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Support to the implementation of the Strategic Research Agenda (SRA) of the Joint Programming Initiative on Cultural Heritage and Global Change (JPICH)

Instrument: Coordination and Support Action

Deliverable D3.3

Second Interim Evaluation of JPICH alignment process

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PP	Restricted to other programme participants (including the Commission Services)
RE	Restricted to a group specified by the consortium (including the Commission Services)
CO	Confidential, only for members of the consortium (including the Commission Services)

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1. Introduction

The **Deliverable D3.3 “Second Interim Evaluation of JPICH alignment process”** is the third document to be produced under the Task 3.1 “Monitoring the alignment process of joint research programming”, led by FCT (Portugal). This is part of the Work Package 3 “Monitoring and Evaluation (KPI)”, led by MCC (France) in the frame of JHEP2, the second Coordination and Support Action (CSA) for the Joint Programming Initiative “Cultural Heritage and Global Change: a new challenge for Europe” (JPICH).

The **main objectives of the Work Package (WP3)** are to monitor and assess JPICH alignment and implementation process, and to demonstrate and evaluate JPICH project’s impact by identifying and applying qualitative and quantitative Key Performance Indicators (KPIs). To accomplish these objectives, an already existing set of indicators identified by the first JPICH CSA (JHEP) has been upgraded and adapted to the JHEP2 goals and foreseen activities (see Deliverable 3.1, *Key Performance Indicators to monitor alignment at national research programmes level and at JPICH research activities level*). Additional KPIs have been identified to monitor the alignment of national research programmes and research activities, and added to this initial set of indicators. This updated set of indicators is actually being applied to JPICH research activities performed within the alignment process (e.g. networking, calls for proposals, mobility, etc.).

Within WP3, **Task 3.1 involves four main objectives:**

- 1) **Upgrade and adapt the JHEP monitoring and evaluation methodology** by selecting relevant KPIs for monitoring the alignment process;
- 2) Continue to **monitor the outcomes and results of activities launched through the first CSA JHEP**, as the alignment of national research programmes, and the outcomes of activities implemented through JHEP2 - WP2 and the different Task Forces applied in the frame of JHEP2;
- 3) Continue the **implementation of monitoring and evaluation tools identified in JHEP (D5.2) and provide solutions to ensure improved efficiency of monitoring activities and more effective implementation of indicators;**
- 4) **Produce interim evaluations** summarizing and analysing all outputs of the monitoring exercise in terms of joint programming - to be held in the context of D3.2 (June 2017) and D3.3 (December 2018).

The two first objectives were already achieved under the preparation of the D3.1 (submitted in June 2016). The third and the fourth objectives were to adapt JHEP monitoring and evaluation tools according to the newly defined KPIs. The present report, together with the D3.2 (*First Interim Evaluation of JPICH alignment process*, submitted in July 2017) aims to achieve the third and the fourth objectives.

Under the Task 3.2 “Assessment of the alignment process”, led by BELSPO (Belgium) was produced the Deliverable D3.4 “First report on the implementation of the alignment of common research programmes at single Member States and Associated Country levels”, that aims to critically evaluate the efficiency of the KPIs selected to monitor and evaluate the alignment process and evaluate the level of alignment on research activities at transnational level through the assessment of the results reported in D3.2 “First Interim Evaluation of JPICH alignment process”.

2. Methodology

Several tools had been proposed by the first JPICH CSA (JHEP) methodology for monitoring and assessment, namely in the D5.2 “Report on the implementation of monitoring and evaluation: Recommendation for future monitoring and evaluation activities”. In the second JPICH CSA (JHEP2), these tools were redrafted (questions were suppressed or added to the different documents: survey and questionnaire) in order to better fit the D3.1 set of indicators (Annex I). Template for Regular Reporting on JPICH joint activities made by FCT and MCC in the context of JHEP2 Work Package 3: Monitoring and Evaluation (KPI) was kept as such, with only minor modifications.

In sum, these three tools (a monitoring survey; a questionnaire; and a template), were created using the Online Survey Tool - Survs (<https://survs.com/>) for D3.2, and duly updated for D3.3 (present report).

2.1. Monitoring survey

In July of 2018, in order to obtain the most current and broad idea of the existing data, a survey for regular monitoring of all activities performed within the JPICH, between January 2017 and December 2018, was addressed to Executive Board members with 40 questions (Table 1 and Annex II), encompassing 17 indicators. The first deadline given to fulfil the required survey was September 28th, 2018. After that, two more reminders were made and most of the answers were obtained in December 2018.

2.2. Questionnaire

Also in July 2018, a questionnaire (15 questions, encompassing 3 indicators) referencing specific questions concerning governance, alignment and research policy, was addressed to Governing Board and Executive Board members (Table 1 and Annex III). The first deadline given to fulfil the required survey was September 28th, 2018. After that, two more reminders were sent and most of the answers were obtained in December 2018.

2.3. Template for Regular Reporting (TRR)

The Template for Regular Reporting (29 questions, encompassing 7 indicators) was also disseminated to the JPICH partners that have had specific activities performed within the framework of the JPICH, between January 2017 and December 2018 (Table 1 and Annex IV).

Table 1 - Information about the Online Instruments used to do the Monitoring and Evaluation of JPICH: Monitoring Survey, Questionnaire and Template for Regular Reporting.

Online instruments			
Instruments	Recipients	Description	Link
Monitoring Survey	EB Members	<p>40 questions organised in 4 main sections:</p> <p>(A) Enabling Framework Focus on activities that were performed or attended by your organisation within the context of the JPICH, between Jan 2017 and Dec 2018.</p> <p>(B) Research Implementation To monitor the implementation of necessary parameters for the construction of JPICH research capacity and excellence.</p> <p>(C) Research Added Value for Joint Alignment Assessment</p> <p>(D) Transformational Effect To complete indicators, examining how the JPICH generates a transformational power on the initial challenges having risen to intervention.</p>	https://survs.com/survey/rng7pu856q
Questionnaire	GB & EB Members	15 questions organised in 3 main sections (General Information, SRA and Action Programme, Coordinated and Streamlined Research).	https://survs.com/survey/d42zm1ncg9
Template for Regular Reporting (TRR)	Any partner, each time they are organising an event or activity within the context of JPICH.	29 questions organized in 7 main sections (General Information, Participation, Stakeholders, Research Priorities and Topics, Publications, Specific Outputs, Dissemination).	https://survs.com/survey/sdcewpzsw9

The Template for Regular Reporting (TRR) concerns specific activities, namely workshops, training activities, conferences, etc., performed or attended in the frame of the JPICH. Some of these activities are already foreseen by the action programme and follow a precise planning. This is mainly the case for a list of 13 activities (some of the topics of the activities are somehow related to each other and were combined) that were identified under Work Package 2, Task 2.3 (Follow up activities Action Programme and Cultural Heritage Governance strategies), and that are coordinated by JPICH Member States, namely:

- Social, cultural, political and economic value of cultural heritage (Portugal);
- The changing meaning and value of cultural heritage across Europe for ‘old’ and ‘new’ citizens as well as ‘outside’ visitors (Belgium);
- Research on the role of cultural heritage in the reconstruction of (national) identity in post-conflict situations (Poland);
- The Heritage Portal as a Knowledge hub in a cultural heritage circular economy (Romania);
- Changing (urban) landscapes & Changing landscapes: landscape with its cultural heritage and natural environment (Netherlands);
- Cultural heritage concepts and theories: evaluation of the 20th century historic urban landscape (Lithuania);
- Enjoyment of cultural heritage by means of new and old media (Cyprus);
- Re-use and continued use of buildings, historic urban centres and landscapes (United Kingdom);
- Community as actor in heritage management & Sustainable development of local communities (France).
- Migration and identity (Sweden);
- Methodology development for assessing the cultural and socio-economic value(s) of digital cultural heritage (Spain);
- Sharing knowledge of conservation measures for historical buildings in areas that are sensitive for earthquakes and landslides (Italy);
- The past has power: conservation of historic wooden structures (Norway).

These 13 activities benefit from specific monitoring procedures that were defined in coordination between WP2 and WP3. Three regular reports on joint activities are scheduled (D2.7, D2.8 and D2.9), under the responsibility of WP2. These reports are already based on a questionnaire including a large range of questions from the TRR. The first of these reports has been published in June 2017: “D2.7 – Report on joint activities” and the second in June 2018: “D2.8 – Midterm Report on Joint Activities”. For the D2.8 (June 2018), RCE (WP2 leader) have requested the coordinators of the activities that were implemented in 2017, to fill a TRR on JPICH joint activities. For the activities in 2018 and 2019, the coordinators of the activities were asked to update the information which was given in the first report. The coordinators of the activities that were implemented in the second half of 2018 were also asked, by RCE (WP2 leader), to fill in the TRR.

Of these 13 activities, 3 were implemented in 2017, those organized by Cyprus, Portugal and Lithuania. In 2018, 5 additional activities were implemented, organized by Norway, Spain, Poland, The Netherlands and United Kingdom. The remaining activities will be implemented in 2019. Regarding the activity “Sharing knowledge of conservation measures for historical buildings in areas that are sensitive for earthquakes and landslides” (Italy), no precise date has been specified yet.

Besides this, specific activities were identified, attended or organized in the framework of the JPICH that were not foreseen by the action programme. These activities don't benefit from specific reporting procedures under WP2, thus, it is the only responsibility of WP3 to monitor their results. This is the case for the following list of activities:

- JPICH Funded Research Projects Parade (20th -21st February 2017, Brussels)
- Workshop on Alignment (25th April 2018, Madrid)
- JPICH International Workshop on Funded Research Projects (28th - 29th May 2018, Turin)
- International Summer School (25th - 29th June 2018, Kaunas)
- International Conference on Participatory Governance in Built Heritage (3th - 4th October 2018, Amersfoort).

To complement these instruments, specific questions were addressed to the JPICH Coordination team, according with the necessary indicators to be measured. The questions were the following:

- Which were the precise dates when a country quits or joins the JPICH? This information will allow measuring the evolution of the number of countries participating to the JPICH.
- The Statistics of the "1st Pilot Call", "Heritage Plus Joint Call", "Joint Call on Digital Heritage" and "Joint Call on Heritage in Changing Environments".
- The number of new and foreseen joint transnational calls for proposals?
- From the beginning of the JPICH, the increase in the amount of Cultural Heritage information available on JPICH website?

In addition to all of this the Deliverable 3.4, through the critical evaluation of the efficiency of the KPIs used for the first monitoring exercise (January 2015 - December 2016), was also taken into account to write the present report by adapting/merging/changing some indicators accordingly.

3. Results and analysis of monitoring activities

This part of the report is a full breakdown of the different monitoring instruments used to achieve the required objectives. The results obtained with the online instruments above mentioned are presented below, with specifications for each indicator, considering the period between January of 2017 and December of 2018.

The JPICH partnership has 18 countries participating as members: Italy, Belarus, Belgium, Cyprus, Czech Republic, France, Ireland, Latvia, Lithuania, Moldova, The Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden and United Kingdom. All of them are represented (sometimes by different delegates) in the Governing and Executive Boards.

From the Executive Board members to whom the monitoring survey was addressed, 10 answers were obtained from 10 different countries: Belarus, France, Portugal, Sweden, The Netherlands, United Kingdom, Italy, Czech Republic, Norway and Spain.

Concerning to **who the questionnaire was addressed from the Governing and Executive Board members, 14 answers from 13 countries were obtained:** Belarus, Cyprus, Czech Republic, France, Latvia, Lithuania, Norway, Portugal, Sweden, The Netherlands, United Kingdom, Italy and Spain. In the case of Belarus, two answers were obtained.

Results achieved through the TRR: From the 13 specific activities foreseen in the action programme and following WP2 plans, 8 occurred during the period of this report, those organized by Portugal, Poland, The Netherlands, Lithuania, Cyprus, United Kingdom, Spain and Norway.

Concerning the other specific activities, not foreseen in the action programme (JPICH Parade 2017, Workshop on Alignment, JPICH Workshop on Funded Projects, International Summer School and Conference on Participatory Governance), no data was made available sufficiently on time to the WP3 monitoring team, in order to consider these activities in the present report and to complete the corresponding indicators: 7, 10, 13, 14, 28 and 29. For the other activities (Workshop on Alignment and Conference on Participatory Governance), answers were given through reports and minutes. The reports and minutes do not always fit in with the TRR questions being very difficult to use this information to answer some indicators, namely: 13, 14, 28 and 29. In this sense, only the results achieved from the 13 specific activities foreseen in the action programme were taken into account to measure the indicators 7, 13, 14, 28 and 29.

Besides this, following the assessment of the complete D3.3 set of 29 indicators, main topics and parameters regrouping these indicators will now be analysed through the results obtained.

A) Enabling framework

The category of indicators grouped under the denomination “Enabling framework” aims to monitor and evaluate five important topics (Governing structures, Extending cooperation and partnership, JPICH attractiveness, SRA and Action Programme and Dissemination strategy) that are considered as enabling elements and essential prerequisites to the implementation of main JPICH coordinating structures and Work Packages.

Governing structures

Indicator 1	Sustainability of the JPICH financial and administrative structures.
Indicator definition	Capacity to secure and manage financial resources from JPICH partners at the long term.
Objective	Long term confidence and financial commitment from JPICH partners.

Results

40% of the respondents acknowledge the JPICH financial and administrative structures as good, very good or excellent, and about 60% as poor or fair (**Figure 1**). It should be noticed that since the last monitoring exercise (D3.2 – submitted in July 2017), they changed significantly (less optimistic) the opinion with the respect to the sustainability.

Excellent	10%		1
Very good	20%		2
Good	10%		1
Fair	50%		5
Poor	10%		1
Total respondents			10
Respondents who skipped this question			0

Figure 1 - Question 4 of the Monitoring Survey, sent to EB Members: “How do you evaluate the JPICH financial and administrative structures’ sustainability?” (Excellent: Belarus; Very Good: UK and Spain; Good: Czech Republic; Fair: The Netherlands, Sweden, Italy and Norway; Poor: France).

The solutions in order to increase partners' confidence in the sustainability of the financial and administrative structures may consist in guaranteeing the long term continuity of the direct support of the European Commission via Coordination and Support Actions (CSAs), or other instruments (for the activities conducted by the initiatives), consider the implementation of member fees, the change of the Coordinator, etc. More commitment and support of the Member States to the JPICH is also needed.

Extending cooperation and partnership

Indicator 2	List and type of joint actions with organisations active in the field of CH.
Indicator definition	Formal collaborations through joint activities and actions with International organisations (including UN, UNESCO, NGOs, ICOMOS, ICOM), NGOs, regional organisations, other...
Objective	To extend network and cooperation to external organisations.

Results

About 30% of the answers (3 EB members) reported collaborations in 2017 and 2018, with organisations not represented in the JPI governing structure, namely:

- UNESCO (in the field of natural resources).
- Preparation of the international conference Citizens Involved: Participatory Governance of Built Cultural Heritage. Informal contacts with Europa Nostra and the European Association of Archeologists (EAA).
- A memorandum of Understanding between ICCROM and the JPICH.

Indicator 3	List and type of joint actions with other P2P networks.
Indicator definition	P2P networks such as article 169/185, ERA-NETs, ERA-NETs Cofund... other JPIs (Urban Europe, CliK'EU, FACCE etc.). Joint actions including definition of common schemes for evaluation and monitoring, coordination or clustering, definition of common SRA, joint training activities, personnel exchange, mutual opening of facilities and infrastructures, of programmes, joint calls design and implementation, other...
Objective	To establish quality contacts with other P2P networks.

Results

About 20% of the EB members (2 in 10 respondents) have organized activities with other JPIs, in 2017 and 2018. At French Level (the only respondent that listed these activities), meetings have been organized by the Ministry of Research in order to coordinate actions between the French representatives in the 10 JPIs. A reflection group on Environment H2020 and Horizon Europe challenges was also set-up by the Ministry of Research, as well as several GPC-mirror group meetings. The Ministry of Culture also participated to all these meetings.

Four EB members (40% of the respondents) from Belarus, UK, France and Norway participated in 2017 and 2018, in Joint Activities of other JPIs, namely Joint Transnational Call (The Sustainable Urbanisation Global Initiative (SUGI)/Food-Water-Energy Nexus Call, which involves over 20 funding partners from JPI Urban Europe and Belmont Forum countries) and Joint Programming Conferences. All the 10 JPIs were referred (JPND, FACCE, HDHL, Cultural Heritage, Urban Europe, CLIMATE, MYBL, AMR, WATER and OCEANS), but the most mentioned were the Urban Europe and OCEANS.

Indicator 4	List of joint actions involving non-European countries.
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Indicator definition	Joint actions involving non-European countries, particularly advanced economies (Japan, USA...), neighbourhood Mediterranean countries, BRICs...
Objective	To cooperate with non-European countries.

Results

About 60% of the countries (Belarus, UK, Czech Republic, Italy, Norway and Spain) have collaborations with non-ERA countries (not members of the EU or not associated to H2020), in 2017 and 2018.

About 30% of the countries (Belarus, UK and Norway) reported collaborations with advanced economies (ERA countries excluded: Australia, Canada, Hong Kong, Japan, New Zealand, Singapore, South Korea, Taiwan and United States) or BRIC countries (Brazil, Russia, India and China), in 2017 and 2018.

The collaborations with advanced economies, non-ERA & BRIC countries indicated are presented in Table 1.

Table 1- The collaborations with advanced economies, non-ERA & BRIC countries. Mention to JPICH respondent, country reached and type of collaboration.

JPICH respondent	Country reached	Type of collaboration
National Academy of Sciences of Belarus (Belarus)	Russia, India and China	Joint events
AHRC (United Kingdom)	Brazil, China, India and a number of countries from the OECD Development Assistant Committee List such as Turkey.	Participation in the Newton Fund and in a number of calls under the Newton Fund;
	India	Partnerships with the Indian Council for Historical Research (two workshops and a networking call) addressing the theme of 'Cultural Heritage and Rapid Urbanization in India'.
	Egypt	Partnership with the Science & Technology Development Fund (STDF) of Egypt (two calls).
	Ghana, Sweden, Ireland and Mozambique	Participation in the Global Challenges Research Fund (GCRF).
	Brazil	A co-founding agreement with FAPESP, which enables joint research projects in which costs for researchers in both countries can be included in a single grant application.
	Norway and Sweden	Agreements with non UK research organisations (the Research Council of Norway and the Swiss National Science Foundation), which allows UK researchers to be part of national research projects.
	Chile and Argentina	A Leadership Fellow for Heritage. As part of this project has been developing connections with research communities and heritage partners in Latin America.

	Brazil and Argentina	T-AP/Digging into Data: The Trans-Atlantic Platform for the Social Sciences and Humanities Call.
	United States	Equip Call.
MIBACT and MIUR (Italy)	Egypt, Kosovo and Azerbaijan	Formal contact for possible future collaboration with the JPICH.
	Belarus	Formal contact within the JPICH, for participation to the joint JPICH call “Heritage in changing environments” and to the submission of the ERA-NET Co-fund proposal on Conservation and Protection.
RCN (Norway)	Brazil, Canada, Egypt, El Salvador, Hong Kong, India, Italy, Lithuania, Nepal, Norway, Philippines, Romania, Slovakia, Spain, Turkey, Ukraine, USA and Zimbabwe	As part of the JPICH Joint Activities: ICWCT – International Course on Wood Conservation Technology (Activity 49 in JPICH Action Programme “The past has power: Conservation of historic wooden structures”.)
State Research Agency (Spain)	Norway	Collaboration between Spain and Norway inside the JPICH.

JPICH attractiveness

Indicator 5	Evolution of the number of countries participating to the JPICH.
Indicator definition	Cumulated number of countries that joined the project and that were not present at the beginning of the project, countries that opted out (no longer partners or observers), and information about the number of countries that participated to the JPICH per year.
Objective	JPICH is attracting new countries.

Results

JPICH attractiveness has been assessed through two different criteria: new countries attracted by the JPICH and countries that withdraw from the project. Despite the five withdrawals (Turkey in December 2011, Slovenia in March 2013, Denmark in June 2015, Israel in November 2015 and Slovakia in December 2018), the number of participating countries in JPICH increased since the project began (in January 2010), going from 16 participating countries (Italy, UK, France, Belgium, The Netherlands, Cyprus, Czech Republic, Spain, Turkey, Slovenia, Austria, Slovakia, Poland, Romania, Ireland and Lithuania) to 18 in December 2018 (Italy, Belarus, Belgium, Cyprus, Czech Republic, France, Ireland, Latvia, Lithuania, Moldova, The Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden and United Kingdom).

In addition to the variation in the composition of the consortium, more changes were made. Austria and Slovakia changed status, from member to observer, in July 2010 and December 2018, respectively. Sweden and Portugal changed from observer to members in May 2011 and November 2014, respectively. In addition, Moldova, Belarus and Latvia joined the JPICH in February 2013, November 2016 and August 2017, respectively.

Although the strategy for the integration of new countries is resulting in a positive balance (from 16 partners in 2010 to 18 partners in 2018), efforts should continue to be made to attract new partners, namely third countries. Furthermore, it would constitute an important achievement if some of the countries with the status of «observer» (Austria, Bulgaria, Estonia, Germany, Greece, Israel and Slovakia) may become full partners. Some countries also approached the JPICH for a membership, namely Kosovo and Egypt.

SRA and Action Programme

Indicator 6	Adequacy of research needs in SRA and Action Programme.
Indicator definition	The SRA is reflected by the Action Programme that identifies the most useful funding instruments and pooling capacities for implementation of selected research topics in SRA.
Objective	Action Programme funding quantity and type matches SRA needs.

Results

36% of the respondents consider that the gaps identified in the SRA are completely covered by activities of the JPICH Action Programme, and about half (50%) envisages that this coverage is partially achieved. About 72% of the respondents acknowledge that the funding instruments for the implementation of the SRA are identified (completely or partly). With respect to the effectiveness of the pooling capacities for the implementation of the SRA, 79% mentioned that they are identified in the Action Programme. Concerning the global satisfaction with the Action Programme, about half of the respondents (57%) are satisfied and 43% only partially satisfied (**Figure 2**).














	Yes, completely	Yes, partly	Only partially	Not at all	
The gaps identified in SRA are sufficiently covered by JPICH activities as described in the Action Programme?	5 - 36% 	7 - 50% 	2 - 14% 	0 - 0%	14
Funding instruments for implementation of the SRA are well identified in the Action Programme?	5 - 36% 	5 - 36% 	4 - 29% 	0 - 0%	14
Pooling capacities for implementation of the SRA are well identified in the Action programme?	4 - 29% 	7 - 50% 	2 - 14% 	1 - 7% 	14
You are globally satisfied with the Action Programme?	5 - 36% 	3 - 21% 	6 - 43% 	0 - 0%	14
Total respondents					14
Respondents who skipped this question					0

Figure 2 – Question n°7 of the Questionnaire, sent to GB & EB Members.

Regarding the comments about the SRA and the Action Programme, these are mainly referring to the necessity to revise and develop further the SRA, as well as to implement it more clearly. It was also mentioned that it was still difficult to evaluate the Action Programme since there was a difference between the programme itself, and its concrete implementation by partners.

Dissemination strategy

Indicator 7	List of new stakeholders and types of stakeholders reached by the dissemination strategy within EU and across the EU.
Indicator definition	One list for stakeholders reached by JPICH dissemination strategy in the EU, one list for stakeholders reached outside the EU, with description of categories of stakeholders reached. They include the four categories used in the JHEP Dissemination Plan: Policy makers and influencers; Cultural Heritage research community; Parallel projects and organisations; Industry, SMEs and civil society.
Objective	To identify and contact key stakeholders across and within the EU.

Results

The 8 specific activities that took place (the ones foreseen in the action programme) indicated the type of stakeholders that the joint activity was relevant for. The “Cultural Heritage research community” was mentioned with “very relevant” and “relevant” for 8 activities, “Policy makers and influencers” and “Parallel projects and organisations” were mentioned with “very relevant” and “relevant” by 7 out of 8 activities (87%) and “Industry, SMEs and Civil Society” as “relevant” by 5 out of 8 activities. An indication of the type of stakeholders reached by the activity was also given, with highest incidence in the “Cultural Heritage research community” followed by “Policy makers and influencers”.

B) Research implementation

The category of indicators grouped under the denomination “Research implementation” aim to assess the implementation of necessary parameters for the construction of JPICH research capacity and excellence, by evaluating 3 important topics (Joint transnational calls for proposals, Capacity building and Enabling activities, and Collaboration with private sector).

Joint transnational calls for proposals

Indicator 8	Evolution in the number of applications granted and average funding allocated per application through calls for proposal.
Indicator definition	For each call, total amount of allocated funding related to the number of applications finally granted and average funding allocated to each granted project, compared to preceding call.
Objective	To increase the amount of allocated funding through transnational calls for proposals.

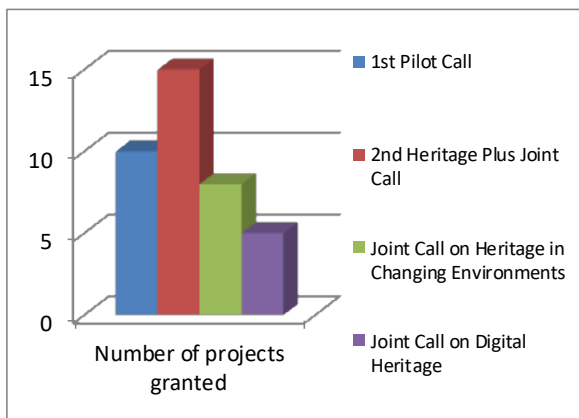
Results

The launch of calls for proposals is one of the main elements for the implementation of research through JPICH joint activities. The monitoring and evaluation framework planned to assess the launch of Calls for Proposals through the following aspects: the number of calls launched and planned for the future, the amount of allocated funding, the number of proposals submitted, the final number of granted projects and respective amount.

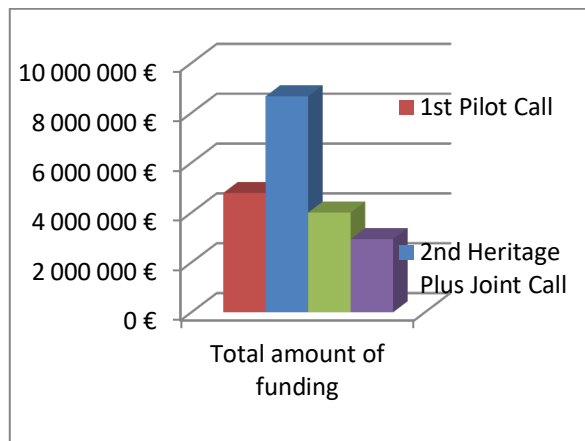
The **Table 2** (below) present the results of the four joint transnational calls for proposals launched on behalf of the JPICH: “1st Pilot Call”, “2nd Heritage Plus Joint Call”, “Joint Call on Digital Heritage” and “Joint Call on Heritage in Changing Environments”. The **Graphs 1 and 2** (also below) present the number of granted projects per call and the total amount of funding per call, respectively.

Table 2 - Results of the four joint transnational calls for proposals launched on behalf of the JPICH: “1st Pilot Call”, “2nd Heritage Plus Joint Call”, “Joint Call on Digital Heritage” and “Joint Call on Heritage in Changing Environments”.

1 st Pilot Call (2013)	2 nd Heritage Plus Joint Call (2014)	Joint Call on Digital Heritage (2017)	Joint Call on Heritage in Changing Environments (2017)
13 countries participating Total call budget: 3.3 M€	15 countries participating Total call budget: 9.7 M€ (6.6 M€ + 3.1 M€ from EC)	10 countries participating Total call budget: 4.5 M€	11 countries participating Total call budget: 4.6 M€
89 full proposals submitted (one stage)	352 pre-proposals submitted (two stages)	34 full proposals submitted (one stage)	42 full proposals submitted (one stage)
68 of full proposals submitted for evaluation (after the eligibility check)	54 full proposals submitted (from the 61 that pass to the 2 nd stage)	31 full proposals submitted for evaluation (3 not eligible)	39 full proposals submitted for evaluation (3 not eligible)
10 projects funded in a total of 2.770.299,58 €	15 projects funded in a total of 8.668.128,00 €	8 projects funded in a total of around 4.000.000,00 €	5 projects funded in a total of around 2.935.940,94 €



Graph 1 - The number of granted projects per call.



Graph 2 – The total amount of funding per call.

Despite the importance of the adaptation suggested through the critical evaluation of D3.4 to this Indicator (information about the committed budget per country, the number of applications participating to calls, the total budget of proposals per country, the success rate, etc.), no data was made available sufficiently on time to consider this information in the present report.

Indicator 9	Roadmap of joint transnational calls for proposals.
Indicator definition	Number of new joint transnational calls for proposals published by the JPICH, and calls foreseen or planned for future of JPICH.
Objective	To launch joint transnational calls for proposals.

Results

Since the last monitoring exercise (D3.2 - submitted in July 2017), the JPICH Joint Call on “Heritage in Changing Environments” was launched, with a deadline for submission of proposals on the 30th November 2017.

In the near future, 2 calls for proposals will be implemented, namely on:

“Conservation and Protection” - to be launched on April 2019;

“Identity and Perception” - to be launched in 2020.

Capacity building and Enabling activities

Indicator 10	Number and diversity of training instruments implemented.
Indicator definition	Inform the number of seminars, conferences, thematic workshops, e-learning platforms developed for Cultural Heritage researchers and professional training purposes.
Objective	Development of advanced training.

Results

Only 1 out of 10 organisations implemented new training instruments in 2017 and 2018, namely to deliver doctoral training and to promote research in all aspects of heritage.

The Centre for Doctoral Training in Heritage, known as The Heritage Consortium, was established in 2013 and is supported by £1.85 million of postgraduate funding from the Arts and Humanities Research Council and £1.11 million provided by its seven members. In the most recent annual report (January 2018), during year fourth of the Heritage Consortium, they organised an annual conference, held two training days, developed new strategic partnerships and were invited to take part in the European Commission's Voices of Culture brainstorming and contributed to the 2017 report 'Towards an Integrated Approach to Cultural Heritage for Europe'.

Indicator 11	Number of collaborations with digital and built infrastructures participating in Cultural Heritage.
Indicator definition	Number of new or pre-existing infrastructures participating in JPICH activities. Physical (Iperion CH...) and digital (DARIAH...) infrastructures. Open laboratories, networks (HERA...)
Objective	Development of a Cultural-Heritage-dedicated network of infrastructures.

Results

About 40% of the countries (4 in 10 EB members) mentioned to have been somehow involved in the development of the European Research Infrastructure for Heritage Sciences (E-RIHS), trying to reach a complementarity between the two initiatives.

As mentioned in the D3.4, the objective of this indicator is quite challenging (to stimulate the participation with infrastructures or to stimulate a network between infrastructures) and not the purpose of JPI. As a JPI cannot “develop” a network of infrastructures, it should stimulate or participate in the development of a Cultural Heritage dedicated network of infrastructures.”

Collaboration with private sector

Indicator 12	Number of research collaborations and partnerships with private sector.
Indicator definition	Participation of industry and SMEs through calls for proposals, access to research infrastructures, training programmes, informal collaborations, and commercial projects. Projects co-financed by private sector, access to private infrastructures.
Objective	Private sector participation in the research process.

Results

Only 20% of the respondents (2 EB members from 10) have conducted collaborations and/or joint activities with the private sector between 2017 and 2018, namely through the preparation of the international conference Citizens Involved: Participatory Governance of Built Cultural Heritage, and through a Joint Research Programme. Even though a greater participation of the private sector in the research process would be desirable, the results are in line with the success criteria/target for this indicator “at least one collaboration implemented with the private sector”.

C) Research added value

The category of indicators grouped under the denomination “Research added value” aims to monitor and evaluate eight important topics (Publications, Training, Aligned research, Calls outputs, and Alignment at strategic, funding, operational and scientific level). This part of the report assesses how the JPICH intervention produces effects and added value, affecting the primary beneficiaries of the intervention by producing meaningful results and developing knowledge transfers between the research community, Cultural Heritage professionals, various stakeholders and all close collaborators.

Publications

Indicator 13	Number of publications resulting from JPICH research activities.
Indicator definition	Number of publications resulting from JPICH research activities. Publications in specialized, academic and high-impact journals (those considered highly influential in the field of Cultural Heritage and in specialized professional fields), and publications on JPICH research activities (collective works, conference proceedings, monographs, etc.).
Objective	Available publications to enhance visibility of JPICH activities.

Results

The number of publications that resulted from specific activities foreseen in the action programme (8 out of 13 specific activities) was a book of abstracts; reports; workshop presentations; collective work; a leaflet and a joint statement by ICCROM and JPICH.

Training

Indicator 14	Number of degrees achieved and thesis presented by students collaborating in JPICH during the life time of the project.
Indicator definition	Students having achieved important degrees (master, doctoral) or presented their thesis during JPICH lifetime and having participated in JPICH research activities in one way or another, through research projects, workshops or training programmes.
Objective	To include students and professionals still in training in JPICH research activities.

Results

Young students or professionals still in training participated in most of the specific activities (5 out of 8 specific activities). No degrees were achieved nor thesis presented in the context of these activities. Within the framework of Heritage Plus, which is an activity of the JPICH, 39 thesis and PhDs were defended.

Aligned research

Is needed to align research programmes to increase their impact and effectiveness, reduce duplications and fragmentation in European research, avoid overlaps and exploit synergies in order to improve the efficiency of scarce financial resources.

Indicator 15	New mechanisms for alignment with regional, federal, national and European research agendas.
Indicator definition	Innovative mechanisms implemented for alignment, coordination and interactions between institutional strategic agendas in the Cultural Heritage area: common research agendas, forums, subsidiarity principle... as innovative funding concepts likely to influence national, regional, institutional funding policies.
Objectives	Increased coordination of JPI and European scientific strategic agendas.
	High coordination of JPI and National/Federal scientific strategic agendas.

Results

There is a widespread feeling among partners that JPICH contributed to an increase of the strategic cooperation in Cultural Heritage area between EU Member States (50% of the respondents agree, and 43% strongly agree) and to the establishment of more interactions between institutional strategic agendas in Cultural Heritage area (57% of the respondents agree, and 29% strongly agree).

Respondents acknowledge that this very positive assessment, is mainly the consequence of the increase of “traditional” alignment activities and instruments (mainly calls for proposals), and not due to “new mechanisms for alignment”. Indeed, 69% of the respondents (9 GB/EB members from 13 respondents) feel that JPICH already developed mechanisms to reduce fragmentation and unnecessary duplication, and the most reported instrument for that are Joint Calls for proposals (10 respondents specifically mention this instrument in first position). Several respondents underlined the fact that calls are efficient at enabling researchers to work with other countries/partners, therefore increasing collaborations, reducing duplication of effort and combining research priorities (United Kingdom). The importance of updating and further develops a plan for Calls and other coordinating actions were also underlined.

Additional instruments and mechanisms for alignment are also mentioned. The second most quoted mechanism is the Strategic Research Agenda - SRA (2 respondents). The SRA could influence on national strategic agendas, and his update is very important. Only one respondent (Portugal) mentioned “Alignment actions”, without specifying which of the JPICH actions are encompassed, and Italy mentioned “Networking” and “Communication” trough Heritage Portal.

JPICH could be the good instrument to align more at national level and to reach common goals. The answers to the questionnaire show that 69% of the respondents feel that JPICH has the instrument to measure the gains in efficiency in national funding (38% completely and 31% partly), by reducing fragmentation, and avoiding duplications in the relevant research fields.

Indicator 16	Number of institutions sharing JPICH Strategic Research Agenda.
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Indicator definition	Number of institutions sharing the JPICH SRA or for which the JICH is explicitly mentioned as a cornerstone.
Objective	To align institutional research agendas to JPICH SRA.

Results

Common research agendas are one of the ultimate objectives of the joint programming. In this regard, 92% of the respondents (12 out of 13 respondents) indicated to have national strategies, research agendas, programmes or priorities that take into account the JPICH SRA and one respondent (Cyprus) indicated that they are discussing opportunities to further develop these tools.

According with the answers, the sharing of the JPICH SRA is performed differently and at various scales by JPICH partners. Three important tendencies can be distinguished: 1 - partners that already have national/regional strategies for Cultural Heritage mirroring the JPICH SRA; 2 - partners that are starting, in the process of, or just finishing the process of defining national/regional strategies for Cultural Heritage mirroring the JPICH SRA; 3 - partners that included some JPICH SRA priorities as cornerstones in their own national strategy, in order to reflect their participation to the JPICH and allow funding of Cultural Heritage related activities.

C1) Annex to C category for Joint Calls Assessment

Several parameters are supposed to be evaluated here, all depending of Joint Calls for Proposals and its corresponding results.

The information provided by the Heritage Plus 16 funded projects was gathered in individual reports and summarised in three annual progress reports, namely:

- D4.1 - “1st Annual progress Report of funded projects and explanation on the use of the EC funding”;
- D4.2 - “2nd Annual progress Report of funded projects and explanation on the use of the EC funding”;
- D4.3 - “3rd Annual progress Report of funded projects and explanation on the use of the EC funding”.

The Deliverable 4.4 “Final Report on the Joint Call impact assessment” evaluated the 16 funded transnational projects contribution and impact on the initial Heritage Plus topics, as well as their contribution to the JPICH SRA priorities.

Calls outputs

Indicator 17	Number of patent applications, license agreements, invention disclosures, studies underway, technology demonstrators, new specific frameworks and methodologies dedicated to Cultural Heritage conservation.
Indicator definition	Development through JPICH research activities of cross disciplinary tools and methodologies for repair, treatment and maintenance... of Cultural Heritage, including new or improved products, technologies (advanced hybrid technologies, diagnostic tools, nanotechnology), processes (single early warning intelligent system crossing chemical, biological or physical sensors, climatic-security- behaviour interdisciplinary model, mapping earth observation with the help of spatial technologies) and equipment. New frameworks, methodologies and dedicated to risk assessment & prevention, Cultural Heritage conservation, natural and man-made disasters, specific management and risk assessment protocols.
Objective	Development of innovative Cultural-Heritage-dedicated tools, technologies, frameworks and methodologies for conservation and risk assessment.

Results

In the Heritage Plus WP4 reports (D4.1, D4.2, D4.3 and D4.4) there is no mention to patent applications, license agreements and invention disclosures. Two projects developed IT technology demonstrators. The outcome of this indicator is very low, as the relevance of this for a JPI focused on Cultural Heritage is low, as many applications are related to humanities and social sciences. Nevertheless, it is mentioned that more than 105 different kinds of outputs were produced, namely: digital outputs, new models and guidelines that fall under this indicator definition.

Indicator 18	Number of publications resulting from research activities.
Indicator definition	Number of publications resulting from research activities. Publications in specialized, academic and high-impact journals (those considered highly

	influential in the field of Cultural Heritage and in specialized professional fields), and publications on JPICH research activities (collective works, conference proceedings, monographs, etc.).
Objective	Increase of the valorisation of outputs and outcomes from research activities to contribute to an increased visibility of JPICH activities.

Results

A total of **665 different publications** (226 peer-reviewed publications, 258 additional publications and 181 reports, deliverables and working papers), which are addresses to researchers, general public, policy makers, heritage managers, curators or entrepreneurs, and having a potential impact on research and advancement of knowledge, were realized. The number of the publications reported by the projects has been quite impressive, and gave a precious overview of what projects financed through JPICH calls for proposals could produce. However, as referred in D4.4 “This number of publications, would need, in future calls, to be classified in a more precise way, since one can notice that the publications of a whole chapter, the publication of a book, the publication of a book, the publication of a conference paper in proceedings, count for the same amount of publications.”

Were also identified a total of **856 scientifically relevant outputs** (websites, digital outputs, festivals, models, frameworks and guidelines, workshops, fieldworks, courses, lectures, case studies, conferences, symposiums, meetings (online and physical), thesis, master degrees, job positions, interviews/questionnaires/surveys, public events, exhibitions, dissemination materials, literature reviews and press releases) in addition to publications above.

Indicator 19	Share of research projects addressing improvement in accessibility of tools and data.
Indicator definition	Open access of outputs (tools and data) of research projects.
Objective	Improved accessibility of tools and data.

Results

The **knowledge transfer and dissemination activities** (categories: appearance in printed media, exhibitions, websites, logos, newsletters, online presentations, live presentations and others) of the Heritage Plus projects have reached more than 2.2 Million people. However, the projects reported that some categories of outputs were very difficult to quantify, such as advancements in knowledge, knowledge transfers, etc.

C2) Annex to C category for Joint Alignment Assessment

Some parameters were evaluated in order to assess the alignment of national strategies and research programmes with the Strategic Research Agenda (SRA) of the JPICH, namely: alignment at strategic level, at funding level, at operational level, and at scientific level.

Alignment at strategic level

Indicator 20	Alignment of national and regional agendas.
Indicator definition	Adapting research priorities of agencies and programme owners in alignment with the JPICH SRA and actions.
Objective	Increase of the level of the strategic leverage effects.

Results

This indicator is complementary to answers given in indicators 15 and 16. Consequently, 67% of the agencies (corresponding to 6 members of the EB) referred to, have adapting their national research agenda with the JPICH SRA priorities. This is the case for Belarus, which carefully studies all documents of JPICH and makes efforts for priority funding of proposals. For UK, Heritage remains a priority area as outlined in the Arts and Humanities Research Councils Delivery Plan for 2015-2018. In 2015 published a Heritage Strategy outlining their priority areas, with the areas identified in the JPICH SRA forming a basis for the analysis. In March 2018, a revised Heritage Priority Area Future Research Strategy was published: <https://ahrc.ukri.org/documents/strategy/heritage-strategy/>. The JPICH is part of a portfolio of AHRC's work within heritage. Sweden, also confirmed having aligned its national research agenda 2017-2021 with the SRA of JPICH. Norway developed a certain degree of harmonization in the topics of the national call, relevant to JPICH. The research priority "Heritage in changing Environments" was also included among the Italian priorities. In the development of its new Strategic Agenda of R&I in the theme "Culture and Cultural Heritage", Portugal is making efforts to align its research priorities within the priorities of JPICH SRA.

Indicator 21	Align research themes.
Indicator definition	Establishing a methodology enabling programme clustering and adaptations in national/regional research programme themes.
Objective	Level of the strategic leverage effects.

Results

About 40% of the agencies (4 respondents) establish common rules and procedures in order to be able to participate in international programmes and calls, namely the submission and evaluation procedures, as well as start and end dates of the projects and respective reports. The Research Council of Norway is introducing a new system (closer to the evaluation system in EU) for coordinating its calls for proposals and application processing across the various research programmes and open areas. The AEI (Spain) has a specific annual call for funding international cooperation projects.

Alignment at funding level

Indicator 22	Adaptation of funding landscape to align with JPICH activities.
Indicator definition	Leverage the funding (model) and hence harmonise the funding landscape.
Objective	Leverage of the funding landscape.

Results

70% of the agencies are increasing their national budgets or the financing prioritization, in order to participate in more international activities/programmes. With the calls 'Digital Heritage' and 'Changing Environments' being the most mentioned.

Alignment at operational level

Indicator 23	Harmonised rules and procedures for participation.
Indicator definition	Harmonization of the regulation and procedures for participation in programmes and calls.
Objective	Level of the operational leverage effects.

Results

About 20% of the agencies (2 respondents) made harmonization efforts regarding the regulations and procedures in order to participate in national/international programmes and calls, namely the harmonization of different aspects as submission or evaluation processes, as well as contracts for researchers participating in JPICH calls.

Spain mentioned that made changes in legislation to allow payments to foreign researchers. The AIE can fund contracts for foreign researchers if they are working in Spanish research institutions, universities, etc.

The agencies efforts to leverage the partner's investment were mainly by the use of websites, information and communication activities, seminars, newsletters and regular contact with the Government to secure support for JPICH and Cultural Heritage Research. France communicated several times on the JPICH, in the Ministry of Research, in the Foundation for Heritage Sciences, and in the Ministry of Culture. Several articles were also published in the «Culture & recherché» journal of the Ministry of Culture. The initiative is also presented on the website of the Foundation for Heritage Sciences, which is a network gathering key heritage research actor in France: <http://www.sciences-patrimoine.org/fondation/international/europe/>. A Mirror group has been recently implemented in France for the JPICH, composed by representatives from the Ministry of Research, the ANR, the Ministry of Culture, and other Cultural Heritage laboratories and organizations that are not Agencies or Ministries.

About 20% of the agencies (2 respondents) adjusted the timeline of the funding schemes and the implementation of national funding programmes, in order to enable the participation to the JPICH calls.

D) Transformational effect

This last category of indicators grouped under the denomination “Transformational effect” aims to monitor and evaluate three important topics (Connecting people with heritage, Creating knowledge and Safeguarding our Cultural Heritage resource).

Connecting people with heritage

Indicator 24	To improve Cultural Heritage accessibility.
Indicator definition	Number and type of actions developed by the JPICH to promote knowledge, tools and policy making instruments developed through its activities at political regional/federal/national/European/transnational levels: lobbying, political advisory groups, advocacy groups, transnational forums.
Objective	To help leaders in their use of Cultural Heritage (policy making) and to improve Cultural Heritage inclusion in research and sectoral policies.

Results

About half of the organisations that answered to the questionnaire (56%), indicated to have participated in actions to bring the JPICH at the political level, namely by the participation in political advisory group meetings, through the contribution to national groups for all 10 JPIs to achieve visibility for JPICH, and getting minister support to the JPICH. RCE has written a memo for the Ministry of Culture of the Netherlands, stressing the importance of the JPICH and the need to set aside budget for the JPICH. France communicated several times on the JPICH, in the Ministry of Research, in the Foundation for Heritage Sciences, and in the Ministry of Culture.

Creating knowledge

Indicator 25	JPICH ability to adapt and create new Cultural Heritage educational programmes.
Indicator definition	JPICH participations in creation of new Cultural Heritage curricula, in enforcement of the existing one, and its expenditure on pre-existing and new educational programmes.
Objective	To integrate JPICH research outputs in educational programmes.

Results

Since the beginning of the monitoring period no additional financial investments for Cultural Heritage specialized educational programmes were made by the responding agencies (9 respondents).

Indicator 26	Increase in the amount of Cultural Heritage information available on Heritage Portal and on JPICH website.
Indicator definition	From the beginning of the JPICH, increase in the amount of information available on the Heritage Portal (http://www.heritageportal.eu/) and on the JPICH website (http://www.jpi-culturalheritage.eu/).
Objective	To disseminate knowledge.

Results

There is no precise data about the increase in the amount of Cultural Heritage information available on JPICH website.

Safeguarding our Cultural Heritage resource

Indicator 27	JPICH potential contribution to the mitigation of climate change effects.
Indicator definition	Potential impact on energy demand and use (in %) of results achieved through JPICH-related projects addressing or trying to tackle the challenge of renewable energy in the Cultural Heritage domain with reference to Europe 2020 goals.
Objective	Adaptation to and mitigation of climate change effects.

Results

Only 1 of the agencies identified results with potential impact on H2020 objectives of reducing the energy demand and use. Italy mentioned that the topics use and re-use of historical buildings as well as the governance of historical city center, were supported by the JPICH in the SRA, the Action Programme and funding projects on these specific topics.

Indicator 28	Share of collaborative projects addressing and investigating the issue of climate change.
Indicator definition	Share of total projects and activities developed through JPICH addressing and investigating the issue of climate change effect on Cultural Heritage.
Objective	Adaptation to and mitigation of climate change effects.

Results

Through the 8 joint activities that already took place, only one topic was not addressed “The potential impact in terms of reductions in energy demand and use” (**Table 3**).

Table 3 – Topics addressed through the joint activities.

Topics	Action Programme Joint activity coordinating countries								TOTAL
	Cyprus	Lithuania	Portugal	Netherlands	Norway	Spain	Poland	UK	
Digital cultural heritage	x		x			x		x	4
Improvement in accessibility of materials and data	x	X	x		X			x	5

Multidisciplinary frameworks for integrated revitalisation of artefacts, buildings and landscapes			x	X	X		x	x	5
Renewal and restoration of historic areas	x		x	X	X		x	x	6
Potential impact in terms of reductions in energy demand and use									0
Climate change	x		x		X				3

Transversal Indicators

Indicator 29	Proportion of priorities identified in the SRA addressed by JPICH activities, and number of research projects working on each priority.
Indicator definition	Among the priorities identified in the SRA: Developing a reflective society, identity and perception, values, ethics; connecting people with heritage, protection through use, sustainability, security, heritage information; creating knowledge, linking information, change, methods and measurements, integrating risk; safeguarding our Cultural Heritage resource, conservation, adaptation and mitigation.
Objective	JPICH ability to address research priorities identified in the SRA.

Results

Through the 8 joint activities that already took place, all research priorities were addressed: “Developing a reflective society”, “Connecting people with heritage”, “Creating knowledge” and “Safeguarding our cultural heritage resource” (Table 4).

Table 4 – JPICH SRA research priorities addressed through the joint activities.

JPICH SRA research priorities	Action Programme Joint activity coordinating countries								TOTAL
	Cyprus	Lithuania	Portugal	Norway	Spain	Poland	UK	Netherlands	
Developing a reflective society	x	x	x			x	x		5
Connecting people with heritage	x	x	x			x	x	x	6
Creating knowledge	x	x	x	x	x	x	x	x	8
Safeguarding our Cultural Heritage resource	x	x	x	x		x			5

4. Conclusions

The present Deliverable (D3.3) is not only aiming at providing recommendations for future evaluation activities, but is also conducting an evaluation of activities performed so far by the JPICH, in 2017 and 2018.

Not enough data to assess a certain number of indicators, which raises the necessity to update or adapt the monitoring methodology for more efficiency. Sometimes because the indicators/associated questions are not clear enough for partners, the monitoring tools are not efficient enough, or due the unavailability of data on time to the WP3 monitoring team, in order to consider these activities in the present report and to complete the corresponding indicators.

Through the results obtained and discussed, the main conclusions will be the following:

- It should be noticed that since the last monitoring exercise (D3.2 - submitted in July 2017) the agencies were less optimistic concerning the evaluation made to the sustainability of the JPICH financial and administrative structures. The solutions in order to increase partner's confidence may consist in guaranteeing the long term continuity of the direct support of the European Commission, increase the support and commitment of the Member States to the JPICH through the implementation of fees, the change of the Coordinator, etc.
- With respect to extending cooperation and partnership, only few members of JPICH reported collaborations with organisations not represented in the JPI governing structure, reported collaborations with advanced economies or BRIC countries, and have organized activities and/or participated in Joint Activities with other JPIs. Concerning the collaborations with non-ERA countries, more than half of the members reported these collaborations.
- From January 2010 to December 2018, the number of participating countries increased from 16 to 18. Despite this positive balance, evolution in this regards could be more effective, even because there have been no changes in number since the last monitoring report and about the fact that 5 of the countries withdrew in this period. In this sense, efforts should continue to be made to attract new partners.
- Concerning the SRA and its implementation, one third of the agencies consider that the gaps identified in the SRA are completely covered by JPICH activities, and about two thirds reported the funding instruments for the implementation of SRA are identified (completely or partly) and are globally satisfied with the Action Programme. In this sense, the SRA should be revised and developed, including the innovation aspect, and efforts should be made to implement it more clearly.
- The launch of calls for proposals is one of the main elements for the implementation of research through JPICH joint activities. Since the beginning of JPICH (2010) were launched 4 Joint Transnational Calls for proposals (2013, 2014 and two in 2017). The launching in the near future of two more calls for proposals (2019 and 2020) reflects the good frequency of Calls during the lifetime of the JPICH.
- With respect to capacity building and enabling activities the answers do not seem promising, only 1 out of 10 organisations implemented new training instruments, 2 conducted collaborations

and/or joint activities with the private sector, and 4 participated or associated with new research infrastructures. Efforts should be made to improve the capacity building.

- Relatively to the publications that resulting from JPICH research activities, many were referred, as well as thesis and PhDs defended. Most of the agencies (69%) consider that JPICH successfully developed mechanisms to reduce fragmentation and unnecessary duplication through Joint Transnational Calls, the SRA, Alignment actions, Networking and Communication through Heritage Portal. With respect to the rationalization of the agendas and research, 92% of the agencies (12 out of 13 respondents) already have national strategies, research agendas, programmes and priorities that take into account the JPICH SRA and the other respondent have the intention to align these national documents with the JPICH SRA.
- In the Heritage Plus WP4 reports there is no mention to patent applications, license agreements and invention disclosures. Nevertheless, more than 105 different kinds of outputs were produced, that fall under this indicator definition. A total of 665 publications were reported, and 856 scientifically relevant outputs identified. Dissemination activities and knowledge transfer reached more than 2.2 Million people, however advancements in knowledge and knowledge transfer are very difficult to quantify.
- In terms of joint alignment at strategic level, the numbers shows overall good results with 67% of the agencies referring to have adapt their research priorities with the JPICH SRA and actions, and with about 40% establishing common rules and procedures in order to be able to participate in international programmes and calls. At funding level, 70% of the agencies mentioned the increase of the national budgets or the financing prioritization in order to participate in more international activities/programmes. In terms of joint alignment at operational level, the low numbers shows that this will certainly be one of the issues related to the topic of “alignment” to deserve a broader reflection, which should be made in a context broader than this particular JPI, since it is transversal to all JPIs.
- More than half of the respondents indicated to have participated in actions to bring the JPICH at the political level, namely by the participation in political advisory group meetings, through the contribution to national groups for all 10 JPIs to achieve visibility and getting minister support to the JPICH.

Annex I: JHEP2 - WP3 - D3.1 “Key Performance Indicators”

A) Enabling Framework

Topics	Objectives	Success criteria /Target	Indicator		Indicator Definition	How to measure (multiple sources)
Governing structures	Long term confidence and financial commitment from JPICH partners.	Members States / EC satisfaction	1	Sustainability of the JPICH financial and administrative structures	Capacity to secure and manage financial resources from JPICH partners at the long term.	Survey A4
Extending cooperation and partnership	To extend network and cooperation to external organisations	At least one annual joint action with an international organisation	2	List and type of joint actions with organisations active in the field of CH	Formal collaborations through joint activities and actions with International organisations (including UN, UNESCO, NGOs, ICOMOS, ICOM...), NGOs, regional organisations, other...	Survey A13 & A14
Extending cooperation and partnership	To establish quality contacts with other P2P networks	Organise at least one annual joint action with another P2P networks	3	List and type of joint actions with other P2P networks	P2P networks such as article 169/185, ERA-NETs, ERA-NETs Cofund... other JPIs (Urban Europe, Clif'EU, FACCE etc.). Joint actions including definition of common schemes for evaluation and monitoring, coordination or clustering, definition of common SRA, joint training activities, personnel exchange, mutual opening of facilities and infrastructures, of programmes, joint calls design and implementation, other...	Survey A9, A10, A11 & A12
Extending cooperation and partnership	To cooperate with non-European countries	Organise at least one annual joint action with a non-European country	4	List of joint actions involving non-European countries	Joint actions involving non-European countries, particularly advanced economies (Japan, USA...), neighborhood Mediterranean countries, BRICs...	Survey A6, A7 & A8
JPICH attractiveness	JPICH is attracting new countries	Initial countries' membership enlarged to include at least one new country and doesn't decrease from one year to the next	5	Evolution of the number of countries participating to the JPICH	Cumulated number of countries that joined the project and that were not present at the beginning of the project, countries that opted out (no longer partners or observers), and information about the number of countries that participated to the JPICH per year	Coordinator
SRA and Action Programme	Action Programme funding quantity and type matches SRA needs	–	6	Adequacy of research needs in SRA and Action Programme	The SRA is reflected by the Action Programme that identifies the most useful funding instruments and pooling capacities for implementation of selected research topics in SRA	Questionnaire Q7 & Q8
Dissemination strategy	To identify and contact key stakeholders across and within the EU	4 categories of key stakeholders identified, by WP6 contacted and involved in JPICH activities	7	List of new stakeholders and types of stakeholders reached by the dissemination strategy within EU and across the EU	One list for stakeholders reached by JPICH dissemination strategy in the EU, one list for stakeholders reached outside the EU, with description of categories of stakeholders reached. They include the four categories used in the JHEP Dissemination Plan: Policy makers and influencers ; Cultural Heritage research community ; Parallel projects and organisations ; Industry, SMEs and civil society	Template Q17 & Q18

B) Research Implementation

Topics	Goals, Objectives	Success criteria /Target	Indicator		Indicator Definition	How to measure (multiple sources)
Joint transnational calls for proposals	To increase the amount of allocated funding through transnational calls for proposals	Number of applications granted and average funding allocated per application increase from one call to the next	8	Evolution in the number of applications granted and average funding allocated per application through calls for proposal	For each call, total amount of allocated funding related to the number of applications finally granted and average funding allocated to each granted project, compared to preceding call	Coordinator
Joint transnational calls for proposals	To launch joint transnational calls for proposals	Launch at least 2 joint transnational calls for proposals	9	Roadmap of joint transnational calls for proposals	Number of new joint transnational calls for proposals published by the JPICH, and calls foreseen or planned for future of JPICH	Coordinator
Capacity building and Enabling activities	Development of advanced training	At least one training instrument implemented annually	10	Number and diversity of training instruments implemented	Inform as to number of seminars, conferences, thematic workshops, e-learning platforms developed for Cultural Heritage researchers and professional training purposes.	Survey B19 & B20
Capacity building and Enabling activities	Development of a Cultural-Heritage-dedicated network of infrastructures	Develop and pool digital infrastructures for Cultural Heritage	11	Number of collaborations with digital and built infrastructures participating in Cultural Heritage	Number of new or pre-existing infrastructures participating in JPICH activities. Physical (Iperion CH...) and digital (DARIAH...) infrastructures. Open laboratories, networks (HERA...)	Survey B17 & B18
		Develop and pool research facilities, laboratories, infrastructures				
Collaboration with private sector	Private sector participation in the research process	At least one collaboration implemented with the private sector	12	Number of research collaborations and partnerships with private sector	Participation of industry and SMEs through calls for proposals, access to research infrastructures, training programmes, informal collaborations, and commercial projects. Projects co-financed by private sector, access to private infrastructures	Survey B15 & B16

C) Research Added Value

Topics	Goals, Objectives	Success criteria /Target	Indicator		Indicator Definition	How to measure (multiple sources)
Publications	Available publications to enhance visibility of JPICH activities	–	13	Number of publications resulting from JPICH research activities	Number of publications resulting from JPICH research activities. Publications in specialized, academic and high-impact journals (those considered highly influential in the field of Cultural Heritage and in specialized professional fields), and publications on JPICH research activities (collective works, conference proceedings, monographs, etc.).	Template Q21, Q22
Training	To include students and professionals still in training in JPICH research activities	–	14	Number of degrees achieved and thesis presented by students collaborating in JPICH during the life time of the project	Students having achieved important degrees (master, doctoral) or presented their thesis during JPICH lifetime and having participated in JPICH research activities in one way or another, through research projects, workshops or training programmes.	Template Q14, Q15, Q23 & Q24
Aligned research	Increased coordination of JPI and European scientific strategic agendas	Development of an European agenda mirroring the JPICH agenda	15	New mechanisms for alignment with regional, federal, national and European research agendas	Innovative mechanisms implemented for alignment, coordination and interactions between institutional strategic agendas in the Cultural Heritage area: common research agendas, forums, subsidiarity principle... as innovative funding concepts likely to influence national, regional, institutional funding policies	Questionnaire Q9, Q10, Q11 & Q12
Aligned research	High coordination of JPI and National/Federal scientific strategic agendas	Participating States align their scientific strategy to the JPICH agenda				
Aligned research	To align institutional research agendas to JPICH SRA	Share the JPICH research agenda with at least one institution	16	Number of institutions sharing JPICH Strategic Research Agenda	Number of institutions sharing the JPICH SRA or for which the JICH is explicitly mentioned as a cornerstone.	Questionnaire Q13, Q14 & Q15

C1) Annex to C category for Joint Calls Assessment

Topics	Goals, Objectives	Success criteria /Target	Indicator	Indicator Definition	How to measure (multiple sources)	
Calls outputs	Development of innovative Cultural-Heritage-dedicated tools, technologies, frameworks and methodologies for conservation and risk assessment	–	17	Number of patent applications, license agreements, invention disclosures, studies underway, technology demonstrators, new specific frameworks and methodologies dedicated to Cultural Heritage conservation	Development through JPICH research activities of cross disciplinary tools and methodologies for repair, treatment and maintenance... of Cultural Heritage, including new or improved products, technologies (advanced hybrid technologies, diagnostic tools, nanotechnology), processes (single early warning intelligent system crossing chemical, biological or physical sensors, climatic-security- behavior interdisciplinary model, mapping earth observation with the help of spatial technologies) and equipment. New frameworks, methodologies and dedicated to risk assessment & prevention, Cultural Heritage conservation, natural and man-made disasters, specific management and risk assessment protocols.	Heritage Plus WP4 reports: D4.1, D4.2, D4.3 and D4.4
Calls outputs	Increase of the valorisation of outputs and outcomes from research activities to contribute to an increased visibility of JPICH activities	–	18	Number of publications resulting from research activities	Number of publications resulting from JPICH research activities. Publications in specialized, academic and high-impact journals (those considered highly influential in the field of Cultural Heritage and in specialized professional fields), and publications on JPICH research activities (collective works, conference proceedings, monographs, etc.).	Heritage Plus WP4 reports: D4.1, D4.2, D4.3 and D4.4
Calls outputs	Improved accessibility of tools and data	–	19	Share of research projects addressing improvement in accessibility of tools and data	Open access of outputs (tools and data) of research projects.	Heritage Plus WP4 reports: D4.1, D4.2, D4.3 and D4.4

C2) Annex to C category for Joint Alignment Assessment

Topics	Goals, Objectives	Success criteria /Target	Indicator		Indicator Definition	How to measure (multiple sources)
Alignment at strategic level	Increase of the level of the strategic leverage effects	–	20	Alignment of national and regional agendas	Adapting research priorities of agencies and programme owners in alignment with the JPICH SRA and actions.	Survey C21 & C22
Alignment at strategic level	Level of the strategic leverage effects	–	21	Align research themes	Establishing a methodology enabling programme clustering and adaptations in national/regional research programme themes	Survey C32 & C33
Alignment at funding level	Leverage of the funding landscape	–	22	Adaptation of funding landscape to align with JPICH activities	Leverage the funding (model) and hence harmonise the funding landscape.	Survey C23 & C24
Alignment at operational level	Level of the operational leverage effects	–	23	Harmonized rules and procedures for participation	Harmonization of the regulation and procedures for participation in programmes and calls	Survey From C25 to C31

D) Transformational Effect

Topics	Goals, Objectives	Success criteria /Target	Indicator		Indicator Definition	How to measure (multiple sources)
Connecting people with heritage	To help leaders in their use of Cultural Heritage (policy making) and to improve Cultural Heritage inclusion in research and sectoral policies	–	24	Increased and diversified actions to bring knowledge developed in the JPICH to political level	Number and type of actions developed by the JPICH to promote knowledge, tools and policy making instruments developed through its activities at political regional/federal/national/European/transnational levels: lobbying, political advisory groups, advocacy groups, transnational forums	Survey D34 & D35
Creating knowledge	To move the field towards truly interdisciplinary studies	–	25	JPICH ability to attract and increase investments for existing and new Cultural Heritage educational programmes	JPICH participations in creation of new Cultural Heritage curricula, in enforcement of the existing one, and its expenditure on pre-existing and new educational programmes	Survey D38 & D39
Creating knowledge	To generate knowledge	Available information on the Heritage Portal and on the JPICH website increased from the beginning of the JPICH	26	Increase in the amount of Cultural Heritage information available on Heritage Portal and on JPICH website	From the beginning of the JPICH, increase in the amount of information available on the Heritage Portal (http://www.heritageportal.eu/) and on the JPICH website (http://www.jpi-culturalheritage.eu/)	Coordinator
Safeguarding our Cultural Heritage resource	Adaptation to and mitigation of climate change effects	Contribute to H2020 goals to reduce energy demand by factor of 5 to 20%, or more	27	JPICH potential contribution in reduction in energy demand and use	Potential impact on energy demand and use (in %), of results achieved through JPICH-related projects addressing or trying to tackle the challenge of renewable energy in the Cultural Heritage domain with reference to Europe 2020 goals	Survey D36 & D37
Safeguarding our Cultural Heritage resource	Adaptation to and mitigation of climate change effects	–	28	Share of collaborative projects addressing and investigating the issue of climate change	Share of total projects and activities developed through JPICH addressing and investigating the issue of climate change effect on Cultural Heritage	Template Q20, Q25 & Q26
Transversal indicators	JPICH ability to address research priorities identified in the SRA	80% of research priorities identified in the SRA were addressed by JPICH activities	29	Proportion of priorities identified in the SRA addressed by JPICH activities, and number of research projects working on each priority	Among the priorities identified in the SRA: Developing a reflective society, identity and perception, values, ethics; connecting people with heritage, protection through use, sustainability, security, heritage information; creating knowledge, linking information, change, methods and measurements, integrating risk; safeguarding our Cultural Heritage resource, conservation, adaptation and mitigation	Template Q19