Laboratory Twinning Guide

Guidelines for planning, submitting, implementing and evaluating WOAH Laboratory Twinning Projects

Last updated: July 2025

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Background

What is the Laboratory Twinning Programme?

The Laboratory Twinning Programme was founded in 2006 and is WOAH's flagship initiative for capacity building in animal health laboratories and other scientific institutions.

Laboratory Twinning projects aspire to be sustainable partnerships between WOAH Reference Centres and a Candidate institute.

The Programme aims to build capacity in the diagnostic and surveillance of terrestrial and aquatic animal diseases, as well as to increase the competence of veterinary services in relevant knowledge areas.

The ultimate goal of the Programme is to improve WOAH's Members capacity to comply with the Standards set by the organisation.

Who is Laboratory Twinning Programme for?

The Laboratory Twinning Programme is a tool available to WOAH Members under the Performance of Veterinary Services (PVS) Targeted Support options. Participation in the Twinning Programme is not contingent on having received a PVS mission. However, PVS missions are helpful in identifying and prioritising the topic of a twinning project and in selecting the Candidate institute.

Twinning Candidates should be chosen strategically, in line with national and regional priorities, to allow for projects to add significant value to animal health systems. Candidate institutes should comply with the set of prerequisites set by WOAH in order to increase the likelihood of project success and should have the encouragement and financial support from the National Veterinary Authority.

Twinning partnerships are meant to be mutually beneficial for Parents and Candidates and to foster long-lasting connections between the involved scientists.

What is the scope of Laboratory Twinning projects?

Objectives of individual projects may range from improving capacity in a specific technical area to improving capacity for a group of diseases or a topic. For example, one laboratory may have a requirement for improving its capacity to undertake molecular diagnosis for various serotypes of FMD virus whilst another laboratory may wish to improve its capacity to provide support and training in epidemiology within a region. The project should always be aligned with national priorities. Projects which also cater to the needs of the region of the Candidate country are preferred.

How is success defined in a Laboratory Twinning Project?

A successful laboratory twinning is one in which the project objectives are achieved within a reasonable timeframe and the Candidate institute has the resources and capacity to serve its country and region while maintaining the relationship with the Parent institute.

Roles and responsibilities

What is the role of Parent and Candidate institutes?

The Parent institute's WOAH expert and their team are expected to lead the implementation of the twinning project. This process includes the development of the project proposal, the preparation of training visits and meetings, implementation of project activities, and the submission of project reports. Parent institutes have the ownership of the twinning budget and the responsibility to keep a documented track of project income and expenses. If necessary, and contingent on WOAH approval, the Parent may solicit the involvement of experts from other Reference Centres or from public health institutes. Parents will be contacted two and five years after project conclusion to participate in the evaluation of the twinning.

Candidate institutes must clearly determine which staff members will be involved in the project and determine who the technical focal person (project champion) will be. Candidate institutes should endeavour to facilitate the organisation of meetings, trains and shipments, and to transparently provide the information requested by the Parent institute. The Candidate institute can be a national veterinary laboratory, a government agency, university, private institute, etc. as long as the choice is approved and justified by the WOAH Delegate of the Candidate country. Candidates will be contacted two and five years after project conclusion to participate in the evaluation of the twinning.

Prerequisites for Parent and Candidate institutes

Prerequisites have been set based on the recommendations of the 2025 evaluation of the Laboratory Twinning Programme. These conditions, which are based on 20 years of data regarding project sustainability and success, are put in place to improve the likelihood of project success and to safeguard the allocation of limited financial resources.

Prerequisites for Parent institutes

- Parent institutes must be WOAH Reference Centres – either Reference Laboratories or Collaborating Centres, in a topic relevant for the twinning project.
- Parent institutes must agree to comply with the provisions of the present guidelines.
- Parent institutes are discouraged from leading more than two twinning projects at one time, if implemented by the same team within the institute.
- Parent institutes should only engage in a project if the time investment associated with leading the twinning has been agreed on by the institute management.

Prerequisites for Candidate institutes

- Candidate institutes should receive the support from the National Veterinary Authority for the project, including the commitment to support the laboratory financially, as required to maintain the outcomes of the twinning project.
- Candidate institutes must agree to comply with the provisions of the present guidelines.
- Candidate institutes must have safe infrastructure, running water, generator-backed power, internet connection, and staff in sufficient numbers for the desired training.
- For diagnostic-focused twinnings, the laboratory should be the national reference centre for the disease.
- For diagnostic-focused twinnings, Candidate institutes should be located in areas that are of easy access, and which can receive samples and reagents without delays or complications, including from abroad.
- In order to avoid duplication, Candidates are urged to disclose to the Parent institute all capacity building initiatives being implemented in the institute, especially when led by external partners.

WOAH’s role as a Programme Manager

- The Twinning Programme Manager will assist with finding project partners, if not identified when the expression of interest is submitted.
- The Programme Manager, supported by WOAH Financial Units, will review the technical and financial proposals, respectively, and provide comments for their improvement.
- The Programme Manager will submit the proposal to the Biological Standards Commission and communicate the outcome and rationale of the review to the project partners.
- The Programme Manager will arrange the signature of the contract by all parties and will request that project reports are submitted per the schedule in the contract.
- The Programme Manager will review project reports, oversee the implementation of the activities and assist, when necessary, within WOAH’s possibilities.
- After project completion, the Programme Manager will implement a project evaluation in the two and five years that followed the end of the twinning.

Funding options

Self-funded

Twinning projects can be funded directly by one of the participating countries. In that case, the inclusion of a budget in the contract is optional, and project partners do not submit financial reports to WOAH.

WOAH's funding guidelines, described below, are not applicable to self-funded projects.

WOAH-funded

Most often, twinning projects are funded by WOAH, though grants provided by its resource partners and managed by the WOAH World Animal Health and Welfare Fund (World Fund). In the case of WOAH-funded twinnings, a project budget is included in the twinning contract. The budget must be reviewed and approved by WOAH before contract signature. In WOAH-funded twinnings, financial reports must be submitted to be revised by WOAH Financial Units, which assess compliance with the eligibility criteria listed below.

Funds will be transferred to and managed by the Parent Institute. The first payment will be made after contract signature upon receipt of the respective invoice. As a general rule, a maximum of 50% of the total budget will be transferred to the Parent Institute at this time. The remaining budget will be transferred over the course of the project, following receipt and validation of interim, annual and final reports, and upon receipt of the respective invoices.

If funds remain unspent from previous payments, the subsequent will be adjusted accordingly (payments may be delayed by WOAH in case of significant underspending). Any budget that remains unspent at the end of the project must be refunded to WOAH, or will be deducted from the final payment, as appropriate.

WOAH will ensure that only actual costs incurred after the date of signature of the contract are eligible in the context of the implementation of the project contracts. Eligibility of actual expenditures incurred will be monitored by WOAH Financial Units according with the conditions outlined in the present guidelines and in the contract.

The budget must be aligned with the work plan in the project proposal and its use must be limited to duration of the project. The duration of the project can be extended by decision of the WOAH Director General upon submission of an official request by the Parent Institute, supported by appropriate justification and a revised timeline for implementation of the twinning activities. All listed activities and associated costs should be necessary to achieve the outcome of the Twinning Project.

The budget should preferably be in Euros (EUR), or otherwise in US Dollars (USD). For Parent institutes in the UK, payments in Pound Sterling (GBP) can be considered on a case-by-case basis; if the request is accepted, budgets can be prepared in GBP.

The budget will only be allocated to activities for which financing is requested and where those activities are eligible for funding. As often as possible eligible costs must be based on real costs verifiable by supporting documents.

The following are examples of direct eligible and ineligible expenses:

<u>Eligible expenses</u>

- Travel costs for visits, meetings and trainings listed in the twinning work plan. Budget lines would include:
    i. transportation costs for plane/train tickets (economy class only);
    ii. daily subsistence allowance (‘per diems’, in accordance with WOAH’s current rates);
    iii. visas and vaccines (if relevant).
    iv. room rental, translation and interpretation;

v. fuel costs can be covered on a case-by-case basis. All travels in business class will be rejected by WOAH and will not be reimbursed.

- Shipment of diagnostic samples and reagents directly related to the Twinning project.
- Enrolment in specialised courses on a case-by-case basis.
- Approval of any consultancy fees will be decided on a case-by-case basis and must be approved by WOAH before the project has started; claims cannot be submitted without prior approval for these costs.
- The costs of laboratory reagents and consumables that are directly linked to the project. This includes reagents used for practical training activities, assessments, and proficiency tests.

Note on reagents and consumables

The total cost of laboratory consumables (including reagents) should not exceed 30% of the subtotal of the budget without these costs.

For example, if:

C = cost of laboratory consumables, and

T = total cost of project

then,

$$C/(T-C) \leq 0.3$$

Spending in excess of this limit is not accepted and will not be reimbursed.

Ineligible expenses

- Infrastructural investments (construction, power, water, internet);
- General overheads, bench fees, salaries, administrative costs, and contingencies;

- Laboratory hardware (such as equipment, hardware, IT tools, clothing, personal protective equipment).

It is not an objective of WOAH twinning projects to directly provide funds to equip laboratories with hardware or building materials. However, a twinning project may include an expert assessment of the laboratory's needs for additional hardware.

Important information

It is the responsibility of each institute to address insurance issues of staff travelling within the framework of a twinning project. WOAH will not be held responsible for any illness or accident occurring whilst experts are on mission abroad.

It is recommended that trainers or visiting scientists are not provided with a lump sum of *per diem* at the beginning of their visit if the visit is longer than a week.

Resources for needs that are not within the scope of WOAH Laboratory Twinning and are available from other sources may complement or enhance the capacity building objectives of Twinning. This may include funds for laboratory hardware, reagents, or other activities, such as research or accreditation. When such funds are available, WOAH may assist the Parent or Candidate Institutes in accessing them

Application process

Choice of project partners

The success of a Twinning project depends on the selection of well-matched institutes, having a subject relevant for the Candidate, clear and achievable objectives, and the full commitment of all those involved, including the competent authority of the candidate country.

It is advised that the twinned partners already have experience working together or, at least, that the lead scientists already know each other. If that is not the case, a pre-twinning visit to the Candidate institute is strongly recommended. This visit does not translate into the obligation of pursuing the development of the proposal and should be funded through the same source that would fund the twinning project.

Language is an important factor in twinning matchmaking, as are the geographical proximity and travel times. WOAH will endeavour to find partners who can speak the same language and to solicit Parent institutes who are located at a reasonable distance from the Candidate to facilitate travel and online meeting arrangements.

Expression of interest

A Candidate or Parent Institute (or both) may express interest in taking part in a twinning. The expression of interest should be accompanied by a 'project brief', which may be in the form of an informal email or a letter to the WOAH Director General. This would include a brief description of the project objectives, details of the institutes involved, benefits that the project will provide, and whether a funding source has been identified. This communication should be sent with the knowledge and support of the WOAH Delegate of the country in which the Candidate laboratory is located.

It may happen that, depending on funding availability, WOAH organises calls for expressions of interest targeting specific regions or specific

Members. The scope and selection criteria of such calls are always made clear to the eligible Members.

At any stage WOAH may advise on factors that make it unlikely for the application to be successful; this might include duplication with an existing or proposed Twinning project in the region or lack of available funds. A list of current and approved WOAH Twinning projects is available on the WOAH website. Potential applicants should use this list to assess whether their application is likely to lead to overlap with an existing project.

Project proposal

It is advised that project partners wait for WOAH's feedback on the expression of interest before investing time developing a formal project proposal.

The project proposal must be completed using the WOAH technical and financial templates, available on request. All fields should be completed according to the specifications of the respective section header.

If the two institutes have not yet worked together, it is strongly advised that a visit to the Candidate institute takes place to inform the development of the work plan.

Special consideration should be given to the risk assessment and mitigation section – risks should be identified and mitigation solutions should be proposed to lessen the impact on project implementation.

In addition to the project proposal, the application file must include:

- Official letters of endorsement and support signed by the WOAH Delegates of both Members. This letter can be received at any stage in the approval process but must reach WOAH before the contract is signed.
- Official letters signed by the Directors of both institutes. These must indicate that the Directors of both institutes support the Twinning Project.

- Curriculum Vitae of the leading scientists at the Parent and Candidate institutes involved with the Twinning project.

Twinning projects usually last between one and three years. Alternative durations can be discussed with WOAH. However, the abovementioned time spans are favoured to avoid disruptions caused by staff and management turnover.

A reporting schedule must be included in the project proposal. Usually, for a 2-year project, reports are due at six-, 12-, and 24-months. Progress reports include a technical and a financial section and should be submitted using the templates made available by WOAH.

It is recommended that the WOAH Twinning Programme Manager reviews the draft proposal before the final version is submitted to the Biological Standards Commission in order to help the project partners improve it.

Proposal evaluation

The final application file (work plan, budget, support letters and CVs) must be sent by email to the WOAH Twinning Programme Manager, who will coordinate follow-up actions.

The technical proposal will be presented to the relevant Specialist Commission: Biological Standards Commission for terrestrial projects and topical areas, or the Aquatic Animal Health Standards Commission for aquatic animal diseases. The proposals will be reviewed during one of the groups' biannual meetings, in February or September every year. The Specialist Commissions evaluate the proposal according to the following criteria:

- Relevance of the topic for the region of implementation, based on the justification provided in the proposal.
- Clarity, coherence, and scientific merit of the work plan.
- Feasibility of the work plan, including risk mitigation strategies.
- Alignment with diagnostic methods described in WOAH standards.

The Specialist Commissions consider each proposal and may endorse the proposal, seek further clarification, or reject the proposal. In the latter case, WOAH will always communicate to the applicants the reason for the failed application.

Contract signature

Once the technical proposal has received the endorsement of the relevant Specialist Commission and the budget (if applicable) has been validated by WOAH, the twinning contract must be signed by the representatives of the Parent and Candidate institutes and by WOAH. Annexed to this contract are the budget (for WOAH-funded projects) and the project plan.

Implementation

Twinning project activities

Twinning activities will depend on the topic and objectives of each project.

As a general rule, projects will start with a kick-off meeting and end with a closing meeting. It is strongly encouraged to include representatives from the national competent authority of the Candidate country in the opening and closing meetings, in addition to the directors of both institutions and the technical staff who is going to be impacted by the project. Having diplomatic representatives of the twinned countries in the meeting can add value and depth to the project beyond the activities undertaken in the laboratory.

The nature of training activities may include short secondments between laboratories, training visits to the Parent and Candidate institute, participation in technical meetings and conferences, day-to-day communication on specific issues, sharing of scientific information and protocols, work on joint publications, and structured workshops for staff from both laboratories. Training should focus on developing self-reliance in the Candidate Institute.

When planning a workshop or other event, it is important that participants are chosen for the relevance of their experience or are chosen according to the tasks they are meant to perform at the Candidate institute. The objectives of all activities should be clearly defined at the outset so that suitable participants can be selected. It is important that people are trained in a way that allows them to disseminate expertise to their colleagues and to stimulate debate in their own region. This involves selecting attendees for trainings with good communication skills who are in a position to pass on their knowledge

Fostering links between scientists

Beyond technical improvement, the creation of lasting interpersonal links between scientists in the two twinned institutes is a key outcome of twinning projects.

It is not a good sign if communication prior to the start of the twinning project is poor, and either partner is unresponsive to emails or calls. Communication problems may be linked to a heavy workload and competing priorities in either laboratory which may also jeopardise the success of the twinning project. If this is the case, it is suggested that the project is postponed to a more favourable period.

Having a significant number of project activities happening in-person, rather than online or through e-learning can help create stronger connections.

It is important that the twinning team maintains contact between in-person trainings through the use of email and videoconferencing technologies in order to sustain project advancement.

Scientists in the Candidate institute are encouraged to actively participate in international meetings and conferences and, where possible, to promote the outputs of twinning projects at such meetings through oral presentations and posters.

Twinning with the objective of becoming a WOAH Reference Centre

Although some projects will result in the Candidate institute achieving WOAH Reference Centre status, this recognition is not an objective of all twinning projects.

If one of the project objectives is to attain WOAH Reference Centre status, the Candidate must be aware of the implications of this recognition, including the obligation to meet the mandate of WOAH Reference Centres.

In such cases, the Candidate should work to engage with the international community and, if aiming for Reference Laboratory status, should be receiving diagnostic samples from beyond its national boundaries.

Reporting schedule

WOAH will ask twinning focal persons to submit progress reports according to the schedule defined in the project contract. Technical and financial reporting templates are available and should be used for all reports. All sections in the template should be filled-in according to the requirements of the respective heading.

The release of the financial tranches beyond the first transfer of funds is contingent on the submission of financial reports by the Parent institute and the review and validation of the reports by WOAH.

The final report should be submitted to WOAH no later than one month after the closing of the project.

Troubleshooting

Every twinning project is likely to encounter unexpected challenges. An awareness of potential risks is the first step to avoiding them. The twinning contract has a section in which foreseeable risks should be identified, and mitigation strategies should be laid out.

Risks that need to be considered may include:

- Changes in the staff or direction of either institute.
- Sociopolitical changes or instability.
- Delays in the obtention of VISAs.
- Delays or cost increase in shipping of materials.
- Disease outbreaks which may impact the workload of either laboratory.
- Natural disasters affecting either country.
- Construction or maintenance work in either institute.

- Breakdown of equipment required for the twinning.
- Abrupt change in animal health priorities.
- Financial challenges, in the case of self-funded projects.

Numerous, but not all risks can be identified prior to starting the project. It is important to regularly monitor risks and evaluate them as they arise. A convenient time to do this is at the end of each defined stage of the project. If a risk becomes an issue that may affect the whole project or budget, WOAH must be notified immediately.

In case of significant delay in the implementation of the project activities, an **extension** of the project can be requested to WOAH by the Parent institute. Project extensions will be assessed individually, based on factors such as progress in the work plan, reasons for the delay, commitment of the involved institutes and, in the case of WOAH-funded projects, considerations related to the conditions of the grant funding the project.

In the event that the project needs to be **terminated prematurely**, WOAH, the Candidate or the Parent institute may initiate this by providing three months' notice to the other parties, in writing. In the event of premature termination, payments for costs actually incurred or indissolubly committed during the project, that have not yet been financed, will be reimbursed by WOAH No payments other the abovementioned will be due to the Parent or Candidate institutes.

Project evaluation

WOAH will implement twinning evaluations at the two- and five-year marks after the twinning is concluded. The evaluations will be undertaken using a dedicated form which will be sent by WOAH to the twinning focal points at the Parent and the Candidate institute, respectively.

The objective of the evaluation is to understand if the outcomes of the project were maintained, if the project partners remained in contact, and if the Candidate institute has worked towards establishing itself as a centre of excellence for the topic/disease in question in the region.

The results from project evaluations will be used to continuously improve the WOAH Laboratory Twinning Programme.

The evaluation form is included in the "Resources" section of this guide.

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Resources

Pre-twinning questionnaire (*example*)

Basic information

Date	
Institute name	
Institute address	
Country	
General telephone	
Institutional email	
Director's name	
Director's email	

Laboratory characterisation

Areas of work	Public health / animal health / food safety / teaching / research / diagnostics / other – *please specify* (*delete the options that do not apply*)
Scope of work	International / national reference / national, central / regional, secondary / Global reference (WOAH, FAO, WHO) (*delete the options that do not apply*)
Main focus areas	Bacteriology / virology / serology / toxicology / parasitology / other – *please specify* (*delete the options that do not apply*)
Please provide the name of the main scientists for each focus area	
What is the biological safety level of the work done within each focus area (BSL1-4)	
Has your laboratory received training from international partners?	*If yes, please elaborate (topic, dates, duration, partner)*
Does your laboratory collaborate regularly with other organisations?	Other laboratories / epidemiologic Surveillance Networks / universities research centres / other – *please specify* (*delete the options that do not apply and specify the topics of collaboration*)
What is the main funding source of the laboratory?	Government / internal resources (e.g. vaccine production, diagnostic testing) / external resources (e.g. FAO, other donors) / other – *please specify* (*delete the options that do not apply*)

How many staff members does the laboratory have?	Managers __, laboratory technicians __, support staff __
Are these staff members sufficient for the daily workload?	

Technical capacity

Material inventory	*Please provide (separately) the list of equipment and material available in the laboratory and its maintenance status*
Does your institute have written procedures for the following topics?	Biosafety / biosecurity / quality assurance / staff training / other – *please specify* (*delete the options that do not apply*)
Who are your clients?	Government / breeders / universities and research centres / private veterinarians / other – *please specify* (*delete the options that do not apply*)
List the five most used diagnostic tests	
On a scale from one (lowest) to five (highest), rank your **water autonomy**	*Please elaborate (e.g. permanent access to running water, existence of a well, existence of reserve tanks, etc.)*
On a scale from one (lowest) to five (highest), rank your **power autonomy**	*Please elaborate (e.g. stable and permanently available, existence of a generator, existence of solar panels, etc.)*
On a scale from one (lowest) to five (highest), rank your **internet** connection	
Does the laboratory have a laboratory information management system (LIMS)?	
Is your laboratory accredited to perform certain tests (e.g.: ISO 1725)?	*Please elaborate*
Does your laboratory have scientific research experience?	*If yes, please provide examples*

Project evaluation form

Sent separately to Parents and Candidates through MS Forms.

Evaluation: no. 1 (two years after project completion) / no. 2 (five years after project completion). *Delete the option that does not apply*.

Project topic:

Country:

Laboratory name:

Role: Parent / Candidate

Funding mechanism: self-funded / funded by WOAH

For PARENTS and CANDIDATES

Have you maintained contact with the partner laboratory? Yes / No

If yes: examples of joint activities / discussions / assistance

If no: why not?

For CANDIDATES

Have you continued to work on the topic of the twinning?

If yes: examples of activities implemented / people trained / events organised and attended

If no: why not?

For PARENTS

Has the Candidate joined/continued to take part in international networks on the topic of the twinning?

If yes: examples of activities implemented / events organised and attended

If no: why not?

For CANDIDATES

Have you collaborated with countries in your region on the topic of the twinning?

If yes: please provide examples of activities implemented

If no: why not?

For PARENTS

Are you aware of the Candidate collaborating with countries in its region on the topic of the twinning?

If yes: please provide examples of activities implemented

If no: why not?

For CANDIDATES

Are you receiving enough support from the National Competent Authority to implement activities related to the topic of the twinning?

If yes: Has this changed as a consequence of the twinning? How?

If no: Could you explain the challenges that you are facing and how WOAH could help?

For PARENTS

Are you aware if the Candidate is receiving enough support from the National Competent Authority to implement activities related to the topic of the twinning?

If yes: Do you know if this has changed as a consequence of the twinning? How?

If no: Could you explain the challenges they are facing and how WOAH could help?

For PARENTS and CANDIDATES

Considering the following definition of project success, would you consider your twinning as successful?

A successful laboratory twinning is one in which the project objectives are achieved within a reasonable timeframe and the candidate laboratory has the resources and capacity to serve its country and region while maintaining the relationship with the parent laboratory.

If no: why not?

For PARENTS and CANDIDATES

Please use this section to provide any comments and suggestions you would like to convey to WOAH.