

D5.2: REPORT FROM ENGAGEMENT ACTIVITIES WITH TAXONOMIC FACILITIES IN PRIORITY REGIONS (NON-EUROPE)

Grant Agreement Number | 823827

Acronym | SYNTHESYS PLUS

Call | H2020-INFRAIA-2018-2020

Start date | 01/02/2019

Duration | 54 months

Work Package | NA5: Internationalisation and engagement of new user communities in EC priority areas

Work Package Lead | H Goodson

Delivery date | 31.01.2023



SYNTHESYS+ was funded by the Horizon 2020 Framework of the European Union under the H2020 Open Innovation and Open Science Research Infrastructure call.

Contents

Summary.....	1
Initial Progress.....	2
Re-evaluation of execution WP objective and New Focus.....	2
Selection process.....	3
Responsibilities of contracted individuals:.....	4
Start date of the contract.....	4
Scoring and review of applications.....	4
Metrics on activities.....	5
Overview of the action.....	5
Breakdown of the Action: Support to BIFA programme vs Support to Asian institutions not linked to the BIFA programme.....	7
Numbers of calls made since the beginning of the contract.....	8
Numbers of datasets reviewed since the beginning of the contract.....	8
Update to the Global Registry of Scientific Collections (GRSciColl).....	9
Key results:.....	10

D5.2: Report from engagement activities with taxonomic facilities in priority regions (non-Europe)

Summary

The overarching objectives of this work package was to provide a coordination mechanism for SYNTHESYS+ project partners to develop a shared vision and implementation strategy for Expanding Geographic Engagement

NA5 will include a process to identify priority opportunities for SYNTHESYS+ led engagement with stakeholders from an expanded geography, particularly from south-east Asia, disproportionately underrepresented in current activities.

Task 5.2 under NA5 of the SYNTHESYS+ project focuses on engaging with stakeholders from an expanded geography. The identification and prioritisation of under-represented areas was identified as part of task 5.1,



SYNTHESYS+ was funded by the Horizon 2020 Framework of the European Union under the H2020 Open Innovation and Open Science Research Infrastructure call.

SYNTHESYS+
Synthesis of Systematic Resources
a DiSSCo project

which reviewed capabilities and services available against impact to identify geographic scope. Following on from this process led by task partner Museum fur Naturkunde (MfN), the recommendation was for this task to focus on the South-East Asian region.

This will serve as the basis for international expansion, prioritising regions which should serve as focus topic areas within the programme. Activities will include evaluation and revision of existing dissemination and training materials for use in such engagements, and a mechanism for prioritised selection of a set of SYNTHESYS+ co-funded engagements with specific institutions or networks of institutions in target regions.

Based on these engagement principles and selection mechanisms, the NA5 task leads will evaluate candidate projects, each led and co-funded by one or more SYNTHESYS+ partners, to build engagement and collaboration with institutions in target regions. Prioritisation will be based on alignment with strategic priorities identified during the all-hands meeting and leverage of additional funding.

Initial Progress

Task 5.2 has been led by MfN. MfN opened a call on January 31 for 1 month, later extended to April 14, 2020, inviting the submission of proposals for projects that further develop digitization of and access to NSCs in priority regions and enable global linkage of and access to collection data from institutions (e.g. via GBIF). All projects were required to provide co-funding (at least 25% of total costs) Five projects were submitted until the deadline, which was a lower number than expected. Three projects were selected.

Re-evaluation of execution WP objective and New Focus

Given the low response rate and also lower than anticipated granting of funds under the call, it was decided to reevaluate launching a second call. Overall WP leader GBIF called for a reevaluation of the engagement strategy. Additional unspent funds from 5.2 T&S were added to the remaining funds for Call 2 and it was decided to launch a call for proposals to hire regional support contractors to develop the community of practice in Asia, based on the successful EC funded Biodiversity Information Fund for Asia (BIFA) programme, run by GBIF and now in its 5th year, previously targeting Sub-Saharan Africa and the Latin America and Caribbean regions.

By leveraging the project management framework and existing training material in the BIFA programme, this new call can deliver materials, training, and support to enhance capacity for effective mobilisation and use of Natural Science Collections data as well as develop capacity for mobilisation and application of biodiversity information for key policy needs.

This call will support cooperative activities between SYNTHESYS+ partners with collections and stakeholders in regions that are disproportionately under-represented in current activities. The focus is on further developing access and data linkage to scientific collections and ecological datasets, with the objective of making available information resources required to address key policy needs around biodiversity.

By strategically supporting building up communities of practice instead of individual projects in supporting this community in Asia, we are encouraging long-term engagement of individuals and institutions from the region to develop ongoing communities of practice and develop long-term global collaboration.

This model of expanding geographic engagement contributes positively to SYNTHESYS+ objectives and additionally leverages further funder value by enabling re-use of the EC-funded BIFA project management framework, extending data-sharing infrastructure through the development of human capital through



SYNTHESYS+ was funded by the Horizon 2020 Framework of the European Union under the H2020 Open Innovation and Open Science Research Infrastructure call.

SYNTHESYS+
Synthesis of Systematic Resources
a DiSSCo project

dissemination of rigorous training curricula on data mobilization and use aimed at improving the data skills of local professionals and building communities of practice engaged in data mobilization and use.

WP5 task leaders put together a task force which was made up of representatives from WP5 as well as the NHM as overall project lead for SYNTHESYS+, additional members of the GBIF secretariat, and a regional representative from Asia. Specifically, these were:

Laurence Livermore, NHM, London, UK, Tsuyoshi Hosoya, National Museum of Nature and Science, Tsukuba, Japan, Mélianie Raymond, GBIF, Maheva Bagard Laursen, GBIF, Andrea Hahn, GBIF (AH), Christoph Haueser MfN, DE.

The task force agreed to use the funds to design roles of the contractors to complement and leverage existing programs, in line with the original intention of the work package. This activity aims to support cooperative activities between SYNTHESYS+ partners with collections and stakeholders in regions that are disproportionately under-represented in current activities. The focus is on further developing access and data linkage to scientific collections and ecological datasets, with the objective of making available information resources required to address key policy needs around biodiversity. The following scope was agreed to

The regional support contracts will contribute to:

- Increased regional biodiversity data availability to support science and decision making
- Strengthened regional capacity and development of skills in biodiversity data mobilization and use
- Increased institutional collaboration and regional engagement in the SYNTHESYS+ and GBIF network
- Providing technical help-desk assistance, training and mentoring to support institutional engagement in the mobilization and use of biodiversity data
- Facilitating exchange of guidance, best practices and expertise between regional institutions, SYNTHESYS+ partners, BIFA biodiversity data mobilization project teams, the GBIF Participant nodes
- Encouraging long-term engagement of individuals and institutions from the region in the GBIF network

Selection process

Under SYNTHESYS+, an open call went out seeking contractors to support the team developing a community of practice in Asia through the SYNTHESYS+ project and the Biodiversity Information Fund for Asia (BIFA programme). The call was launched on 27 July. The call asked for individuals located in eligible countries and areas in South-East Asia, South Asia and North-East Asia to express their interest in addressing the following tasks: The task force agreed to serve as the evaluation panel for potential candidates. Current funding allowed 2 x 0.5FTEs to be contracted for a 12-month period, aligning with the remaining SYNTHESYS+ project timeline.

We received a very strong response, so the process was very competitive.



Responsibilities of contracted individuals:

- Regular group meetings to develop the community of practice by engaging current and past BIFA project teams, relevant SYNTHESYS+ partners, the Participant nodes and their teams, the data publishing community and interested observers
- Help desk assistance as the primary technical point of contact assisting with regional data mobilization and data quality issues, in coordination with the relevant GBIF Participant nodes and the GBIF Secretariat Data Products team
- Technical administration of a regional cloud-hosted IPT for Asia and the BIFA project teams
- Mentoring focused on technical support for implementing data mobilization plans at the institutional level or within funded projects
- Support for regional capacity enhancement workshops and development of GBIF training materials
- In coordination with GBIF Secretariat and GBIF Participant nodes, support regional engagement in updating and maintaining relevant entries in the Global Registry of Scientific Collections (GRSciColl)
- In coordination with relevant SYNTHESYS+ partners, GBIF regional representatives and relevant GBIF Participant nodes, support in recruiting and assigning appropriate mentors to strengthen the community of practice
- Recommendations on future development of the community of practice, including identification of key capacity needs and training opportunities
- Bi-monthly status reports summarizing activities undertaken personally and by the community, in addition to participating in regular planning meetings involving the GBIF Secretariat and other regional contractors.

Start date of the contract

The people contracted to be part of the Asia regional support team started their activities the 16th of December 2022

Scoring and review of applications

We received 10 applications, all of which were eligible and within the scope set out in the call and were therefore sent to all panel members for scoring using the following criteria:

- Demonstration of required skills
- Previous relevant experience
- Appreciation of the task
- Potential for lasting impact on the capacity within the region

The panel also could take into account the following criteria into account to ensure that the final selection includes a balance in

- Geographic spread of applicants within the region
- Language skills within the region
- Complementary skill set within the region, e.g. balance of technical and project management skills

The eight top-scoring candidates were invited to complete a practical exercise to demonstrate their technical skills.



SYNTHESYS+ was funded by the Horizon 2020 Framework of the European Union under the H2020 Open Innovation and Open Science Research Infrastructure call.

SYNTHESYS+
Synthesis of Systematic Resources
a DiSSCo project

Based on the combined scores from the reviews of the applications and the performance in the practical exercise, the panel agreed to invite the top five scoring applicants to short personal interviews, all of which had demonstrated sufficient technical skills during the exercise to be considered for the contracts.

The panel agreed to make offers to four candidates, based on the following rationale:

- The four potential contractors brought different and complementary strengths to this work.
- A smaller team would see some gain in effective time (over increased coordination and reporting). However, coordination time and report management were not considered to be forbiddingly high from the GBIF Secretariat's perspective.
- It is important to consider the geographic balance - having two out of three candidates from Taiwan could be perceived as imbalanced
- 0.5 FTE appeared to be a viable option for all the candidates
- Suggestion: agree on specific responsibilities (technical vs. regional outreach) for each team member to assist with team balance and delivery of results

Final Recommendation: make offers to four applicants for contracts at 0.5 FTE for 12 months starting on 16 December 2021. The successful applicants were:

- Chihjen Ko
- Melissa Liu
- Vijay Barve
- Lily Shrestha

Metrics on activities

These metrics are based on numbers indicated by the members of the Asia regional support teams in the bi-monthly progress report

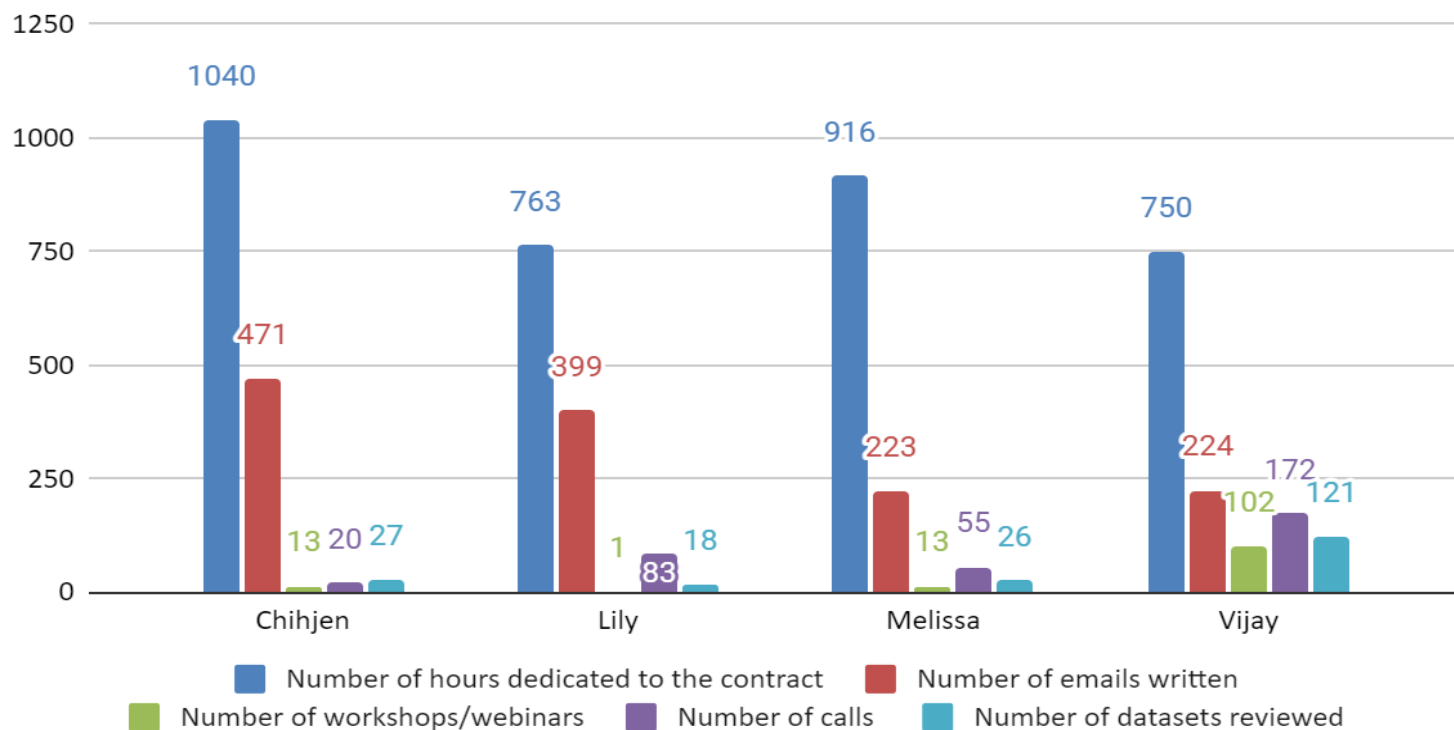
Overview of the action

Name	Number of hours dedicated to the contract	Number of emails written	Number of workshops/webinars	Number of calls	Number of datasets reviewed
Chihjen	1040	471	13	20	27
Lily	763	399	1	83	18
Melissa	916	223	13	55	26
Vijay	750	224	102	172	121



SYNTHEsys+ was funded by the Horizon 2020 Framework of the European Union under the H2020 Open Innovation and Open Science Research Infrastructure call.

Overview of the Action



SYNTHESYS+ was funded by the Horizon 2020 Framework of the European Union under the H2020 Open Innovation and Open Science Research Infrastructure call.

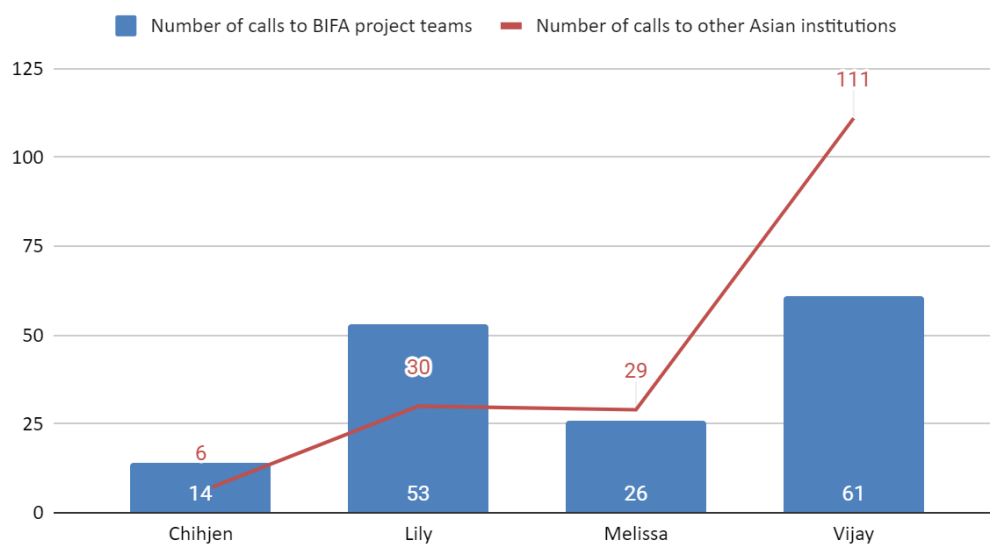
Breakdown of the Action: Support to BIFA programme vs Support to Asian institutions not linked to the BIFA programme

Name	Number of hours dedicated to support BIFA projects	Number of hours dedicated to support other Asian institutions	Number of emails written to BIFA project teams	Number of emails written to other Asian institutions	Number of workshops/webinars linked to BIFA projects	Number of workshops/webinars linked to other Asian institutions	Number of calls to BIFA project teams	Number of calls to other Asian institutions	Number of datasets reviewed linked to BIFA projects	Number of datasets reviewed linked to other Asian institutions
Chihjen	488	552	221	250	8	5	14	6	19	8
Lily	480	283	250	149	0	1	53	30	6	12
Melissa	276	640	137	86	3	10	26	29	11	15
Vijay	461	289	86	138	49	53	61	111	43	78

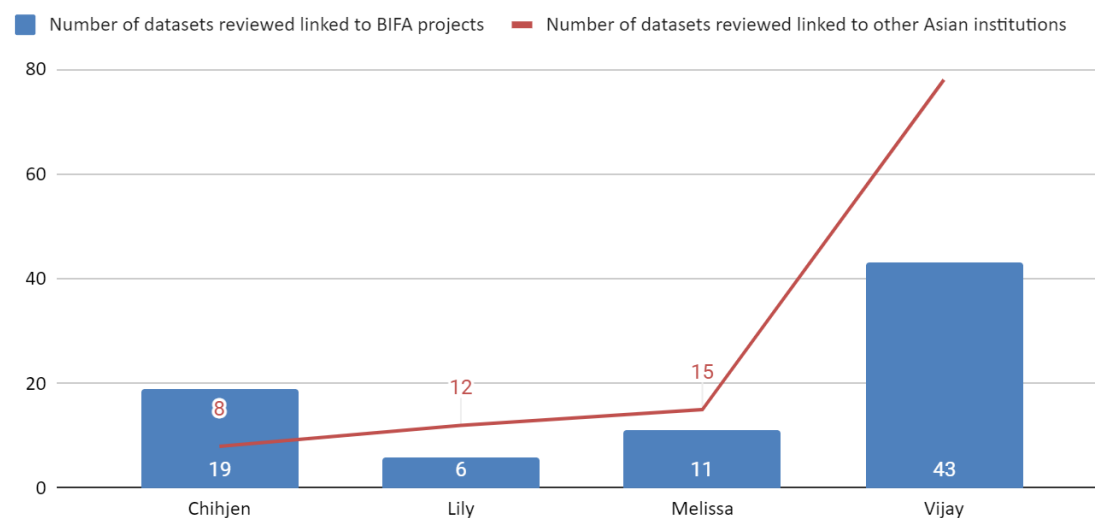


SYNTHESYS+ was funded by the Horizon 2020 Framework of the European Union under the H2020 Open Innovation and Open Science Research Infrastructure call.

Numbers of calls made since the beginning of the contract



Numbers of datasets reviewed since the beginning of the contract



SYNTHESYS+ was funded by the Horizon 2020 Framework of the European Union under the H2020 Open Innovation and Open Science Research Infrastructure call.

Update to the Global Registry of Scientific Collections (GRSciColl)

The Global Registry of Scientific Collections (GRSciColl) is a comprehensive, community-curated clearing house of information on scientific collections, which builds on previous efforts developed by the Consortium of the Barcode of Life (CBOL) and others.

GRSciColl includes data on institutions, collections and associated staff members and spans all scientific disciplines, including earth and space sciences, anthropology, archaeology, biology and biomedicine, as well as applied fields like agriculture, veterinary medicine and technology.

GRSciColl also serves as the registry for InstitutionCodes and CollectionCodes—elements used in the DarwinCore data standard used in the biodiversity informatics community. Use of these terms enables publications and databases to point unambiguously to collections and their contents.

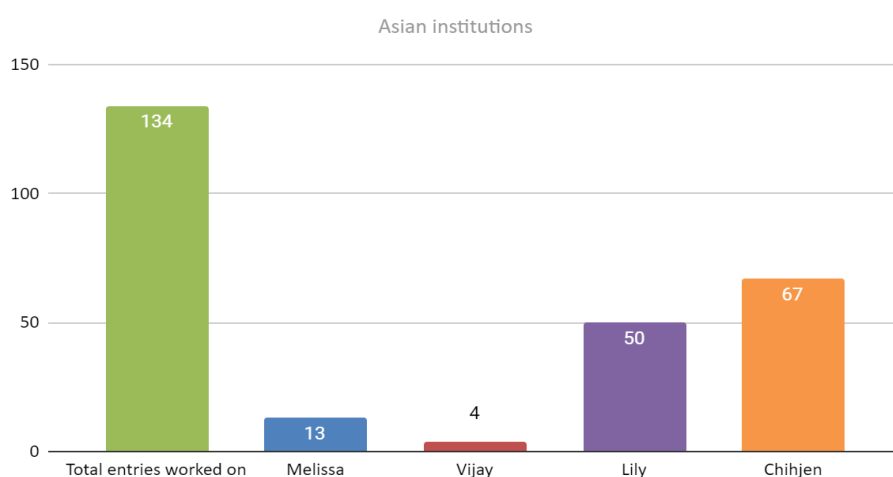
The main goals of GRSciColl are to:

Improve access to information about scientific collections, their host institutions as well as contacts for key collections and curatorial staff

Improve interoperability among databases by providing unique codes and machine-readable identifiers for institutions and collections

A workflow has been developed to enable regional support teams to help update and enrich the information available in GRSciColl and coordinate data mobilisation based on GRSciColl (<https://www.gbif.org/grscicoll>) entries.

Overview of the updates of GRSciColl entries



SYNTHESYS+ was funded by the Horizon 2020 Framework of the European Union under the H2020 Open Innovation and Open Science Research Infrastructure call.

SYNTHESYS+
Synthesis of Systematic Resources
a DiSSCo project

Key results:

- The SYNTHESYS+ investment of 107,000EUR was able to leverage significant additional funding to support biodiversity information availability in the majority of countries in Southeast, Northeast and South Asia
- The SYNTHESYS+ investment has leveraged activities with a total value of more than €1.97M, taking into account contributions in kind from GBIF (core funding) and co-funding from BIFA-funded projects
- BIFA has funded 46 projects in 16 countries and areas in Asia
- Data mobilized through regional contractor projects has had a significant impact in filling BIFA-funded projects have mobilized over 425,000 species occurrence records to date, relating to nearly 13,000 accepted species names of which 4,290 were recorded for the first time in the GBIF in at least one country
- Over 460 accepted species within records mobilized under the BIFA programme are assessed as globally threatened (critically endangered, vulnerable, or endangered) in the IUCN Red List of Threatened Species

The contractors enabled research and applications across a range of Asian policy priorities that relied on the availability of data published by the funded projects

The regional contractors programme enhanced capacity and skills among Asian institutions to digitize and share biodiversity data, expanding the community of practice in the region dealing with biodiversity informatics

- A total of 113 participants from 21 Asian countries and areas took part in four data mobilization workshops associated with BIFA project calls since 2017, enabling the training of a further 1,200 participants in 17 workshops conducted as part of the funded project activities
- As a result of training in the early phase of BIFA, the most recent data mobilization workshop for funded projects in BIFA6 used trainers and mentors drawn exclusively from Asia, demonstrating the programme's impact in terms of skills transfer

Since the beginning of their contract, the Asia regional support team has attended a total of 64 workshops and webinars, 41 workshops and webinars directly involving BIFA project teams and 23 webinars and workshops involving other Asian institutions.

The team also reviewed the quality of 120 datasets published through GBIF, 75 datasets mobilized by BIFA project teams and 45 datasets mobilized by other Asian data holding institutions.

Moreover, the in-region support team enabled the global natural sciences collections community through the GBIF Secretariat, to pilot new initiatives such as:

- The scheduling of weekly office hours to support data publishing activities of institutions in Asia
- The interviewing of past BIFA projects to assess current capacity needs and engagement opportunities
- The testing of a workflow enabling the use of Global Registry of Scientific Collections as a tool to prioritize data mobilization campaigns
- The organization of virtual data mobilization workshops open to all stakeholders in the region interested in learning or strengthening data mobilization skills.



Through their action, the members of the Asia regional support team provide invaluable support to the Asia community of practice.



SYNTHEsys+ was funded by the Horizon 2020 Framework of the European Union under the H2020 Open Innovation and Open Science Research Infrastructure call.