



## **D1.31      Summary      Progress** **Report Year 6**

### **WP1 Coordination**

Responsible Partner: ANSES  
Contributing partners: all partners



## GENERAL INFORMATION

European Joint Programme full title	Promoting One Health in Europe through joint actions on foodborne zoonoses, antimicrobial resistance and emerging microbiological hazards
European Joint Programme acronym	One Health EJP
Funding	This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 773830.
Grant Agreement	Grant agreement n° 773830
Start Date	01/01/2018
Duration	69 Months

## DOCUMENT MANAGEMENT

Title OHEJP deliverable	D1.31 Summary Progress Report Year 6
WP and task	WP1 / Task 1.2
Leader	ANSES
Other contributors	All partners
Due month of the deliverable	M69
Actual submission month	M69
Type <i>R: Document, report</i> <i>DEC: Websites, patent filings, videos, etc.; OTHER</i>	R
Dissemination level <i>PU: Public (default)</i> <i>CO: confidential, only for members of the consortium (including the Commission Services).</i>	PU  <i>See updated Grant Agreement</i>
Dissemination <i>Author's suggestion to inform the following possible interested parties.</i>	<div> OHEJP WP 1 <input type="checkbox"/> OHEJP WP 2 <input type="checkbox"/> OHEJP WP 3 <input type="checkbox"/> </div> <div> OHEJP WP 4 <input type="checkbox"/> OHEJP WP 5 <input type="checkbox"/> OHEJP WP 6 <input type="checkbox"/> </div> <div> OHEJP WP 7 <input type="checkbox"/> Project Management Team <input checked="" type="checkbox"/> </div> <div> Communication Team <input type="checkbox"/> Scientific Steering Board <input checked="" type="checkbox"/> </div> <div> National Stakeholders/Program Owners Committee <input type="checkbox"/> </div> <div> EFSA <input type="checkbox"/> ECDC <input type="checkbox"/> </div> <div> Other international stakeholder(s): ..... </div> <div> Social Media: ..... </div> <div> <u>Other recipient(s):</u> ..... </div>



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# 1 Publishable summary

## 1.1 Summary of the context and overall objectives of the project

### 1.1.1 What is the problem/issue being addressed?

The One Health EJP is a policy driven research programme addressing issues related to needs identified in the food safety area, including the following:

- Need to strengthen the links between human health, animal health and environmental aspects: One Health approach.
- Need to further integrate surveillance and response capacities, preventive approaches, detection systems as well as preparedness and response to disease outbreaks.
- Need of collaboration in Joint Research and Joint Integrative Projects, as well as Training and Education activities throughout a consortium of national public mission organisations.
- Need to foster interaction between European countries, national authorities and stakeholders.
- Need to update policy makers on these achievements and build on this knowledge, to take appropriate action.

### 1.1.2 Why is it important for society?

The integrated and inclusive health approach, known as 'One Health', is based on strengthening collaboration between human, animal and environmental health. It focuses on developing surveillance and response capacities, strengthening early-warning and detection systems; reinforcing the capacities of public health and veterinary authorities as regards prevention, preparedness and response to disease outbreaks; evaluating the social and economic impact of diseases; promoting cross-sectoral collaboration for the health of livestock, wildlife and ecosystems concerned; investigate conditions under which diseases emerge and spread over the three matrices that compose One Health. Thus, coordination between the different health systems, which are generally run separately, must enable economies of scale by encouraging synergies, and guarantee improved health security. Particular attention is paid to the communication of risks at all levels of action.

### 1.1.3 What are the overall objectives?

The overall objective of the One Health EJP is to develop a European network of public research institutes, mainly with reference laboratory functions. The One Health EJP integrates public health, medical, veterinary and food scientists in the domains of foodborne zoonoses, antimicrobial resistance and emerging zoonotic threats in order to improve the prevention and control in the three domains, whilst taking into account the public health concerns of consumers and other stakeholders throughout the food chain. Therefore, the following objectives are undertaken through the commitment of a highly interactive and experienced administrative framework encompassing scientific direction, financial management and communication of the respective beneficiaries and of the coordination team.

- 1. To bring together the major representatives of the European scientific communities in the field of foodborne zoonoses, antimicrobial resistance and emerging threats dealing with national mandates of reference and performing official research programmes in these three domains.**

After the enlargement process in 2020 that successfully added six new beneficiaries to the One Health EJP consortium, no further requests to join the Programme were received. All members



were invited to participate in the SSB meeting of March in Vienna, in the One Health Stakeholder Conference of June in Brussels, as well as to the Final meeting in September in Paris.

**2. To implement scientific integrative collaborative projects related to the prevention and control of foodborne zoonoses.**

The joint integrative projects are very important activities of the One Health EJP since they bring together One Health experts from all over Europe to propose improved surveillance programmes in all sectors (public health, animal health and food safety), to support the harmonization and validation of laboratory procedures, to propose better risk analysis, to share data and to set up alert tools, and to propose innovative intervention methodologies. In 2023, the last JIP (i.e. COVRIN) has finalised its scientific activities; all other integrative projects already came to an end.

**3. Stimulate scientific excellence by co-financing specific joint research projects, likely to improve the scientific evidence useful for the preparation of monitoring tools and reference activities at national and European level in the field of food-borne zoonoses, antimicrobial resistance and emerging threats.**

Although the Joint Research Projects are classic research collaborative projects with the aim to increase knowledge in the domains of foodborne zoonoses, AMR and emerging threats, these collaborations also add to key components of the prevent-detect-response cycle. For instance, suggestions to improve surveillance programmes, laboratory procedures that can be taken up by other laboratories in other sectors, databases or repositories are developed in these JRP and support the preparedness of the collaborating partners. In 2023, there were no more scientific activities in any of the 24 research projects.

**4. To foster harmonization and standardization of the reference methods and tests by bringing together scientific and technical expertise in the field of foodborne zoonoses, delivering standards and materials of reference such as biological archives including collections of strains and DNA libraries.**

Since the harmonization and alignment of protocols is a general objective of the One Health EJP, these activities are embedded in both the JRP and the JIP. As for the latter, the projects [OH-Harmony-CAP](#) and [CARE](#) are focussing on laboratory procedures and on reference materials and databases, respectively. In this way, this main One Health EJP objective is specifically promoted and dedicated activities were set up.

**5. To exchange and communicate with all National, European and International relevant stakeholders, and in particular the European Centre for Disease Control and Prevention (ECDC) and the European Food Safety Authority (EFSA).**

Close contacts with both ECDC and EFSA have been maintained throughout the lifespan of the One Health EJP. During the revision of the Strategic Research Agenda in 2018, both organisations have shared their needs, which led to the launch of JRPs and JIPs in the second internal call that will address at least some of these. In 2020, new stakeholders joined the EJP's Stakeholder Committee, thus allowing a close discussion on the domains that are of interest to them as well. In the last stage of the One Health EJP, dissemination efforts were the main activities and aimed to feed back the results and outcomes of the projects to these international stakeholders, as well as to the national and regional ones.



## **6. To promote and develop food safety research resources in the European Union by training, education and communication.**

The research findings of JRPs, JIPs and PhDs are continuously presented to the scientific community by designed yearly scientific meetings and workshops, beside the proper publications by scientists. Also training courses and short-term missions, staff exchanges and targeted training are organized to improve researchers' skills in new techniques.

### **1.1.4 Work performed during the reporting period (M61-M69) and main results achieved**

#### **1.1.4.1 WP1**

The Coordination Team (CT), consisting of the Coordinator, Scientific Coordinator and Support Team (ST), continued with the management of the One Health EJP by having weekly conference calls for the day-to-day management of the project. In 2023, regular videoconferences with Project Management Team (PMT) were organised (3 January, 21 March, 11 May, 4 July and 4 September). On the 23<sup>rd</sup>- 24<sup>th</sup> of March 2023, AGES hosted the annual SSB meeting in Vienna. In addition, the ST helped the WP5 Team in the organisation of the Stakeholders Conference (logistical and financial aspects), which took place from 19 to 21 June in Brussels. The CT was also responsible of the organization of the Final Meeting, the last event bringing together all kind of members of the consortium, in order to mark a final milestone. The Final meeting was held in Paris at the Ministry of Health on the 11<sup>th</sup> and 12<sup>th</sup> of September.

Regarding the financial and administrative follow-up of the OHEJP, the ST continued to coordinate and manage finances and the financial report of the year 5 as well as the Fifth Amendment to the Grant Agreement finalised on the 10<sup>th</sup> of May. The ST also managed to finalise the 2nd amendment to the Consortium Agreement. In addition, the CT together with the PMT prepared the periodic report and submitted it to REA on the 8<sup>th</sup> of June. A review meeting gathering the external monitors appointed by the REA, and the OHEJP WP Leaders was held on 12<sup>th</sup> July.

The Communications Team successfully continued to generate further impact by developing relationships between the One Health EJP and the identified audiences with on and offline activities. The team produced content for a strong, cohesive brand, and continued to develop a wide range of dissemination material to highlight the OHEJP outcomes and demonstrate impact. More specifically, some dissemination materials for the sixth year included: Project Impact Brochures for FULL-FORCE (M64), ARDIG (M65), MATRIX (M68) and an additional brochure for BeONE expected by the end of the Programme; branded interactive PDF versions of key documents "Analysis of outcomes and uptake of One Health EJP outputs by stakeholders", "Strategic Research and Innovation Agenda (SRIA)" and "Annual Report 2022" and "Final Report"; in addition to the regular Consortium and external newsletters, there were three short newsletters for promotion of the One Health EJP Conference 2023 for stakeholders and SRIA, and also a printed flyer to promote the SRIA at the Conference and Final Meeting. Furthermore, information on OHEJP events and outputs were also disseminated via external organisations' newsletters, including EFSA's Scientific Cooperation Newsletter and One Health Commission's One Health Happenings.

#### **1.1.4.2 WP2**

All the tasks of WP2 were completed by the end of Y5. In Y6 WP2 has continued to monitor relevant scientific developments and provided input for the strategy on sustainability developed in WP7. WP2 has helped actively in all OHEJP dissemination plans regarding the main outputs of the project during all these years. WP2 also supported the expertise to highlight the main strategic interactions that have been made with other projects/initiatives that assure the maintenance of OHEJP legacy.





#### 1.1.4.3 WP3

All scientific activities of the Joint Research Projects ended before this reporting period. In 2023, the last version of the final reports that the Project Leaders prepared at the end of 2022 were collected and served to feed into the One Health EJP Periodic Report Y5 and the 'Fifth periodic report on JRPs' (D3.21). The final JRP reports were submitted to external experts for evaluation following the same guidelines as for the first round JRP. The final reports plus the evaluation reports drafted by the experts were assembled in deliverable D3.20 'Final reports of 2<sup>nd</sup> call JRPs and evaluation reports'.

The WP3 team remained in close contact with the JRP Project Leaders to inform the governance boards (PMT, SSB, One Health Stakeholders meeting and planned Final Meeting) about the expected outcomes and impact of their projects. The WP3 Team also continued to register the publication and dissemination efforts of the JRP.

#### 1.1.4.4 WP4

WP4 has continued to support the JIPs, especially in the dissemination process. To further disseminate the results, all the JIPs and SimEx have been encouraged to present their outcome and impact at several meetings. Two dissemination webinars, initiated by WP4, with presentations and demonstrations of tools developed within the OHEJP have been targeted directly to potential hands-on users at institute level. In this way, the new methods, tools and guidelines have been disseminated within projects, between OHEJP partners and to scientists external to the OHEJP. The WP4 leader has also participated in the bilateral meetings with stakeholders and presented the JIP and SimEx outputs. The final reports and evaluations of the second call projects can be found in D4.28 "Final reports of 2<sup>nd</sup> call JIPs and evaluation reports". WP4 has also recruited external evaluators to the projects COVRIN and SimEx and the assessments are found in deliverable D4.31 "Final reports of JIP COVRIN and OHEJP exercise (SimEx) and evaluation reports".

#### 1.1.4.5 WP5

During Y6, the WP5 Science to Policy Translation team made the best use of the relationship with national stakeholders (representatives of Ministries represented in the Programme Owners Committee, POC) and with key EU stakeholders (ECDC and EFSA), as well as with other European (EEA, EMA) and international organisations (FAO, WOA, WHO-Euro). Effort was continued to identify interested parties traditionally not regarded as One Health EJP stakeholders, and to take contacts with them (private sector, NGOs), also in the light of the OHEJP Stakeholder Conference.

Dissemination activities by WP5 were particularly intense during Y6, as the One Health EJP approaches its landing phase. WP5 supported the uptake of One Health EJP's outcomes and deliverables by the stakeholders at all levels, highlighting also the impact that the solutions developed by the One Health EJP consortium had in the environmental, economic, industrial and societal domains. These WP5 activities complement dissemination activities by the Communications Team, by the Joint Research Projects (JRPs), and by the Joint integrated Projects (JIPs).

The 9<sup>th</sup> and last Targeted Report was distributed to the organisation of the Stakeholders Committee, containing targeted updates on the consortium, and of its scientific activities. Continuing with the Dissemination Workshop series, one last was offered during 2023, in addition to organising the 11<sup>th</sup> and last Stakeholders Committee Meetings (Task 5.1), and to updating the Outcome Inventory (Task 5.4). WP5 dissemination activities of the One Health EJP results were central in fostering sustainability, and advocated for the application of the One Health approach by policy makers (Task 5.4).

The main dissemination activity of Y6 was, however, the OHEJP Stakeholder Conference "Collaborating to face future One Health challenges in Europe" (Task 5.4), which brought together a wide range of



interested parties. This event was also an important forum to discuss the future of European One Health, and of the OHEJP.

The acknowledgment of the One Health EJP activities by stakeholders, demonstrate the effectiveness of the OHEJP work, and the success of the dissemination strategies used by WP5 over the past six years.

#### **1.1.4.6 WP6**

The WP6 team has continued to monitor the progress and successes of PhD students in collaboration with the communications team to highlight these successes via social media (i.e., Twitter & LinkedIn). Five PhD projects have now been completed, with the most recent ToxSauQMRA PhD project finishing in M64. A further 12 PhD students are currently under a Final Thesis Report evaluation, with a team of two external scientific reviewers and one PMT member forming the reviewer pipeline for D6.18, submitted in M66. In addition to these works, the WP6 team in collaboration with WP3 & 5 held a One Health EJP Dissemination Webinar on the 9<sup>th</sup> of June 2023, which brought together Joint Research Projects (JRP) from the three domains; these were: AIR-SAMPLING (foodborne zoonosis), BIOPIGEE (foodborne zoonosis), PARADISE (emerging threats), & WORLDCOM (antimicrobial resistance). The Webinar contributed to the dissemination of the work of these JRPs to a global audience, increasing the profile of One Health. The last of the short-term mission (STM) funded through the 2022 call took place in M63 to M65. The WP6 team collated reports from STMs conducted in 2022 and early 2023, to produce case studies and deliverable D6.20 - Report on Short Term Missions 2022. Deliverable D6.15 - Report on outputs of the short-term missions summarising the outputs of all short-term missions awarded between 2019 and 2023 has been prepared and submitted in M66. Furthermore, the WP6 team focused on the core deliverables and monitored the remaining PhD project completion, outcomes, and impacts until the end of the consortium in M69.

#### **1.1.4.7 WP7**

During the period M61-M69, WP7 managed the finalisation and dissemination of the One Health EJP Strategic Research and Innovation Agenda (SRIA). WP7 also worked on the preparation of the workshop on the institutionalization of the One Health, held as a side event with the One Health EJP stakeholders conference 2023: “Collaborating to face future One Health challenges in Europe”. Both events took place in the Museum of Natural Sciences in Brussels in June (19-22), 2023. The outcomes of the workshop have been reported in a document on achievement of MS101 “Roadmap for the institutionalization of One Health”. Regarding M103, “Road map for making the collaborations between One Health partners sustainable”, this work was addressed as part of the SRIA, in which the OHEJP network of partners is described and a strategy for its sustainability is given, in particular in relation to the important role of the MedVetNet Association in maintaining and enlarging the network of One Health scientists and experts.

## **1.2 Progress beyond the state of the art, expected results until the end of the project and potential impacts**

The final months of the project (M61 to 69) are mainly dedicated to the prospective aspects of the One Health EJP. Indeed, the continued efforts of the consortium to disseminate the results are of significant importance.

Firstly, through the organisation of the One Health Stakeholders Conference (19-21 June 2023 in Brussels) the One Health EJP has reached out to both already identified and new stakeholders (ECDC, EFSA, DG AGRI, DG Health, DG ENV, EMA, EEA, the national authorities, consumer organizations, the industry). Such events enable to further expand and consolidate the strong One Health network,



facilitating the dissemination of the project outcomes. This is necessary for the sustainability of the OHEJP and to achieve significant impact.

Secondly, efforts are being made to ensure:

- Bilateral discussions with stakeholders to further promote the uptake of relevant outcomes (see further).
- Continuation of the OHEJP through potential European funding: large-scale European projects (under Horizon Europe or the FP10), CSA or equivalent.
- Work by the MedVetNet Association to conserve and advocate OHEJP results for more sustainable use, incl. initiatives like 'One Health module for IPA beneficiaries' (IPA: Instrument for the Pre-accession Assistance); online workshop 30 January, and in person workshop in Montenegro, 16 & 17 May.

Specific cooperation initiatives in the context of sustainability, dissemination and exploitation:

- Participation in the online 'Expert Workshop on Cross Sectoral Evidence Based Governance for One Health', 26 May, organized by the Commission services together with the Scientific Advisory Mechanism.
- Participation in the CVO-CMO meeting organized by the Swedish Presidency, 19 June.
- Participation in Advisory Forum in Stockholm, 28 June.
- Having bilateral discussions with EFSA, ECDC, EEA, JRC, DG SANTE, FAO, WHO-Euro to envisage what the future of the One Health EJP could be.



## 2 WP1 - Coordination and Management

### 2.1 Work carried out to date

#### 2.1.1 Task 1.1: Management of EC contractual obligations

The Coordination Team (CT: WP1 Leader and deputy leader, plus their staff) supervised the preparation and submission of the deliverables due from M61 to M69 to the Research Executive Agency (REA). At the beginning of the period, the CT carried out the annual technical and financial reporting. A first version of the Periodic Report was submitted on June 7, 2023. In the external review procedure framework, a review meeting has been organized on 12 July 2023, giving occasion to the PMT to present the activities of all the WPs and to respond to the reviewers' questions.

Furthermore, The ST has also prepared the fifth Amendment to the Grant Agreement to update the Annexes 1 and 2 of the GA and to notify the termination of beneficiaries P24-NNK and P38-IISPV, who did not wish to continue to be part of the consortium during the extended period in 2023. The European Commission approved the Amendment to the Grant Agreement (AMD-773830-78) on 7 June 2023.

Consequently to the termination from the Consortium of beneficiaries P24-NNK and P38-IISPV, two Termination Reports (TERA) have been launched and managed by the ST.

The ST also managed the finalisation of the 2nd amendment to the Consortium Agreement (CA) to update:

- The financial provisions by adjusting the resulting co-funding rate for co-funded activities, in accordance with the reality of costs declared by the consortium members over the first four years. Indeed, the co-funding rate was initially set to 44%, but actual expenses declared after four years of implementation show that it is rather 43,39%. The final co-funding rate for co-funded activities will be known at the end of the OHEJP when all costs have been reported.
- Annex 1 "Background included", to specify the access rights per participant for each of the 2nd round projects, and possibly the selected PhDs since version 1 was released.
- Annex 6 "CA detailed budget per partner and per activity" to reflect the EU contribution each partner is expected to receive until the end of the project in September 2023.

To report the activities undertaken from M61 to M69, the CT and the PMT have worked jointly on this Summary Progress Report (SPR) for the sixth year. The ST delivered a first draft of the document on 26th July to the REA, in order to discuss it with the REA Steering group at an online meeting planned in September 2023.

In addition, the ST started the preparation of the Periodic Report for Y6 and of the Final Report to be launched after the end of the OHEJP on 30 September 2023.

#### 2.1.2 Task 1.2: Project management

##### 2.1.2.1 Overall management aspects

The Coordination Team (CT) provided an effective management support to ensure the quality of the work both in terms of results and timing, and to manage the relationships between partners and to ensure effective internal communication. The CT has organised, on a weekly basis, videoconferences to monitor the project's progress and to ensure the timely implementation of the AWP year 6. When a significant issue arose, the CT liaised with the Research Executive Agency (REA) to inform the Project Officers (PO) in the first place and request some additional time for the submission of a deliverable or a change of content of Annex 1 of the Grant Agreement whenever needed and relevant. The CT and



PMT held regular videoconferences to monitor the progress of the activities per work package (WP). The PMT reviewed, commented, and provided relevant guidance and inputs on important WP documents, and validated the deliverables which were prepared and submitted during this period.

### **2.1.2.2 Implementation of the dissemination and legacy strategy**

The efforts to implement an effective dissemination and legacy strategy has been pursued until the end of the project in September 2023. The One Health EJP collaborators involved in the research projects, integrative activities and PhD, together with the PMT and their collaborators, pursued their effort in disseminating a selection of the scientific outcomes to specific audiences.

The objective of the dissemination activities is to publicise the outputs of the research and integrative efforts, and to facilitate their uptake by other researchers, diagnostic and reference laboratories, risk assessors, risk managers and policymakers, at national, EU, and international levels. As such, these deliverables of the One Health EJP will be sustained and the One Health EJP will have gained impact. Please note that all deliverables are openly accessible on the One Health EJP website in the '[One Health Outcome Inventory](#)'.

This dissemination approach has been successfully implemented during the One Health EJP Stakeholders Conference on 19-21 June 2023 and has been pursued until the Final meeting in Paris.

#### **2.1.2.2.1 Bilateral discussions**

Bilateral discussions are an important step of the dissemination and legacy strategy as they aim to allow 7 key targeted stakeholders (SH), i.e. EC-DGs SANTE, ECDC, EFSA, EEA, JRC, WHO-EURO and FAO, to be acquainted with some of the main results produced by the OHEJP and to consider how to utilise them in the future. These discussions can also form the basis for identifying new opportunities for the next step in One Health cooperation between the One Health EJP partners on food safety. Bilateral discussions are a way to encourage Stakeholders to take up outputs/outcomes produced by the One Health EJP; it is a long process that cannot be fully achieved before the end of the project. Undertaking bilateral discussions have contributed to demonstrate that the OHEJP gains impact, and that the OHEJP has put considerable effort to promote the uptake of its results by SHs during its life phase and beyond.

The PMT members set up a Working Group to prepare the bilateral discussions This Working Group gathered on 5 and 16 December 2022 to establish the procedure for selection of the main outcomes to be proposed to the 9 SHs as cited above.

The full process of bilateral discussions has been achieved at the end of the summer period (from 23<sup>rd</sup> August to 20<sup>th</sup> September) according to the calendar below:

- Bilateral meeting with EFSA – 28 June 2023, Stockholm
- Bilateral meeting with ECDC – 23 August 2023, online
- Bilateral meeting with EEA – 29 August 2023, online
- Bilateral meeting with FAO – 31 August 2023, online
- Bilateral meeting with EC JRC – 6 September 2023, online
- Bilateral meeting with DG Santé – 7 September 2023, online
- Bilateral meeting with WHO Euro – 20 September 2023, online

Outcomes of the bilateral discussions were presented at the final meeting of the OHEJP taking place on 11-12 September 2023. Among them, JRC and the Med-Vet-Net association (MVNA) will sign a collaboration agreement; DG SANTE will consider how the outputs of the One Health EJP can be advertise through them; EEA, EFSA and ECDC will invite the MVNA at one of their next cross agencies task force meeting, in order to consider how to find further collaborations between EU agencies and



the MVNA; Finally WHO and FAO will adapt and use part of the tools produced by the integrative projects, such as assessing the “One Healthness” of countries or the capacities of the laboratories to undertake surveillance and detection of pathogens.

### 2.1.3 Task 1.3: Organisation of EJP management and governance meetings

The ST ensured the organisation of all the project governance body meetings in regards to the identified planning:

- Four PMT online meetings have been organised since the beginning of the year (3 January, 21 March, 11 May and 4 July). The last PMT meeting is scheduled on 4 September.
- The 10<sup>th</sup> SSB meeting was hosted by AGES in Vienna on the 23<sup>rd</sup>- 24<sup>th</sup> of March 2023. At this meeting, the Consortium continued an effective process of disseminating the outcomes of the EJP One Health to demonstrate its impact at the national level. In addition, the sustainability of the OHEJP has been discussed in depth, supported by a presentation of the [SRIA](#) and discussion on the sustainability plan within the MedVetNet Association.
- The CT was involved in the logistical aspects of the [One Health Stakeholders Conference](#) in Brussels on 19 -21 June, as a support to WP5 and the Workshop on the institutionalization of One Health, in support of WP7.
- The ST has coordinated the preparation of the [Final meeting](#) The PMT members have been involved in the Working group (WG) to set up the [Agenda of the meeting](#), and prepare different sessions of the meeting.

#### 2.1.3.1 OHEJP Final meeting

The final meeting of the OHEJP was held on Monday 11th (afternoon) and Tuesday 12th (morning) September 2023 in the premises of the French Ministry of Health and Prevention.

This meeting, hosted by ANSES, provided a unique opportunity to bring together all partners and collaborators for a special moment of fellowship. It allowed to highlight the results achieved over the last five years in the fields of zoonoses, antimicrobial resistance and emerging threats research and to demonstrate the progress made towards the sustainability of the OHEJP. Through discussions and presentations, there was evidence that the One Health concept is now part of the DNA of each consortium partner. With the participation of key stakeholders of the OHEJP (EFSA, ECDC, EEA), we drew a picture of the legacy of the OHEJP and highlighted the future perspectives of the consortium.

The Final Meeting sessions can be viewed as videos on [YouTube](#) and the presentations are available as PDFs to download [here](#).





#### 2.1.4 Task 1.4: Communication tools

The Communications Team have strengthened the One Health EJP brand and communications outputs for key One Health EJP events held in 2023, including the Dissemination Webinars by WP4 ([New Tools for Surveillance and Risk Assessment](#)) and WP6 ([New Tools for Detection and Surveillance](#)), the [One Health EJP Conference 2023 for stakeholders](#), the [Workshop on Institutionalisation of One Health](#), and the provided a webinar and contributed to a panel discussion for the 4th Dissemination Workshop (Lessons learnt and legacy of the One Health EJP). They provided communications support for the [Final Meeting](#) held in September 2023. The Communications Team have supported all OHEJP events using the following activities: developing promotional social media campaigns, posting information on the website, including articles in our newsletters, creating branded flyers and programmes, creating bespoke logos for local event organisers, and sending information to external organisations (e.g., EFSA and One Health Commission) for inclusion in their newsletters. The Communications Team has provided an extensive list of support tools, before, during and after each event that provides delegates with a branded and professional experience.

The Communications Team continued their work to improve the dissemination of outcomes, including the overarching One Health EJP deliverables, Publications, WP6 outcomes, Project outputs and WP5 activities etc. Project Leaders have been supported in disseminating their outcomes, especially through the creation of Project Impact Brochures. These are interactive pdf brochures designed to appeal to a wide audience, with brochures produced in sixth year for FULL-FORCE (M64), ARDIG (M65), MATRIX (M68) found on the [Project Impact Brochure webpage](#), and an additional one for BeONE for release in M70. A social media campaign during the sixth year has focused on disseminating JIP and JRP main outputs and outcomes, which include brochures, tools, publications, and OHEJP-devised solutions.

The previous expansion of the website has enabled continued collation of key dissemination documents and tools, such as the Project Impact Brochures, Science to Policy Translation Reports, [One Health Outcome Inventory](#), [Data Management Plans](#), [“Analysis of outcomes and uptake of One Health EJP outputs by stakeholders”](#) and the [“Strategic and Research Innovation Agenda \(SRIA\)”](#) and the key reports: [Annual Report 2022](#) and [Final Report 2023](#). The website shares information about OHEJP events, outcomes and other Consortium news through the [Latest News](#) and [One Health EJP blog](#) webpages, which are written in a less formal way to appeal to wider audiences, including non-scientists. For example, the blog campaign for “OHEJP PhD life” posts described a day in the life of the



OHEJP PhD students for readers to better understand their research work, with two more student blog posts shared in the sixth year (M63 and M66).

The [website](#) is the main information hub of the OHEJP, and redevelopment/redesign work has been completed in the sixth year. The Communications Team has also updated all the website content during the sixth year, to ensure that it is accurate and complete. The Communications Team worked with an external web developer to ensure that the security and stability of the website will be maintained beyond the length of the programme. Website sustainability has been a key focus since the site will exist for five years after the end of the One Health EJP (in September 2023). This involves collaboration with the Med-Vet-Net Association to organise that management of the website for transfer to their organisation during M69/M70, to ensure the legacy of our research remains available once the One Health EJP ends.

The One Health EJP social media channels have been an important information hub for our online audiences and have continued to grow in the sixth year, since we now have over 3700 followers on LinkedIn and over 4900 followers on Twitter (as of September 2023). The Communications Team has supported stakeholders spread their messages to facilitate sustainability, shared key One Health EJP news and information, celebrated the achievements of PhD students under the Doctoral Programme and generally worked to increase the number of social media posts disseminated per month.

The deliverable D1.22: Manuscript submission to peer-reviewed journal of “The One Health European Joint Programme (OHEJP): successes of a One Health approach” has been reviewed by Project Management Team and a draft version has been completed in M69 to be ready for journal submission after M69. The deliverable D1.20: “Annual report for stakeholders for the fifth year” was completed in M67 and was widely disseminated to all OHEJP audiences during M68. It detailed the key objectives of the OHEJP, and the progress made by WPs, JRPs, JIPs, PhD projects and other activities, including, but not limited to dissemination and communications. The deliverable D1.20: “Executive Summary and Final report for stakeholders” was completed for its dissemination in M69. The deliverables D1.19: “Annual report on the internal and external newsletter produced fifth and sixth years” and D 1.21: “Report on sustainability of website” were completed in M69.

After the Communications Team contributed to updating the “Dissemination Information Pack” in the fourth year, its beneficial impacts continued to be evident in the sixth year. Consortium members have been better supported in understanding how to upload information to the OHEJP community on Zenodo (a sustainable open access repository) and apply the Publications Policy to their research outcomes. Consortium newsletters have been sent out on a quarterly basis in M62, M65, and M68. These newsletters were targeted to Consortium members only and were disseminated to internal OHEJP mailing lists. These newsletters were also uploaded to the [Newsletters webpage](#) on the OHEJP website.

The final external newsletter published in M65 continued to use the re-designed style created in the fourth year, which has improved engagement with external audiences through its branded design. External newsletters were targeted to those outside of the OHEJP consortium and those who have signed up to the OHEJP mailing list. The newsletters were sent to the external and internal mailing lists, shared on social media and uploaded to the OHEJP website on the [Newsletters webpage](#).

A substantial role in dissemination of deliverables, outcomes and data has been undertaken by the Communications Team in the sixth year. The Communications team have worked closely with FULL-FORCE, ARDIG, MATRIX and BeONE project leaders to create interactive PDF documents, described as Project Impact brochures, which highlight the key outcomes of each project. FULL-FORCE Project Brochure became available online in M64 (April 2023), ARDIG in M65 (May 2023) and MATRIX for M68 (August 2023). An additional Project Impact Brochures will be produced for BeONE for release in M70. The Communications Team worked with WP3 and WP4 to produce the promotional document “Analysis of outcomes and uptake of One Health EJP outputs by stakeholders” which has been uploaded the website and disseminated on social media during the sixth year. The Communications





Team also worked with WP7 to produce the branded version of the SRIA and an additional flyer summarising the SRIA content. Information on these branded documents have been shared in the newsletters and on a [SRIA blog post](#).

The Communications Team members have presented at the governance and review meetings to update and demonstrate what the Communications Team have achieved, in addition to highlighting the impact and sustainability of the OHEJP outcomes beyond the end of the OHEJP. Overall, effective communication of OHEJP progress, completion of research, news, events, and Education and Training activities has created a European One Health community of scientists who are experts in the One Health Field.

### 2.1.5 Task 1.5 Ethics

The Y5 and final Ethics Report was submitted in December 2022 (D1.27). No further actions were needed.

### 2.1.6 Task 1.6 Declaration of Co-fund

N/A

## 2.2 Deliverables and Milestones

### 2.2.1 Deliverables

Del. Ref.	Deliverable title	Est. Del. Date	Actual Del. Date
D1.19	Annual report on the internal and external newsletter produced during the fifth and sixth year	M69	M69
D1.20	Complete version of annual report for stakeholders n°5	M67	M68
D1.21	Report on sustainability of website	M69	M69
D1.22	Publication "Achievements of the One Health European Joint Programme (OHEJP), 2018-2023"	M67	M69
D1.31	Summary progress report year 6	M69	M69
D1.30	Final report for stakeholders	M68	M69

### 2.2.2 Milestones

Mil. Ref.	Milestone title	Expected Delivery/ Achievement Month	Notification
MS11	SSB Meeting n°10	M63	SSB Meeting n°10 was hosted by AGES in Vienna on 23-24 March 2023.



### **3 WP2 – Integrative strategic research agenda**

#### **3.1 Work carried out to date**

##### **3.1.1 Task 2.1: Development of the SRA**

Task completed in Y5

##### **3.1.2 Task 2.2: Strategic interactions with EU projects and initiatives**

Task completed in Y5

#### **3.2 Deliverables and Milestones**

##### **3.2.1 Deliverables**

N/A

##### **3.2.2 Milestones**

N/A



## 4 WP3 - Joint research projects

### 4.1 Work carried out to date

In 2023, there were no more scientific activities in any of the JRP. However, the final reporting of these JRP was finalized, as well as the external evaluation of the final JRP reports.

#### 4.1.1 Task 3.1: Drawing up of guidelines for submission, selection and evaluation of JRP proposals as well as request of extension of accepted JRPs.

N/A

#### 4.1.2 Task 3.2: Supervision of the JRP in the first round of projects.

N/A

#### 4.1.3 Task 3.3: Organisation of a second round of projects and their supervision.

In January 2023, the last version of the final reports that the Project Leaders prepared at the end of 2022 were collected and served to feed into the One Health EJP Periodic Report Y5 and the 'Fifth periodic report on JRPs' (D3.21). The final JRP reports were submitted to external experts for evaluation following the same guidelines as for the first round JRP. The final reports plus the evaluation reports drafted by the experts were assembled in deliverable D3.20 'Final reports of 2nd call JRPs and evaluation reports'.

All the JRP projects were finalized before the end of 2022. In 2023, WP3 has followed-up the evaluation process according to the D3.9 guidelines ([link](#)). According to these guidelines, each project report had to be evaluated by 3 experts (two external scientific experts and one POC members). Eight scientific experts were contacted that have already reviewed the project full proposals, as well as 22 new scientific experts and 20 POC members. At the end, 5 full proposal evaluators, 8 new scientific evaluators and 8 POC members were selected. The projects except one were all evaluated on time. Only the DISCoVeR project was evaluated by 2 persons. After receiving the evaluations, they were anonymized and included in an official deliverable: D3.20, report on evaluation of finalized JRPs (second round): [link](#). The evaluators' comments and recommendation were also communicated to the Project Leaders through individual projects evaluation reports.

WP3 also monitored the publications upload to Zenodo, and reported the publications of the JIP/JRP and PhDs to the EU Participant Portal. WP3 sent reminders to PLs to emphasize the importance of Open Access and to upload the articles to the chosen repository (Zenodo). In collaboration with the Comms Team, WP3 ensured that all the publications were mentioned on the publications page of the OHEJP website ([link](#)).

#### 4.1.4 Task 3.4: Organisation of annual scientific meetings (ASM) where results from JRP are presented.

N/A



## 4.2 Deliverables and Milestones

### 4.2.1 Deliverables

Del. Rel. No	Deliverable title	Est. Del. date	Actual Del. Date
D3.20	Final reports of 2nd call JRPs and evaluation reports	M65	M65
D3.21	5th periodic report on JRPs	M63	M63

### 4.2.2 Milestones

N/A



## 5 WP4 - Joint integrative projects

### 5.1 Work carried out to date

#### 5.1.1 Task 4.1: Development of procedures and guidelines for submission and selection of JIP proposals, and for reporting and evaluation

The deliverable D4.19 has been updated to also include the evaluation criteria for SimEx and modified evaluation templates. The new name is D4.19 Guidelines for evaluation of final Joint Integrative Project reports and SimEx Project report and is found on Zenodo.

#### 5.1.2 Task 4.2: Supervision of JIP

The second call JIPs finished and delivered their final reports in M60. During the first months of Y6 external evaluators were recruited. For each of the projects one expert that had already evaluated the original proposal, one new scientific expert and one OHEJP Programme Owners Committee (POC) representative were recruited. The project final reports and the evaluation reports can be found in [D4.28 Final reports of 2<sup>nd</sup> call JIPs and evaluation reports](#).

The JIP COVRIN ended on the 31<sup>st</sup> of March Y6. The final meeting of the project was held already in M60 in Teramo, Italy. The WP4 Leader attended the meeting online. During the final months of the project the COVRIN final report was drafted and commented on by WP4 and the report was delivered on time.

Evaluators were recruited to assess the COVRIN project. One of the evaluators was a POC representative and the other two were scientific experts. The final report and the external evaluations are summarized and included in [D4.31 Final reports of JIP COVRIN and OHEJP exercise \(SimEx\) and evaluation reports](#).

For all projects an individual project evaluation report was created with the anonymized evaluators' comments and recommendations. This was sent to the project PL for further dissemination within the project.

##### 5.1.2.1 Summary of JIP06-COVRIN

Research and integration activities in the One Health EJP COVRIN project, have achieved the two main overall operational objectives: A) to identify drivers for the emergence and spread of SARS-CoV-2, B) to generate data and build models for risk assessment of SARS-CoV-2.

In the research area of work package 1, Detection of SARS-CoV-2 in animal reservoirs and the environment, data of SARS-CoV-2 genome testing were shared, and immunoassays methodologies were shared and harmonized. A ring-trial of tests was completed, with recommendations implemented in national and international reference laboratories allowing assessment of potential hosts of SARS-CoV-2. In the tasks on assessment of bioavailability, association between detection of the virus genome, and its ability to be infectious was assessed providing crucial information for risk assessment.

In work package 2 on SARS-CoV-2 characterization, genome analyses and next generation sequencing of detected isolates and metagenomic sequencing of different samples were undertaken. Surveys were executed to make a summary description of protocols and to make an overview of the key steps of the bioinformatics analyses. A bioinformatics ring trial was undertaken to harmonize bioinformatics pipelines. Regarding in vitro and ex vivo biological characterization of circulating SARS-CoV-2 strains, cell line models have been collated and shared between partners. These will allow better analyses of virus traits related to zoonotic and/or reverse zoonotic transmission.



In work package 3 on SARS-CoV-2 risk assessment and surveillance, formats and procedures for sampling and surveillance in wildlife, livestock and pets and the environment were evaluated and reported. These were augmented by workshops to involve partners in the surveillance data collection. A review of surveillance activities in the different countries was produced. Risk factors for virus transmission in wildlife reservoirs, food producing animals and the environment are being studied and analyses of transmissions in pets were produced. An overview with a One Health perspective of models and parameters to assess transmission in animals was reported.

In work package 4 of COVRIN on coronavirus preparedness, detection of virus from different wildlife species were performed. A report on relevant sample types and hot spots for coronavirus sampling was produced to evaluate the impact of ecological factors and interventions. These outputs are aimed at identification of drivers of virus emergence through evaluation of phylodynamic and cross-species interactions with focus on zoonotic and reverse zoonotic aspects and adaptations. Capacity built, data generated, and research outcomes will be used in future national programmes and collaborative networks to develop control strategies, intervention strategies and prevention.

#### **5.1.2.2 Summary of the OHEJP exercise (SimEx)**

Zoonotic foodborne outbreaks continue to occur every year, evidencing the need for the public health (PH), animal health (AH) and food safety (FS) authorities to embrace a One Health (OH) approach. Simulated response exercises are useful for the improvement of crisis management plans, providing an opportunity to test practical methodologies in a controlled environment. The One Health European Joint Programme simulation exercise aimed at practicing the OH capability, capacity and interoperability across the three OH sectors within eleven different European countries. The simulation exercise replicated a national *Salmonella* outbreak investigation, involving both the food chain and the raw pet feed industry. The scenario includes the use of a tracing tool, which was well received by the participants. Evaluation of the national exercises identified common gaps and strengths in current OH strategies, from which recommendations were produced for any country aiming to improve their OH strategy. The recommendations are aimed to support policy makers achieve a successful and robust OH strategy enabling a rapid, effective response to future zoonotic foodborne outbreaks. Additionally, the need for future OH focused exercises was identified. Therefore a set of recommendations have been provided to assist future development.

#### **5.1.2.3 Dissemination activities**

During M61-69 the results from all the JIPs have been further disseminated. Presentations of JIPs have been held at the SSB Meeting in Vienna, Austria on the 23<sup>rd</sup>-24<sup>th</sup> of March, at the Stakeholders Conference in Brussels on the 19<sup>th</sup>-21<sup>st</sup> of June and at the Workshop on the Institutionalisation of the One Health on the 21<sup>st</sup> of June 2023.

In addition to these events, the OHEJP and the JIP outcomes were presented at the European Chief Veterinary Officers Meeting in Brussels on the 19<sup>th</sup> of June with the Working Party on Animals and Veterinary Questions organized by the Council of the European Union under the Swedish presidency. The first day of this meeting was dedicated to One Health and was a joint meeting with Central Medical Officers. The aim was to strengthen One Health cross sectorial collaboration to better prevent, predict, detect and respond to zoonotic health threats. Speakers from WOA, WHO, EFSA, ECDC and the EU Commission presented existing collaborations, activities and priorities. Best practices in the field of One Health cross sectorial collaboration were presented by Member States delegations. The presentation from the OHEJP demonstrated well the need for harmonized methods and aligned work practices to support a One Health approach between sectors.

The WP4 Team has continued to provide support to the JIPs by providing templates and instructions as well as giving feedback on the drafted versions of the presentations for meetings and conferences.



In this way the JIPs have been able to target the specific audiences. The recurring meetings to harmonize the work between WP3, 4 and 6 have continued. In addition, WP4 has contributed to the preparatory work and organisation of the SSB Meeting in Vienna, the Stakeholders Conference, and the Workshop on Institutionalisation in Brussels as well as the Final Meeting in Paris. There have been regular meetings several times a month to prepare these meetings. WP4 has also contributed with several presentations and co-chairing at the meetings.

All projects have also been reminded about and encouraged to follow the updated procedures for scientific publishing, dissemination, and communication. All publications from JIPs so far are uploaded on Zenodo and it has been verified that they agree with the [OHEJP Scientific Publication Policy](#).

Two dissemination webinars, initiated by WP4, have been arranged in collaboration with WP3 and WP6. These webinars were targeted directly to those who will use the tools at the institutional level. In this way, the new methods, tools and guidelines have been disseminated within projects, between OHEJP partners and to scientists external to the OHEJP.

The first dissemination webinar titled *‘New Tools for Surveillance and Risk Assessment’* was organized and hosted by WP4 and was held on the 28<sup>th</sup> of March. The webinar brought together speakers from both Joint Research Projects (JRP) and Joint Integrative Projects (JIP):

Project	Tool	Presenter
JIP MATRIX	<a href="#">MATRIX OH-EpiCap Tool</a> : An evaluation tool for One Health epidemiological surveillance capacities and capabilities.	Dr Joaquin Prada, University of Surrey
JRP BeONE	<a href="#">BeONE ReporTree</a> : a surveillance-oriented tool to strengthen the linkage between pathogen genetic clusters and epidemiological data.	Dr Verónica Mixão, National Institute of Health Doutor Ricardo Jorge (INSA)
JRP TELE-Vir	<a href="#">INSaFLU-TELEVIR</a> : an open web-based bioinformatics suite for virus metagenomic detection and routine genomic surveillance.	Dr João Dourado Santos, National Institute of Health Doutor Ricardo Jorge (INSA)
JIP CARE	The <a href="#">CARE collection</a> of foodborne bacteria and <a href="#">rStrainSelect</a> , a R-tool for strain selection.	Dr Michel Yves Mistou, National Research Institute for Agriculture, Food and Environment (INRAE); Laurent Guillier, French Agency for Food, Environmental and Occupational Health & Safety (ANSES)

The webinar was chaired by the WP4 leader, Professor Karin Artursson from the National Veterinary Institute (SVA) of Sweden. For this event, the OHEJP Communications Team created a [webpage](#) with information about the speakers, the tools to be presented and the link to the registration form. In addition, the Communication Team published regular reminders about the webinar on social media. The webinar attracted 300 registered participants from 50 countries. In the end about 120 people attended the webinar, but afterwards there was a big interest in receiving the recording of the webinar and the presentations.

The demographic data on the attendants showed that participation was high among European countries, with the highest attendance rate from Denmark, Finland, France, Germany, Italy, Norway, Portugal, Sweden and the United Kingdom and with some representatives from Austria, Egypt, Greece,



Hungary, Iran, Ireland, Latvia, Lithuania, North Macedonia, South Africa, Switzerland and Ukraine. Furthermore, sectors including Animal Health (n = 56), Public Health (n = 58), Food Safety (n = 56), One Health (n = 68), Environmental Health (n = 12) and Ecosystem Health (n = 6) were represented in the audience, confirming that the webinar targeted a One Health audience. See also figure 1.

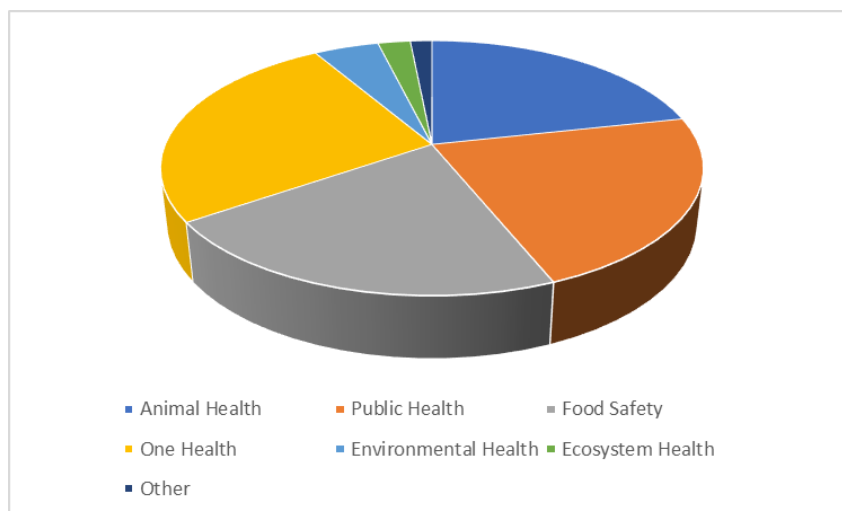


Figure 1: Representation of sectors at the first dissemination webinar.

Among the attendants several OHEJP partner institutes were represented as well as Academia, Competent Authorities, Governmental institutions and OHEJP Stakeholders.

The second dissemination webinar was titled '*New tools for Detection and Surveillance*' and was organized and hosted by WP6 on the 9<sup>th</sup> of June. See section 7.1.2.

### 5.1.3 Task 4.3: Integrative support

By now several tools produced in the JIPs have been taken up by the Surveillance and Information Sharing Operational Tool (SIS OT), developed by the Tripartite. The discussions with the Tripartite for the possible inclusion of additional tools have been performed directly between the JIPs and the Tripartite.

The dissemination webinars presented above is another integrative activity, as are the presentations at the different meetings (e.g., the SSB Meeting in Vienna, the Stakeholders Conference and Institutionalisation workshop in Brussels).

A set of bilateral discussions with the OHEJP main Stakeholders was performed during M 66-69 as described in section 2.1.2.2.1 in this report. JIP tools, guidelines and outcomes, relevant for the different Stakeholders, were identified (in advance), presented and discussed at these meetings. The needs and possibilities to implement the results varies between Stakeholders. Possible areas for taking the results further have been identified and follow-up activities initiated. Contact persons for each JIP have been provided as well of a list with direct links and contacts for the most relevant tools according to the discussions.

In addition, there have been several requests for the SimEx scenario, to be used as a basis for new exercises in various institutes.





#### 5.1.4 Task 4.4: Organisation of call for additional JIPs for the period Y3-Y5

N/A

#### 5.1.5 Task 4.5: Open data management

Each JRP and JIP project has been appointed a DMP Leader who followed-up the implementation of the Data Management Plan.

For the first round projects, DMP Leaders filled in DMP templates. By the end of the project, the final versions of the DMPs were uploaded to Zenodo.

The second round projects were managed by appointed DMP Leaders as well. An online tool (CDP tool) was designed and made available to facilitate the process. A DMP Committee was created; it was composed of six members of the PMT and one project member. The DMP Committee facilitated the process by providing guidance and evaluating the DMPs on a regular basis. All DMPs were evaluated, updated and made available on Zenodo and through the OHEJP website: [link](#).

An overarching DMP was created in the CDP template as well. The objective of this document was to capture all relevant information produced by the different overarching OHEJP Work packages during the lifetime of OHEJP and that was not included in the official deliverables handed over to the Research Executive Agency. It provides information about the OHEJP website (link, contact, etc.), the OHEJP community on Zenodo, and other surveys and inventories.

#### 5.1.6 Task 4.6: OHEJP exercise (SimEx)

The OHEJP Simulation exercise, SimEx presented their final report in M63. Since the SimEx was a task within WP4 the final report was a deliverable, [D4.30 Report on the OHEJP exercise \(SimEx\) – planning, conduction and evaluation](#). An external assessment of SimEx was performed. An assessment protocol was produced with the input from the SimEx Steering Board. The protocol is included in [D4.19 Guidelines for evaluation of final Joint Integrative Project reports and SimEx Project report](#). As for the JIPs three external evaluators were recruited for the SimEx evaluation. The three evaluators were scientific experts in the fields of animal public health, outbreak investigation and crisis management. The results from the external evaluation are included in [D4.31 Final reports of JIP COVRIN and OHEJP exercise \(SimEx\) and evaluation reports](#). The outcome of SimEx is also presented in a publication ([A multi-country One Health foodborne outbreak simulation exercise: cross-sectoral cooperation, data sharing and communication](#)) in the scientific journal 'Frontiers in Public Health'. After publication, the final report from SimEx (D4.30) was updated and the updated version was uploaded on Zenodo.

To further evaluate how SimEx was perceived by participants from different sectors and other aspects, an in-depth analysis of SimEx was performed. The results from this analysis were presented at the OHEJP Final Meeting in Paris and can also be found as an appendix to the [D4.31 Final reports of JIP COVRIN and OHEJP exercise \(SimEx\) and evaluation reports](#).

The SimEx scenario and the set-up of the exercise have been requested both by several partner institutes that for one reason or another did not participate in the exercise and by institutes outside the OHEJP and will be used for further exercises. The documents are available together with the final report from SimEx (D4.30) on Zenodo.

The [Data Management Plan](#) for SimEx can be found on Zenodo.



## 5.1 Deliverables and Milestones

### 5.1.2 Deliverables

Del. Rel. No	Deliverable title	Est. Del. date	Actual Del. Date
D4.28	Final reports of 2nd call JIPs and evaluation reports	M65	M65
D4.29	5th periodic report on JIPs	M63	M63
D4.30	Report on the OHEJP exercise SimEx on the OHEJP exercise SimEx - planning and conduction	M63	M63
D4.31	Final reports of JIP COVRIN and OHEJP exercise (SimEx) and evaluation report	M66	M66

### 5.1.3 Milestones

N/A



## 6 WP5 - Science to Policy translation to stakeholders

### 6.1 Work carried out to date

In the five previous years (2018-2022) solid links were established with Key EU Stakeholders (ECDC, EFSA) and other European and international stakeholders (EEA, EMA, FAO, WOA, WHO/EURO). During the sixth year (2023, M61-69) interaction with the stakeholders continued, especially in the form of targeted dissemination, which also included national stakeholders (representatives of ministries of authority, represented in the POC).

#### 6.1.2 Task 5.1: Identification of the stakeholders and establishment of communication links

##### The Stakeholders Committee

Exchange with contact officers from the stakeholders' organisations continued to be very good. The Stakeholders Committee covers the whole One Health spectrum (human-animal-environment), at the European as well as international level. The Stakeholders Committee is composed of the key EU Stakeholders, ECDC and EFSA, the European Environment Agency (EEA), the European Medicines Agency (EMA), as well as the Food and Agriculture Organization of the United Nations (FAO), the World Organisation for Animal Health (WOAH), and the World Health Organization regional office for Europe (WHO/EURO).

Communication with stakeholders was active by email, on the One Health EJP website, and by web-meetings. One of the major instrument is the Stakeholders Committee meeting (SCM).

##### The Stakeholders Committee Meetings (SCM)

The 10<sup>th</sup> SCM took place on the 22<sup>nd</sup> of November 2022 at the Public Health Agency of Sweden (FoHM) as a hybrid event. It was attended by representatives of ECDC, EFSA, EEA, EMA, FAO, WOA, WHO/EURO, and the EU-funded project JPI-AMR, and also included observer guests from REA and DG-AGRI.

The discussion focused on the analysis of outcomes and uptake of One Health EJP's outputs by stakeholders. The meeting was also a possibility to collect feedback from the stakeholders on the Strategic Research and Innovation Agenda (SRIA), and discuss the sustainability of the OHEJP in general. Upcoming meetings and events of the OHEJP were disseminated, including the Stakeholder Conference (Task 5.4), the workshop on institutionalisation of One Health (WP7 task), and the bilateral discussions (WP1 Task).

The 11<sup>th</sup> and last SCM took place in September 2023, short before the end of the OHEJP, as an online meeting. This was the last occasion to wholeheartedly thank the stakeholders for their support over the years, and to discuss the future of One Health collaboration and the role of stakeholders in post-OHEJP activities.

##### Interaction with other interested parties not included in the Stakeholders Committee

As the One Health approach evolves integrating more disciplines, it was deemed relevant of the OHEJP to establish connections with actors not included in the Stakeholders Committee, for example those coming from the social sciences, or private sector. This exercise started in previous years, and was continued during Y6.

An example of interactions with sectors other than animal health, human health and food safety, is the interaction initiated at the Geneva Health Forum 2022, an event notably engaged by NGOs, funding bodies, and humanitarian associations. This resulted in a publication co-authored by European and international institutions (University of Geneva, OHLEP, PREZODE etc.): Hobeika et al. The Value and Risk of an Intergovernmental Panel for One Health to Strengthen Pandemic Prevention, Preparedness



and Response. The Lancet Global Health. 2023. (DOI: [https://doi.org/10.1016/S2214-109X\(23\)00246-2](https://doi.org/10.1016/S2214-109X(23)00246-2)).

The OHEJP was seen as a virtuous example of One Health initiative by the Swiss think tank Foraus, which contacted WP5 to learn more on OHEJP advocacy work in the EU.

Such interactions with other parties proved to be particularly important when organising the OHEJP Stakeholder Conference (Task 5.4), targeted to a broad audience.

### 6.1.3 Task 5.2: Identification of the research needs of EU stakeholders

WP5 has a number of tools in place to gather the needs of EU and international stakeholders.

#### Scanning of stakeholders' documents

Regular scanning of stakeholders' documents (publications, reports, regulations, press releases, speeches etc.) is performed, and identified needs are summarised in monthly documents stored in thematic groups of the OHEJP website, where they are available to consortium members and stakeholders. To ease access to such documents, they are also accessible through a [dedicated page](#) of the One Health EJP website. Each document consists of initial pages with highlights of the month, followed by news summarised in order to highlight information useful for the One Health EJP (however later in the sixth year, due to increasing amount of work, the initial highlight page was sometimes omitted). This activity is performed in order to keep the consortium up to date with stakeholders' needs, knowledge gaps, policy trends, new regulations, future risks etc. Future knowledge gaps and policy needs are tagged for easy recovery of information.

The websites scanned are updated as needed. In previous years around 50 websites were scanned every month. During Y6 the amount of webpages was reduced due to increasing work pressure related to other tasks. At the moment the following websites are scanned: ECDC, EFSA, EMA, EEA, EC Press Corner, EC public health, European Parliament Think Tank, EU Health Policy Platform, FAO, WHO, OIE/WOAH, One Health Commission, Health Policy Watch.

WP5 dissemination activities are complementary to the general dissemination activities of the One Health EJP (WP1, Communications Team) and the results of the scanning of stakeholders' documents are available to support other means of dissemination (e.g. social media). In addition intelligence from such scanning exercise is used to support the sustainability of the OHEJP regarding trends of stakeholders' needs and key policies (led by WP7, in particular see the SRIA, Task 7.2).

#### Direct communication of needs

While the activity of scanning of stakeholders' documents helps keeping the consortium up to date with general needs of the stakeholders, it is an indirect way to identify them. Direct, active dialogue with stakeholders is important and focuses on research and integrative needs in the area of foodborne zoonoses, antimicrobial resistance and emerging threats. The two approaches supplement each other.

Personal communication via email is well established, but the main forum to discuss with the stakeholders their needs has been the SCM (Task 5.1)

#### Involvement in sustainability

WP5 also contributes to the sustainability aspects of the OHEJP (led by WP7). Because not all of the stakeholders' needs can be addressed within the lifespan of the consortium, WP5 supports activities of WP7, for example the Strategic Research and Innovation Agenda (SRIA, Task 7.2).

In particular WP5 contributed to sections dealing with present and future One Health needs (e.g. citizens' priorities, policy needs, globalization and international cooperation, environment, ecosystem health and wildlife, climate change, AMR in the environment), as well as expected impacts of the SRIA.



WP5 was also invited to the WP7-led workshop on the institutionalisation of One Health, where it delivered two talks, in addition to sharing its experience during the discussions.

Another way by which WP5 contributes to sustainability is by submitting relevant OHEJP-developed solutions to stakeholders' toolboxes (Task 5.3).

#### **6.1.4 Task 5.3: Linking of the scientific capacity available in the EJP with the stakeholders' identified needs: closure of knowledge gaps**

##### The One Health EJP Outcome Inventory

The activities of the One Health EJP consortium are numerous and diverse. WP5 makes sure that the results from OHEJP are made readily available for policy and decision making through targeted dissemination to the stakeholders. For example, WP5 curates the One Health EJP Outcome Inventory (OHOI, formerly "capacity map").

The OHOI highlights outcomes of the OHEJP, supports dissemination of results of the various activities (e.g. research projects, integrative activities), and depicts to some extent complementarity with activities outside the OHEJP. The OHOI is a public online database accessible to all. As such, it targets also stakeholders and other interested parties not represented in the Stakeholders Committee, and supports internal and external collaboration and dissemination. The OHOI has been identified as a valuable tool for dissemination of results of the OHEJP to national and international stakeholders, to other One Health initiatives, as well as within the OHEJP, for example to minimize the risk of duplication of work.

Briefly, the OHOI is an online database inventorying and cataloguing the outcomes of scientific projects and overarching activities of the OHEJP. It is accessible from a [dedicated page](#) of the OHEJP website.

The OHOI lists and organises the outcome of the consortium (databases, biobanks, computational methods, pieces of hardware, etc.), gives general information on the specific outcomes, highlights the added value by depicting to a certain extent similar activities in place outside of the consortium, and links to specific resources that are available. Most importantly, it gives the contact information of the persons in charge, facilitating contacts in case more insights are desired. The OHOI has a search function to ease navigation and browsing, as well as a link to the projects' DMP where more detailed information is available.

The Archive section of the OHOI – which is also public – stores old updates of the projects in the form of a downloadable Excel file.

In Y6, as most of the JRP and JIPs came to an end, the OHOI saw a number of small updates as the need arose, for example as new resources became publicly available (rather than two major updates per year as during the past years).

Appropriate measures were taken in order to keep the OHOI available after the end of the OHEJP through the OHEJP website, which will be hosted by the MedVetNet Association.

##### Other ad hoc support at the global, European, and national level

Another way in which knowledge gaps are being closed is through setting up activities to support specific stakeholders' needs with specific actions, as well as through the development of specific strategies addressing interests of national, EU and international stakeholders, as agreed following consultation with stakeholders. One example is the submission of OHEJP-developed solutions to stakeholders' toolboxes, in response to stakeholders' requests:

- WOAHA requested the OHEJP to include its tools for prevention and response to epidemic zoonotic diseases into a collection aimed at supporting WOAHA members and partners to adopt the One Health Joint Plan of Action.



- ISS, on behalf of WHO/EURO, contacted the OHEJP to request for tools to add in the Compendium of best One Health practices that will serve as input to the WHO Operational Framework for One Health for the WHO European Region 2024-2030.
- Relevant One Health EJP resources were submitted for the FAO Progressive Management Pathway for Terrestrial Animal Biosecurity (FAO-PMP-TAB) toolkit.

Not just international stakeholders, but also European stakeholders well acknowledge the closure of knowledge gaps provided by the OHEJP, and its potential in shaping the future One Health agenda. This was seen, for example, by EFSA inviting OHEJP representatives to contribute to the EFSA Advisory Forum, by request to disseminate internally to the OHEJP a call for tenders related to AMR, and by the invitation to give a presentation at an EFSA event on OHEJP tools relevant to “setting up a coordinated surveillance system under the One Health approach for cross-border pathogens that threaten the Union”. Another example was the request by the EU Community Research and Development Information Service (CORDIS, which is part of the EC strategy for the dissemination and exploitation of research results) to take part in its social media campaign on H2020 communication and dissemination (joint WP5-Communications Team task), and to collaborate in the article “[EU initiative promotes One Health for people, animals and the environment](#)”, available in the CORDIS website in six languages.

OHEJP further made use of its expertise and knowledge to provide input to the Stakeholders’ Targeted Consultation EU4Health Annual Work Programme 2024.

#### Targeted reports

Targeted Reports to Key EU Stakeholders are regular reports disseminated ahead of the SCM meetings. These Targeted Reports are a key tool to disseminate concise updates, with the objective of keeping the One Health EJP stakeholders up-to-date with:

- News of the One Health EJP consortium and events of interest for the stakeholders;
- Outputs of projects, with focus on those communicated by ECDC and EFSA as being of particular interest;
- Impact achieved by finished projects;
- Recent scientific publications.

Although Targeted Reports are aimed at ECDC and EFSA, all the stakeholders’ organisations have access to them, and WP5 encourages internal dissemination in the stakeholders’ organisations. In Y6, one Targeted Reports was produced, the ninth and last one. The 9<sup>th</sup> Targeted Report had an extended section on OHEJP events and overarching outcomes, and the scientific updates were given in the form of recent publications.

#### **6.1.5 Task 5.4: Dissemination of new knowledge, tools and materials**

WP5 implemented a variety of general (e.g. the OHOI, Task 5.3) and tailored dissemination strategies in order to meet the needs of national, European and international stakeholders. This maximises the impact of the consortium’s outputs and ensures that the tools and results of the OHEJP are used in a timely manner.

The overall dissemination strategy is regularly discussed with stakeholders, particularly during the SCMs, and subjected to revision.

The OHEJP conference “Collaborating to face future One Health challenges on Europe” (also known as OHEJP Stakeholder Conference)

In Y6, lot of effort of WP5 was put into the organisation of the OHEJP Stakeholder Conference, renamed as “Collaborating to face future One Health challenges on Europe”, a title more suitable for the event.



The conference “Collaborating to face future European One Health challenges” was held from the 19th to the 21st of June 2023 at the Museum of Natural Sciences of Brussels as a hybrid event (attendance on-site was limited, but attendance online was unrestricted). It provided a unique possibility for a wide range of stakeholders of the One Health arena to meet and discuss the status of European One Health, as well as the challenges of tomorrow.

The organisation of the conference was led by WP5, with major support from the Stakeholder Conference Working Group (SCoWG, composed of selected PMT members and collaborators as well as the Communications Team).

A [dedicated webpage](#) was set up to inform on the conference.

Overall, there were 912 registrations using the online form, and 53 additional registrations via direct contact with the organisers, for a total of 965. The most represented sectors were One Health and public health (evenly distributed), followed by animal health and food safety (again evenly distributed). Environment and ecosystem health accounted for around 16% of the registrations, and around 5% came from the social science sector. 122 people attended the conference on site.

The main idea of the conference “Collaborating to face future European One Health challenges” was borne out of the realisation that the OHEJP outcomes can have an impact, beside on policy and science, also on society and economy. In addition there was also needed to provide a platform to the vast network of organisations partner of, or associated to, the OHEJP, to discuss the future of One Health in Europe, as well as the sustainability of the OHEJP.

The aim of the conference was consequently two-folded:

1. Dissemination and additional impact of One Health EJP at the scientific level (e.g. generation of new knowledge, capacity building, cross-sectoral harmonisation), policy level (e.g. support to evidence based decision making, advocacy of One Health approach), and importantly the long-term impact at the economy level (e.g. tools to enhance the sustainability of production could attract the interest of the private sector), as well as societal level (e.g. by showcasing the benefit for the society at large, and good use of EU funds).
2. Reflection and shaping European One Health, as the ambitious programme brought together representatives of a large variety of stakeholders, for example EC Directorate Generals, EU Agencies, representatives of the private sector, and of NGOs. This provided a unique opportunity for representatives of decision-making bodies to discuss among themselves and with representatives of other stakeholder groups the needs and challenges of future One Health initiatives, as well as the sustainability of the OHEJP.

The programme was divided in three running themes, which provided a fil rouge to follow throughout the conference, starting from the current status of One Health in Europe, and finishing to its future. The focus was on the EU, with sessions dealing directly with EU issues, or highlighting the relation between global issues and the EU.

The target audience included departments and executive agencies of the European Commission, Agencies of the European Union, One Health and other scientific initiatives, internal OHEJP groups, associations dealing with human, animal, and environmental health (being they from the private sector, citizen, farmers, or patients associations), industry representatives, and general and specialised press.





Speakers and panellists included representatives from EC DGs (HEALTH, AGRI, RTD, ENV), EU Agencies (EFSA, ECDC, EEA, EMA), FAO, WHO, SafeConsume, BEUC, Biodiversa+, One Health Social Sciences Initiative, AnimalhealthEurope, Federation of Veterinarians of Europe, as well as speakers from the OHEJP JIPs and JRPs.

The feedback about the event was highly positive. The success of the event was seen by the high interest of the participants, the lively discussions during, aside and after the conference and the feedback received. This is reflected in the interests in the communication activities (e.g. a high level of engagement with social media posts on Twitter and LinkedIn) which accompanied the meeting, and requests for providing the slides or recordings.

Presentations of delivered at the conference were made [publicly available on Zenodo](#), and findable through the [conference webpage](#).

A detailed report on the conference is published in the deliverable [D5.11 “Report on a Stakeholder Conference”](#), submitted in M67.

#### Dissemination to national, European and international stakeholders: the Dissemination Workshop series

Dissemination Workshops are a form of scientific support to stakeholders which addresses specific needs of national, EU and international stakeholders. Target audience is mostly national stakeholders: experts at the level of ministries (e.g. risk managers with a scientific background) and decision/policy makers (upper level of the hierarchy, POC members with limited scientific background). Although addressed primarily at national stakeholders, EU (ECDC, EFSA, EEA, EMA) and international (FAO, WOA, WHO-Euro) stakeholders are welcome to participate. To ease participation, the workshops are organised as online events.

These workshops focus on the impact of One Health EJP-produced solutions, e.g. case studies on how the solutions have been used in a country, how they were/could be applied in specific situations, and how they benefit the prevention, detection, and response using the One Health approach. Given the varied technical background of the audience, the Dissemination Workshops focus on examples of applications rather than on the scientific side, avoiding technical details and using an appropriate language.

Information on the Dissemination Workshops is not made public to keep the audience as specific as possible. Information is rather disseminated through POC, PMC, SSB and the Stakeholders Committee with the request of forwarding to relevant decision makers.

To maximise the impact of the Dissemination Workshops, the workshops' reports are uploaded on Zenodo, and made publicly available through the [Science to Policy Translation webpage](#).

In Y6 one last Dissemination Workshop was organised. This fourth One Health EJP Dissemination Workshop covered three topics: the interaction with stakeholders to translate science into policy, the impact of the education and training activities, and strategies used for effective dissemination of One Health solutions.

Through this workshop, One Health EJP consortium members provided examples of successful strategies and lessons learnt, with the objective of inspiring all those working in this field or setting up new One Health initiatives, and increasing the impact of One Health activities in Europe. This was an important legacy of the One Health EJP. Due to the target audience of this workshop being wider than the traditional audience of the Dissemination Workshops, it was decided to have sessions of this workshop as pre-recorded videos. The videos are freely available on Zenodo, and can also be viewed individually as stand-alone, short seminars. They are accessible through the [workshop's webpage](#).





### Further dissemination of results

Additional dissemination of WP5 results is achieved through presentations in international conferences, at stakeholders' meetings, and through publications. So far, in Y5 WP5 was represented in the following events of broad outreach:

- ICOHAR 2023: submitted abstract on science to policy translation
- EFSA meeting "setting up a coordinated surveillance system under the One Health approach for cross-border pathogens that threaten the Union": presentation given (see also Task 5.3)
- RKI/BfR/UBA OEGD 2023: presentation given
- OHEJP conference "Collaborating to face future One Health Challenges in Europe": multiple talks and presence in panel discussions
- OHEJP Final meeting: WP5 representative in panel discussion and other tasks
- EFSA "Science Meets Policy" conference -EU initiatives towards the large-scale use of Next Generation Sequencing (NGS) to tackle foodborne threats

Additional dissemination in OHEJP meetings with national stakeholders was achieved in SSB meeting in Vienna on 23-24 March.

## 6.2 Deliverables and Milestones

### 6.2.2 Deliverables

Del. Rel. No	Deliverable title	Est. Del.Month	Actual Del. Date
D5.11	Report on a stakeholder conference	M68	M67

### 6.2.1 Milestones

Mil. Ref.	Milestone title	Est. Achievement Month	Notification
MS77	Stakeholder Conference	M66	Achieved. 965 registrations. 122 delegates present on site



## 7 WP6 - Education and training

### 7.1 Work carried out to date

#### 7.1.1 Task 6.1: Short-Term Missions

A total of ten short-term missions (STMs) were funded through the two 2022 STMs calls. Nine STMs were conducted in 2022 (M48 – M60) and the last one, took place in M63 to M65. In M61 to M65, the WP6 team generated case studies from STMs reports submitted by the researchers for the two following STMs: “Genotypic characterisation of antimicrobial susceptibility and isolation of *Aeromonas* and *Vibrio* phages from water samples” conducted in M59 – M60 and “Application of Single-Cell Genomics for the study of the bacterial reservoirs of plazomicin resistance determinants” conducted in M62 – M64 (see figures below). The STM entitled “Understanding Zoonotic Transmission of Group B Streptococci in Camels through a multi-collaborative approach” was also completed in M68, a case study has been written and uploaded to the website by M70.



**SHORT TERM MISSIONS**

Short Term Missions (STMs) are small travel grants with the aim of:

- Sharing scientific expertise, methodologies, equipment and facilities to harmonise the existing approaches and methodologies within the large
- OHEJP European network
- Driving the research forward in a collaborative and non-duplicative fashion to strengthen both the scientific capacity within the OHEJP
- Contributing to the future prevention, preparedness, detection and response of the EU to foodborne and other emerging threats across human-animal-environmental sectors.

### Genotypic characterisation of antimicrobial susceptibility and isolation of *Aeromonas* and *Vibrio* phages from water samples

**Theme:** One Health, Skills Development Missions  
**Home Institute:** ANSES, France  
**Mission Hosting Institute:** BfR, Germany  
**Duration of Mission:** 4 weeks

**“This mission was a great opportunity to discuss the dissemination of antibiotic resistance in the aquatic environment in connection with aquaculture activities. In addition to the improvement of the technical skills of both teams, the diversity of our fields of study (water, fish farming vs food) opened up perspectives for new collaborations, using a One Health approach.”**

*Sandrine Baron and Laetitia Le Devenec ANSES, France*

The objective of the mission was to share technical knowledge on the detection and characterisation of *Aeromonas* and *Vibrio* genus and to establish a collaboration between the institutes, to study of the dissemination of antibiotic resistance in aquatic environments.

During this mission, Sandrine and Laetitia were trained on phages' cultivation, enumeration and conservation methods. They now have in hands the detailed protocols, as well as phages and competent bacteria cultures, provided by the BfR team. They will be able to put the methods into practice in Anses. Sandrine and Laetitia travelled to BfR with culture media for the detection of *Aeromonas* sp., from water and fish samples. Water samples have been collected nearby the BfR laboratory and the German team performed the entire handling: filtration, cultivation and presumptive identification. The partner teams established common protocols for the study of the *Aeromonas* and *Vibrio* genera and initiated the sharing of the Maldi-Tof databases, for the improvement of the species identification of bacteria from the *Aeromonas* and *Vibrio* genera. The two institutes are also now both involved in a research group, which aims to improve the methodology of antimicrobial susceptibility testing in aquatic bacteria and determine Epidemiological cut off values (Ecoff). Meetings and video conferences with French and Canadian researchers took place, to discuss research ideas. At the end of this STM, two research project proposals were elaborated.

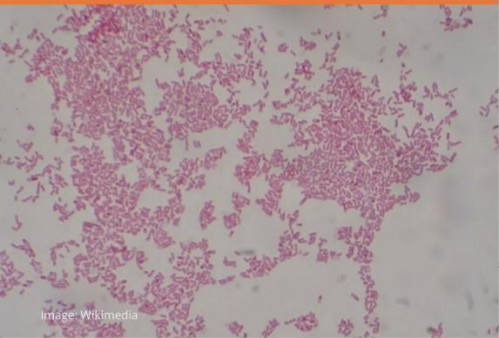
This short-term mission strengthened the emerging collaboration between the two teams from the One Health EJP consortium. It has also led to a reflection on the use of phages to improve and reduce the use of antibiotics in aquaculture, a farming sector from which a One Health approach is absolutely needed.

One Health EJP has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 773830.

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Figure 1. Case study for STM entitled “Genotypic characterisation of antimicrobial susceptibility and isolation of *Aeromonas* and *Vibrio* phages from water samples”. This case study can be found on the OHEJP website: <https://onehealthejp.eu/community/education-and-training/short-term-missions-2022>.



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**SHORT TERM MISSIONS**

Short Term Missions (STMs) are small travel grants with the aim of:

- Sharing scientific expertise, methodologies, equipment and facilities to harmonise the existing approaches and methodologies within the large OHEJP European network
- Driving the research forward in a collaborative and non-duplicative fashion to strengthen both the scientific capacity within the OHEJP
- Contributing to the future prevention, preparedness, detection and response of the EU to foodborne and other emerging threats across human-animal-environmental sectors.

**Application of ‘Single-Cell Genomics’ for the study of the bacterial reservoirs of plazomicin resistance determinants**

**Theme:** One Health Missions, Skills Development missions, Antimicrobial Resistance (AMR)

**Home Institute:** Universidad Complutense de Madrid, Spain

**Mission Hosting Institute:** Karlsruhe Institute of Technology, Germany

**Duration of Mission:** 3 months

The aim of this mission was for the PhD student to learn about the development of single cell workflows, for the detection of low abundance reservoirs of next-generation aminoglycoside (such as plazomicin) resistance mechanisms. The main objective was to label single cells from complex environments with fluorescence markers specific for the genes of interest. This STM enabled the PhD student to produce results that complemented the ones already produced within the OHEJP PHD **METAPROQ** project using metagenomic analyses.

During this mission, three different labelled probes were designed for the detection of the aminoglycoside resistance gene *npmA*, a gene that confers high level of resistance to all known aminoglycosides, including plazomicin, apramycin and other next-generation aminoglycosides. To test the probes, the *npmA* resistance gene was introduced in two plasmids with different copy numbers to use as positive controls, and the same plasmids without the resistance gene were used as negative controls. All these control plasmids were introduced in *E. coli* cells and a classical fluorescence in situ hybridisation (FISH) protocol was performed with the three probes independently to check their labelling efficiency. Two of the designed probes showed promising results and have the potential to be used with environmental samples. Samples have been taken to evaluate the potential sorting of *npmA* positive cells and is planned to be performed in the upcoming months.

This STM has opened a new collaboration channel between two research groups with different scopes for the study of antimicrobial resistance with a One Health approach. The collaboration between the partner institutes is expected to last longer than the extend of the mission and we expect to produce interesting results that could potentially be published as a research article in a scientific journal.

**Thanks to the One Health EJP I have had the chance to expand my skill sets and learn new methods. Having the opportunity to know a new research centre and discuss my project with very talented people has helped me expand my critical thinking and strengthen my professional confidence. We built a long-lasting collaborative network that I trust can give promising results in the close future.**

Bosco Rodríguez Matamoros  
Universidad Complutense de Madrid, Spain

One Health EJP has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 773830.

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Figure 2. Case study for STM entitled “Application of Single-Cell Genomics for the study of the bacterial reservoirs of plazomicin resistance determinants”. This case study can be found on the OHEJP website: <https://onehealthejp.eu/community/education-and-training/short-term-missions-2022>.

The WP6 team also collated all the reports from STMs conducted in 2022 and early 2023, to produce deliverable D6.20 – Report on Short Term Missions 2022. Deliverable D6.15 – Report on outputs of the short-term missions summarising the outputs of all short-term missions awarded between 2019 and 2023 was also prepared. These two deliverables (D6.20 and D6.15) were submitted in M66.

### 7.1.2 Task 6.2: One Health EJP Dissemination Webinar

The WP6 organised a One Health EJP Dissemination Webinar which was held on the 9<sup>th</sup> of June 13:00 – 15:00 CES (M65). The webinar brought together speakers from the three domains of the One Health EJP, Foodborne Zoonoses, Antimicrobial Resistance, and Emerging Threats, with the expressed purpose of presenting a tool (i.e., the science and methodology behind it) and its implementation in a



One Health environment (i.e., within a chicken coup/within the field). Joint Research Projects (JRP) of the following projects presented:

Domain	JRP	Research Tool	Institute
Emerging Threats	<a href="#">PARADISE</a>	Metabarcoding for the detection of single-celled parasites in human faeces	<a href="#">Statens Serum Institut</a>
Foodborne Zoonoses	<a href="#">AIR-SAMPLE</a>	A low-cost screening tool in biosecured broiler production	<a href="#">Norwegian Veterinary Institute</a>
Antimicrobial Resistance	<a href="#">WORLDCOM</a>	Rapid culture-independent LAMP detection of AMR markers for environmental water samples	<a href="#">University of Surrey</a>
Foodborne Zoonoses	<a href="#">BIOPIGEE</a>	A standardised protocol for disinfectant efficacy on biofilms against <i>Salmonella</i> Typhimurium biofilms	<a href="#">Robert Koch Institute</a>

The webinar was chaired by the WP6 lead, Professor Roberto La Ragione, and was attended by 58 people, with a total of 186 registered for the event. Registration opened on the 5<sup>th</sup> of May 2023 and closed on the 2<sup>nd</sup> of June, with a MS Teams Webinar link being sent out on the week commencing 5<sup>th</sup> of June 2023. The communication team contributed to Twitter and LinkedIn social media posts on a weekly basis, and the creation of a [webinar homepage](#) that summarised key details for perspective attendees. The webinar ensured the dissemination of tools and their practical uses created during the One Health EJP, which were presented in a free, accessible and global manner.

The demographic data on the attendees showed that attendance was high among European countries, with a high attendance rate from the United Kingdom, Portugal, Italy, Sweden, France, and Norway; while attendees registered from the Pacific region (e.g., Japan), Africa (e.g., Ethiopia), Middle East (e.g., Jordan), and North America (e.g., United States of America). Furthermore, sectors including Animal Health ( $n = 97$ ), Public Health ( $n = 96$ ), One Health ( $n = 96$ ), Food Safety ( $n = 58$ ), Environmental Health ( $n = 28$ ), and Ecosystem Health ( $n = 11$ ) were represented in the audience, confirming that the webinar targeted a One Health minded audience. Institutions for example including the German Federal Institute for Risk Assessment (BfR), Norwegian Veterinary Institute, and Swedish National Veterinary Institute (SVA), who are One Health Partner Institutions, government agencies (e.g., French Ministry of Health), national health institutions (e.g., National Centre for Diseases Control), and Universities (e.g., University of Surrey) were represented.

### 7.1.3 Task 6.4: Doctoral Training Programme

The One Health EJP Doctoral Training Programme supported 17 co-funded PhD projects (Table 7.1). Five PhD projects have finished, with the recent PhD project ToxSauQMRA finishing in M64. Between M59 - M66, the 12 active PhD projects have been undergoing a PhD Final Thesis Evaluation as part of the D6.18 deliverable with a deadline of 14<sup>th</sup> July 2023. PhD students who have completed their PhD before the 30<sup>th</sup> of April 2023 were required to produce a Final Thesis as a final output and submit it to the WP6 team and upload it to Zenodo. Furthermore, the content covered in sections 1, 2, 7 – 16 of the Final Thesis Report were completed and uploaded to Zenodo. For those PhD students who had not completed their PhD by the 30<sup>th</sup> of April 2023 were required to produce a Final Thesis Report and submitted a final version of the Final Thesis Report by the 15<sup>th</sup> of May 2023 (M65). The outlined procedure and timeline for the PhD Final Thesis Evaluation are outlined below from M61:

- PhD supervisors confirmed with the WP6 team whether they will be submitting a Full Thesis or a Final Thesis Report by 31.03.23 (M63).





- The WP6 Team requested PhD supervisors to nominate and inform the WP6 team of two potential scientific reviewers by 15.04.2023; which has been extended to the 28.04.2023 (M64). The WP6 team then liaised with the scientific reviewers directly to confirm their participation and availability to review the PhD Final Thesis Report. The WP6 team provided guidance criteria (Table 7.2; 7.3, respectively) to explain how the project reports should be assessed. In cases where reviewers were unable to review the PhD Final Thesis Report in the timeline outlined, the WP6 team contacted PhD students for further nominations.
- PhD supervisors and students completed the Final Thesis Reporting Template and sent a final version of the report back to the WP6 team by 15.05.2023 (M65).
- The WP6 team sent the nominated reviewers the relevant guidance, forms and reports to review 17.05.23 (M65).
- The reviewers provided feedback to the WP6 team who will consolidate and anonymise the feedback by the 31.05.23 (M65).
- The WP6 team provided consolidated feedback to PhD supervisors and students by 05.06.23 (M67).
- PhD supervisors and students addressed the feedback, and agreed the report was acceptable with the WP6 team by the 14.06.23 (M67).
- The WP6 team consolidated all Final Thesis Reports onto SharePoint, along with a draft of the deliverable D6.18. The deliverable was finalised once the Final Thesis Report has been validated by a PMT member (Table 7.3) and uploaded to Zenodo by the PhD supervisors (M66).
- The WP6 informed and provided PMT with 2 weeks for the validation of D6.18, and the individual reports (M65 – 66).
- PMT provided feedback to the WP6 team (M65 – 66).
- The WP6 team addressed any PMT feedback and asked PhD supervisors to upload the final public pdf to Zenodo (M65 – 66).
- The PhD supervisors uploaded a Final Report in a .pdf format onto Zenodo by the 30.06.23 (M66).
- D6.18 included all the Zenodo links (to manage the size of this deliverable). The WP6 team will collate the Zenodo links and submit the deliverable to the Support Team.
- The WP6 team worked in liaison with the Communication Team to upload the deliverable to the OHEJP website (M66 - 67).
- The WP6 and Communication Team collaborated to produce project outcome documents between July – September 2023 (validated with PhD supervisors) and disseminated as soon as possible to the relevant target audiences and before the end of the OHEJP between the 01.07.23 – 30.09.23 (M67 – M69).

The PhD Final Thesis Report evaluation continued until M67, revised from M65. The delay was required to address last-minute delays in submission by the PhD projects (DESIRE, AptaTrich etc.), extension requests by external reviewers for unforeseen circumstances and the review period for PMT members occurring during the One Health EJP Stakeholders Conference 2023.

**Table 7.1.** One Health EJP PhD projects broken down by domain. Orange PhD projects have completed at the time this report was submitted.



Sustainability	Emerging Threats	Foodborne Zoonoses	Antimicrobial Resistance
SUSTAIN	PEMbo	EnvDis	LIN-RES
	DESIRE	AptaTrich	ECO-HEN
		ToxSauQMRA	VIMOGUT
		MACE	WILBR
		TRACE	HMR-AMR
			UDoFRiC
			METAPRO
			KENTUCKY
			Codes4strains

**Table 7.2.** Evaluation Guidance Criteria for the PhD Final Thesis Reports (D6.18)

Criteria	Related Heading in the PhD Final Thesis Report	Rate on a scale of 1 to 5 (total score 70)
Did the PhD student recommend future research from the conclusions of the project?	6. Conclusions and Future work	
Were the PhD project objectives met as detailed in the original proposal or was a good justification provided for any deviation from the original proposal?	7. PhD project self-evaluation	
Were all the milestones and deliverables completed?	8. Progress of the project	
Did the PhD student interact with JRPs/JIPs or external (global, EU, national or regional) relevant projects or initiatives?	9. Interactions with JRPs/JIPs or with external projects or initiatives	
Did the PhD student highlight any added value or benefits during the PhD (eg. Training, national & multi-national networking)?	10. Added Value and benefits during PhD resulting from being part of the OHEJP doctoral programme and consortium	
Did the PhD student actively engage in Education and Training activities?	12. Transferrable skills and Training	
Did the PhD student publish their scientific outcomes in relevant peer-reviewed journals?	14. Scientific Publications	
Was the PhD managed and implemented in accordance with the DMP?	14. Scientific Publications	
Did the PhD student actively engage in disseminating the scientific outputs of the project	15. Additional Outputs and 18. List of dissemination and communication activities	



(e.g. conferences, OHEJP blogpost, interviews etc.)?		
How relevant are the finalised project outputs to the One Health EJP aims and objectives?	17. One Health impact	
Is there any direct or indirect impact of the project for national or international stakeholders?	17. One Health impact	
Has this project built or strengthened collaborations with other partners of the One Health EJP and beyond? Was it described in the final report?	17. One Health impact	
Do the project outcomes have policy implications?	17. One Health impact	
Did the PhD student recommend future research from the conclusions of the project?	6. Conclusions and Future work	

**Table 7.3.** The external reviewer and PMT assigned reviewers for One Health EJP PhD projects

PhD Project	External Reviewers	PMT Assigned Reviewer
HME-AMR	Professor Lise Korsten & Dr. Julio Alvarez	Prof. Karin Artursson
KENTUCKY	Dr. Margo Maex & Dr. An Van den Bossche	Dr. Manuela Canica
METAPRO	Prof. Anne-Kristin Kaster & Prof. Morgan Scott	Dr. Lucia de Juan
MACE	Dr. Maciej Kochanowski & Dr. Rob Dewar	Prof. Wim van der Poel
DESIRE	Dr. Katja Spies & Prof. Frauke Ecke	Dr. Hein Imborechts
UDoFRiC	Dr. Giuliano Garofolo & Dr. Arnoud van Vliet	Prof. Annemaria Kaesbohrer
WILBR	Dr. Stefan Borjesson & Dr. Mike Brouwer	Dr. Ir. Arjen van de Giessen
EnvDis	Sara Monteiro Pires & Lesley Larkin	Dr. Stefano Morabito
AptaTrich	Maria Morales & Marcel Hollenstein	Dr. Pikka Jokelainen
VIMOGUT	Dr. Pieter-Jan Ceysens & Werner Ruppitsch	Prof. Roberto La Ragione
TRACE	Dr. Ilaria Di Bartolo & Dr. Manina Meester	Dr. Stefano Morabito
SUSTAIN	Dr. Solveig Jore & Fernanda Dorea	Prof. Dolores Gavier-Widen

## 7.2 Deliverables and Milestones

### 7.2.1 Deliverables

Del. Rel. No	Deliverable title	Est. Del. Month	Actual Del. Month
D6.13	Report of the third CPD module in one health	M62	M62
D6.14	Report n°3 of the annual short term missions completed also uploaded onto the EJP webpage	M62	M62
D6.15	Report on outputs of the short term missions	M65	M66
D6.17	Report n°4 of the One health summer school	M62	M62



D6.18	Thesis Reports of up to 17 PhD studentships	M66	M67
D6.20	Report n°4 of the annual short term missions completed also uploaded onto the EJP webpage.	M65	M66

### 7.2.2 Milestones

N/A





## 8 WP7 – Sustainability

### 8.1 Work carried out to date

#### 8.1.2 Task 7.1: Gathering Stakeholders' Needs and Expectations

Task completed in Y5

#### 8.1.3 Task 7.2: Strategic Research and Innovation Agenda (SRIA) 2021-2030

[The One Health EJP Strategic Research and Innovation Agenda \(SRIA\)](#) was finalised in M62 and widely disseminated by the Communication Team.

#### 8.1.4 Task 7.3: Making the bridges between EJP's beneficiaries and stakeholders sustainable

Based on the output from preceding tasks, a high-level [workshop on the Institutionalisation of One Health](#) was organised on 21 June as a side event with the One Health EJP stakeholders conference 2023: "Collaborating to face future One Health challenges in Europe".

The workshop was conducted physically as an invitation-only event, with key stakeholders who took part in the One health EJP conference and counted with the participation of 57 registered participants and the PMT members for a total of approximately 70 participants. The registered participants covered a large spectrum of institutions and thus competences enabling a thorough discussion, which covered most of the aspects related with the institutionalization of the One health at country level.

This event provided the opportunity for presentations, panel discussions and informal debates between speakers and attendees to consider the current barriers to the institutionalisation of One Health and strategies to overcome them. Since participants included representatives of governmental institutions from the EU and third countries, EU agencies, and exponents of industry and citizens' associations, their wide variety of professional experience generated thought-provoking dialogue at the workshop.

The outcome of the discussions at the workshop has been used to produce the [Milestone 101 containing a roadmap for the institutionalization of the One Health at the country level](#).

Regarding M103, "Road map for making the collaborations between One Health partners sustainable", this work was addressed as part of the SRIA, in which the OHEJP network of partners is described and a strategy for its sustainability is given, in particular in relation to the important role of the MedVetNet Association in maintaining and enlarging the network of scientists.

The SRIA also addresses M104, "Selection of the most appropriate legal statutes, principally the MedVetNet Association". The MedVetNet Association is a legal entity set up after the FP6 Network of Excellence MED-VET-NET, which ended in October 2009, is self-funded and comprises 22 scientific research institutes. A section of the Sustainability Plan, describes the key instruments for the sustainability of the One Health EJP, clearly specifying the role of the MedVetNet Association in the sustainability of the OHEJP.

### 8.2 Deliverables and Milestones

#### 8.2.2 Deliverables

N/A



### 8.2.3 Milestones

Mil. Ref.	Milestone title	Expected Delivery/ Achievement Month	Notification
MS101	Workshop on road map for institutionalisation of One Health	M66	Achieved: Workshop was held on 21 <sup>st</sup> June in Brussels
MS103	Road map for making the collaborations between One Health partners sustainable	M64	Addressed in the D7.5 SRIA)
MS104	Selection of the most appropriate legal statutes, principally the MedVetNet Association	M66	Addressed in the D7.5 SRIA)

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