players in different countries. Seal of Excellence Community of Practice has been active for several years, and the new synergies elements (e.g. transfer of resources) also need similar space for discussion and sharing. We strongly support establishing a similar body to cover the new synergy instruments.
- Alliance4Life appreciates the concept of a Seal of Excellence for ERC, MSCA, and EIC, which has successfully been established. We recommend that this instrument is further followed and, if needed, also reviewed to reflect the actual needs. E.g., for MSCA, the 85 % threshold shall be, on the one hand, the basis for the scientific quality of the projects on the other, provide for a considerable number of projects to be funded. If national funding authorities decide to fund Seal of Excellence projects under the threshold (e.g. 80 %), they get into difficulties with state aid.

5.4 SPEEDING-UP STRATEGIC CHANGES AT NATIONAL, REGIONAL, AND INSTITUTIONAL LEVELS

As Alliance4Life's members have shared during the interviews, the implemented widening actions resulted in the establishment of new or upgraded research centres, deepened their international

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³² Mentioned by Silvia Pastoreková from the Biomedical Centre of the Slovak Academy of Sciences.

scientific collaborations, submission of new research project proposals and implementation of a number of new RIA projects, improved their institutional administrative capacity, etc. However, the desired effect on long-term sustainability and innovation performance of widening countries is still lacking.³³

We see the reason in the fact that widening initiatives are effective as a catalyst and without the strategic follow-up and spill-over efforts on institutional, regional, and national levels the crucial ingredients are missing, and the reaction cannot happen.

Europe needs national R&I reforms, which would address the **absence of long-term strategies and funding pipelines** to sustain the established "pockets of excellence" in CEE, create spill-overs and improve on national and regional levels. On the institutional level, the capability and courage to **introduce progressive governance changes** are needed, which may be unpopular and painful in the short-term perspective. It is the mission of Alliance4Life to serve as a role model for such changes in CEE. In concrete terms, we can mention the following priorities as we see them in descending order of importance:

- Introducing modern career paths, especially for early-career researchers, including competitive
 conditions and wages to retain and attract talent, quitting inbreeding, recognising and rewarding
 excellence;
- Creating a regional and institutional **environment supportive to international staff**, including a whole package of favourable conditions for families of incoming researchers;
- Concentrating national infrastructure investments and funding pipelines on institutions and teams that have proved their quality based on independent peer-reviewed evaluation, and which have introduced or are willing to introduce progressive governance models;
- Pursuing **independence of researchers** and supporting **excellent research**, including basic and curiosity-driven research, which leads to innovation;
- Promoting and supporting the visibility of existing CoEs as "pockets of excellence" in widening
 countries to raise their recognition and acceptance by international networks;
- Addressing lack of administrative capacity, including sustainability of professional management units and grant offices to ensure funding from follow-up and synergic competitive funding sources.

Alliance4Life, with its activities on institutional, regional, and national levels is ready to stay at the forefront of progressive developments. If the ultimate goal of increased R&I excellence in widening countries is to be reached, then the much-needed transformation agenda of the widening and ERA package must maintain a balance between the direct support for research, especially bottom-up, curiosity-driven research, and the supporting and organisational measures.

 $^{^{\}bf 33}\ \underline{\rm https://research-and-innovation.ec.europa.eu/statistics/performance-indicators/european-innovation-scoreboard_en}$

6 ANNEX 1

6.1 QUESTIONS FOR INTERVIEWS

6.1.1 Impact of Participation in Spreading Excellence and Widening Participation

How many Widening instruments has your institution been able to use during this project? Tell about then.

Is there any synergy between Widening projects and national/structural funding instruments in your country? How does this affect/support the impact of participation by your institutions?

What noticeable changes (international, national, institutional) have you seen in research and innovation gaps in the fields of Health and Life Sciences within the course of the project? How much did participation in specific Widening projects influence this change in your institution?

To what extent have Widening actions influenced reform and transformation processes at the institutional level and/or the national research and innovation systems level(s)?

How have the Widening instruments enabled your institution to develop its own internal resources (such as an ERA Chair) to apply for and secure European and other sources of funding?

Does your country practice the "Seal of Excellence" approach for refinancing above the threshold evaluated but not funded by Widening project applications? If so, what effect has this had on your institutions ability to secure funding. If not, what has been the effect of not using this approach?

What role have the Widening instruments had in enabling your institute to form new consortia for Horizon Europe application?

6.1.2 Implementation of Widening Instruments

According to your observations, where did most of the time, energy, and resources for participation in widening projects go, and what were the most efficient use of resources for your institution?

How have partnerships formed during under Widening measures helped your institute to develop new practices? What are these practices and how have widening instruments helped them to be more accessible and sustainable?

How does your institute continue to apply new practices, institutional developments, and research and innovation tools and know-how gained through participation in Widening instruments?

What have been the main successes or important flagship projects resulting from participation in the Spreading excellence and Widening Participation Programme?

6.1.3 Needs Expressed by Institutional Representatives

What have been the main failures or setbacks experienced during participation in Widening instruments? What could have been done differently institutionally, nationally, or at the EU level to address these setbacks?

What is needed for your institution to become even more efficient and be an active leader in sustainably securing EU funds?

What is still needed for sustainable Research and Development initiatives in the fields of Health and Life Sciences at your institution, and what should be done institutionally, nationally, and at the EU level to meet these needs?

In which areas could Widening instruments be further improved to help make partner cooperation, shared best practices, use of resources, etc., more sustainable and empowering for the fields of health and life sciences?

Do you have any other examples, recommendations, or experiences to share about participation in or expectations for the Spreading Excellence and Widening Participation Programme that would help show the main effects of this project and support future initiatives?

7 ANNEX 2

Partner Institutions and representative(s) interviewed:

Institution	City, Country	Individual(s) Interviewed	Position
Masaryk University (MU)	Brno, Czech Republic	Zlatuše Novotná	Strategic Partnership Coordinator, Director's Office. A4Life Board
St. Anne's University Hospital	Brno, Czech Republic	Petr Rychtecký	Head of the Grant Support Center, A4Life Focus Group Chair
Biomedical Research Centre of the Slovak Academy of Sciences	Bratislava, Slovakia	Tatiana Šipošová Silvia Pastoreková Alena Glebova Bozena Smolkova	International Project Manager (A4Life), General Director at the Biomedical Research Centre SAS Institute of Virology, VISION Project Coordinator, VISION Scientific Manager
Medical University of Lodz	Lodz, Poland	Kinga Zel, Aneta Andrezejczyk	International Project Administration for Horizon Europe, EIT Health, and EU4Health
University of Tartu	Tartu, Estonia	Taivo Raud	Head of the University Grant Office
School of Medicine- University of Zagreb	Zagreb, Croatia	Smiljka Vikić-Topić Lozika Mašić Ivan Petrović Ino Čurik	Head of Knowledge Transfer and Innovations, Expert Researcher, Full Professor in the Department of Control and Computer Engineering, Full professor division of Animal Sciences Department of Agriculture
Vilnius University- Faculty of Medicine	Vilnius, Lithuania	Vida Lapinskaitė	Director at the Department of Research and Innovation
Latvian Institute of Organic Synthesis	Riga, Latvia	Osvalds Pugovičs	Director
University of Ljubljana	Ljubljana, Slovenia	Samo Rubarič	Professor at the Faculty of Medicine
Semmelweis University	Budapest, Hungary	NA	NA
Medical University of Sofia	Sofia, Bulgaria	Magdalena Kasnakova	Senior Expert in the International Integration & Project Funding Dept.
University of Medicine and Pharmacy "Carol Davila"	Bucharest, Romania	Iuliana Ceausu	Head of OG Department

8 ANNEX 3

Examples of successful partnerships formed thanks to participation in the widening instrument:

Alliance 4 Life Member	Number of Widening actions (i.e. Teaming, Twinning, ERA chairs) by A4L member		Widening actions (i.e. Teaming, Twinning, ERA chairs) in which the A4L member participated: (Name and acronym)	New proposals submitted thanks to participation in the Widening actions (i.e. with the same partnerships) (funding scheme, title (acronym): status- submitted, accepted, rejected)	Widening actions that initiated new proposals (title, acronym, funding scheme)	Number of Widening actions submitted/funded by the larger PIC organization (i.e. Teaming, Twinning, ERA chairs)
	Submitted	Funded				
Masaryk University (MU) (Czech Republic)	Twinning: 5 ERA: 3 Teaming: 5	Twinning: 4 ERA: 1 Teaming: 2	Twinning: Integration of RNA Biology for Next-Generation Scientists (Integ-RNA) BrIdging Structural BiOlogy with Biological SyNthesis and Self Assembly to Reveal Key Processes in Living Systems (BISON) Medical Genomics and Epigenomics Network (MEDGENET)	HORIZON-WIDERA- 2022-ACCESS-01-two- stage, CORMIC-Bridging academia and industry in Correlative Microscopy (CORMIC): Rejected, will resubmit DIGITAL-2021-CLOUD- AI-01, Genomic Data Infrastructure (GDI): Accepted HORIZON-MSCA-2021- DN-01, Future of ALCL:	Back for the Future, Future, BACK4FUTURE, TEAMING Medical Genomics and Epigenomics Network, MEDGENET, TWINNING Boosting interdisciplinary research to advance next generation	Twinning: 24 Submitted/6 Funded ERA: 9 Submitted/7 Funded Teaming: 14 Submitted/5 Funded

			Twinning for Improving Capacity of Research in Multifunctional Nanosystems for Optronic Biosensing (TWINFUSYON) ERA: In vitro and In-cell characterization of Quadruplex-duplex hybrids: conformation, folding, and recognition by drug-like ligand molecule (QDHassay) Teaming: Back for the Future (Back4Future) Centre of Plant Synthetic Biology for Bioengineering and Sustainable Agriculture (PASSAGE)	Novel Therapies, Origins, Bio-Markers and Mechanism of Resistance (FANTOM): Accepted	biomedicine, BINDING, TWINNING (Widening application itself not funded)	
St. Anne's University Hospital (Czech Republic)	Twinning: 2 ERA: 2 Teaming:	Twinning: 0 ERA: 0 Teaming:	Twinning: NA ERA: NA Teaming: European Center for Excellence (CETOCOEN)	NA	NA	Twinning: 2 Submitted/0 Funded ERA: 2 Submitted/0 Funded Teaming: 1 Submitted/1 Funded
Biomedical Research	Twinning: 2	Twinning:	10 Twinning: Strategies to	H2020-WIDESPREAD- 2018-03, Strategies to	Strategies toward scientific	Twinning : 2 Submitted/1 Funded

Centre of the Slovak	ERA : 0	ERA : 0	strengthen scientific excellence	strengthen scientific excellence and innoVation	excellence in innovative	ERA:
Academy of	Teaming:	9 Teaming:	and innoVation	capacity for early	nanotechnololgy-	0 Submitted
Sciences (Slovakia)	0	<u> </u>	capacIty for early	diagnoSis of	based early	
(223:222)		0	diagnoSIs of	gastrOintestional caNcers,	diagnosis and	Teaming :
		Ů	gastrOintestinal	VISION; Accepted	treatment of cancer	0 Submitted
			caNcers (VISION)		(INTEraCT)	
				Horizon-MSCA-2021-	TWINNING	
				COFUND-01, FCAEC	(Widening	
			ERA: NA	Fellowship Programme for	application itself	
				talented researchers in	not funded)	
			Teaming: NA	cancer, AECC Talent;	G	
				Accepted	Strategies to	
				H2020-SC1-2020-Single-	strengthen scientific	
				Stage-RTD, Animal Free	excellence and	
				Framework for Chemical	innoVation	
				Testing and Safety,	capacity for early	
				AFFECTS; Rejected	diagnoSis of	
				111 1 2 2 1 2 , 1 1 3 5 5 5 6 6	gastrOintestional	
				ERANET-TRANSCAN-3	caNcers (VISION)	
				(JTC 2021), Bringing	TWINNING	
				immunotherapy to		
				pancreatic neuroendocrine		
				tumours: novel strategies		
				to target the tumour		
				microenvironment		
				(ImmuNoNET); Rejected		
				ED ANET TO ANGCANA		
				ERANET-TRANSCAN-3		
				(JTC 2022), Combining		
				Pancreatic Caner		

				Immunosupression (Compaction); Submitted		
Medical University of Lodz (Poland)	Twinning: 3 ERA: 0 Teaming:	Twinning: 0 ERA: 0 Teaming: 1	Twinning: NA ERA: NA Teaming: International Centre for Research on Innovative Bio-based Materials (ICRI-BioM)	NA	NA	Twinning: ERA: Teaming:
University of Tartu (Estonia)	Twinning: 22 ERA: 15 Teaming: 23	Twinning: 6 ERA: 6 Teaming: 4	Twinning: 1) Living Labs for Wetland Forest Research (LiWeFor) 2) Building Excellence in Spectral Characterization of Exoplanet Hosts and Other Stars (EXOHOST) 3) Nurturing Heritage Science with Novel Bioarcheological Methods in the Eastern Baltics (PaleoMIX) 4) Increasing the scientific excellence and technological innovation capacity in Functional Materials for Medical Devices and Robotics of the University of Tartu (TWINNIMS) 5) Molecular Infection	1) Horizon-CL4-2022- DIGITAL-EMERGIN-02, Rethinking Robotics in Textiles: Fibre-Encoded Physical Intelligence for Soft Occupational Exoskeletons (fibREthink): Submitted 2) Horizon-CL5-2022-D2- 01, The Battery Interface Genome- Materials Acceleration Platform II (BIG-MAP II): Accepted 3) ERA-Chair for Microsensing for Bionetworks (BioMIC): Rejected	1) Increasing the scientific excellence and technological innovation capacity in Functional Materials for Medical Devices and Robotics of the University of Tartu (TWINNIMS)	Twinning: 40 Submitted/9 Funded ERA: 27 Submitted/7 Funded Teaming: 28 Submitted/5 Funded

Biology Estonia- Research Capacity Building (MIBEst) 6) Addressing Attractivness of Science Career Awareness (SciCar) ERA: 1) The Center for Genomics, Evolution and Medicine (cGEM) 2) ERA Chair for Translational Genomics and Personalized Medicine (TransGeno) 3) ERA Chair Position in Synthetic Biology at		
University of Tartu Institute of Technology (SynBioTEC) 4) Gas Fermentation Technologies ERA Chair (GasFermTEC) 5) ERA Chair Position in Materials Research in Extreme Environments (MATTER) 6) ERA Chair for Computational Imaging and Processing in High Resolution (CIPHR)		
Teaming : 1) Centre for		

			Personalized Medicine (TeamPerMed) 2) Centre for Digitalisation of Biology Towards the Next- Generation of Biosustainable Products (DIGIBIO) 3) Centre of Excellence on Connected Digital Economy (EE- IT) 4) Industrial Cell Factories and Sustainable Bioprocessing for Future Bioeconomy (CelESTail)			
School of Medicine- University of Zagreb (Croatia)	Twinning: 4 ERA: NA Teaming: 1	Twinning: 0 ERA: NA Teaming: 0	Twinning: NA ERA: NA Teaming: NA	NA	NA	Twinning: 14 Funded ERA: 2 Funded Teaming: 2 Funded NB: Larger institution did not share information about projects which were not funded.
Vilnius University- Faculty of Medicine (Lithuania)	Twinning: 7 ERA: 0 Teaming: 5	Twinning: 0 ERA: 0 Teaming: 2	Twinning: NA ERA: NA Teaming: 1) Center of Excellence in Science and Technology for Healthy Ageing (Health- Tech) 2) Center of Excellence in Science and Technology for	NA		Twinning: 17 Submitted/2 Funded ERA: 0 Submitted Teaming: 6 Submitted/2 Funded

Latvian Institute of Organic Synthesis (Latvia)	Twinning: 7 ERA: 3 Teaming: 5	Twinning: 2 ERA: 1 Teaming: 2	Healthy Aging (Health-Tech) Twinning: 1) Springboard for excellence in advanced development of antibacterials (SPRINGBOARD) 2) Networking for excellence in functional pharmacology to study the role of fatty acid metabolism in neurological disorders (Fat4Brain) ERA: Neutral Products Research at Latvian Institute of Organic Synthesis as a driver for Excellence in Innovation (Natalion) Teaming: 1) Baltic Biomaterials Centre of Excellence Phase 1 (BBCE) 2) Baltic Biomaterials Center of Excellence (BBCE)	1) Horizon-EIC-2022- Pathfinderopen-01. Target delivery of nutraceuticals to prevent the onset of Parkinson's disease in healthy individuals (TargetedFood): Rejected 2) Horizon-CL6-2021- Circbio-01. Derived Senolytics as a New Algae Valoration (ALGASEN): Rejected 3) Horizon-Hlth-2021- Stayhlth-01. Harnessing the power of the developing gut-microbiome-brain axis to identify new therapeutics: a novel multicellular and multimodal integrative model for Autism spectrum disorders (HolisticA): Rejected 4) HORIZON-MSCA-2022-DN-01. Springboard network for new	1) Networking for excellence in functional pharmacology to study the role of fatty acid metabolism in neurological disorders (FAT4BRAIN) TWINNING 2) Baltic Biomaterials Center of Excellence (BBCE) TEAMING 3) Springboard for excellence in advanced development of antibacterials (SPRINGBOARD) TWINNING	Twinning: 7 submitted/2 Funded ERA: 3 submitted/1 funded Teaming: 5 submitted/2 funded
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				antibacterials to treat tuberculosis (Springboard4TB): Submitted		
University of Ljubljana (Slovenia)	Twinning: 4 ERA: 6 Teaming: 5	Twinning: 2 ERA: 2 11 Teaming:	12 Twinning: Quantifying ageing related cognitive decline and mild cognitive impairment (COGDEC) Pharmacogenomics Hub in a strengthened IMGGE (PharmGenHub) ERA: Astrocyte dopamine D1 receptor signaling in depression		NA	Twinning: 49 Submitted/3 Funded ERA: 18 Submitted/6 Funded Teaming: 38 Submitted/2
			(D1-Glia) Chair of Neuroinformatics (CONI) Teaming: Advanced Regional Translation of Excellence into Medical Innovations for Delayed			Funded

Semmelweis University	Twinning: NA ERA: NA Teaming:	Twinning: 0 ERA: 0 Teaming: 1	Aging (ARTEMIDA) Twinning: NA ERA: NA Teaming: Establishing the Hungarian Center of Excellence for Molecular Medicine in Partnership	NA	NA	Twinning: X Submitted/2 Accepted ERA: X Submitted/3 Accepted Teaming: X Submitted/1 Accepted
Medical University of Sofia (Bulgaria)	Twinning: 1 ERA: NA Teaming: NA	Twinning: 1 ERA: 0 Teaming:	with EMBL (HCEMM) Twinning: Boosting Ingenium for Excellence (BI4E) ERA: NA Teaming: NA	NA	NA	Twinning: NA ERA: NA Teaming: NA
OUniversity of Medicine and Pharmacy "Carol Davila" (Romania)	Twinning: NA ERA: NA Teaming: NA	Twinning: NA ERA: NA Teaming: NA	Twinning: NA ERA: NA Teaming: NA	NA	NA	Twinning: 1/1 ERA: NA Teaming: NA