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July 2012

REPORT OF THE MEETING OF THE OIE *AD HOC* GROUP ON VETERINARY EDUCATION

Paris, 24-25 July 2012

The meeting of the OIE *ad hoc* Group on Veterinary Education (the *ad hoc* Group) was held at the OIE Headquarters in Paris (France) from 24 to 25 July 2012.

Dr Alejandro Thiermann, President of the OIE Terrestrial Animal Health standard Commission, joined the meeting on day 1 and, on behalf of the Doctor Bernard Vallat, Director General of the OIE, welcomed all members and observers. Dr Thiermann took the opportunity to introduce Dr Derek Belton as Acting Head of the International Trade Department.

Dr Ron DeHaven, Chairman of the *ad hoc* Group, acknowledged the presence of several observers and proposed a round table in order for the participants to introduce themselves. The Agenda was revised and adopted.

The list of participants can be found at [Annex I](#) and the adopted agenda at [Annex II](#).

Dr DeHaven opened the meeting mentioning the publication of the Recommendations on the Competencies of graduating veterinarians ('Day 1 graduates') to assure National Veterinary Services of quality that were provided at the 80th OIE General Session in May 2012. These recommendations are relevant to all Member Countries, regardless of the prevailing societal, economic and political circumstances, and can be found at: <http://www.oie.int/en/support-to-oie-members/veterinary-education/>.

Dr DeHaven also commented the adoption of Resolution 32 – Good governance and veterinary education – which identifies the future priorities that the World Assembly of Delegates would like to see addressed in this area. Included in this resolution are the following recommendations:

- The OIE should continue to work closely with Member Countries and the National leaders of Veterinary Education Establishments (VEE), Regional and Global Organisations and donors to support efforts to improve the quality of (initial and continuing) training of veterinarians and to promote harmonised approaches to recognition of qualifications, notably with the support of VSB;
- The OIE should develop recommendations on a core/basic veterinary curriculum relevant to the delivery of quality national Veterinary Services for consideration of the Assembly at the 81st General Session (May 2013);
- The OIE should finalise the procedures for twinning of VEE and of VSB, and should convince governments, regional and international organisations and donors to support these initiatives.

Dr Thiermann congratulated the Group Members on behalf of the OIE for the excellent work done on 'Day 1 competencies' and reminded the attendees that these recommendations are a tool to be used as a guidance for Developing Countries in their effort to ensure the quality of Veterinary Services through veterinary education.

Dr Thiermann reminded that the 'Day 1 competencies' document provides the basis for development of the core curriculum. He emphasised that the OIE definition of veterinary services covers both the government and the private sector veterinarians. The concept of the basic core curriculum applies equally to those working in the private and the public sector. Of course, senior level veterinarians in the public sector will need additional training and recommendations on this point will be made in the document 'Post Professional and Continuing Education for Graduate Veterinarians'. Dr Thiermann highlighted the importance of regional specificities in determining needs for veterinary education.

Dr Saeb El-Sukhon mentioned the importance of the link between the OIE and the VEE and discussion on how to improve the communication between these entities was undertaken. Dr Thiermann clarified that the OIE had made major improvements in regards to communication with different organisations and several agreements have been established in the past years (e.g. NGOs, Industry, World Veterinary Association etc.). However, Dr Thiermann added that, so far, no international organisation exists to represent VEE worldwide and that the OIE liaises with Delegates within the Member countries to ensure communication at all levels, VEE included. It was agreed though that the reinforcement of the communication between the OIE Delegate and Deans of VEE would be of a mayor importance.

Dr DeHaven thanked Dr Thiermann for sharing this insight with the group and took the opportunity to mention that this concern have been taken into account within Twinning Programme, and that communication is ensure by the official endorsement of the programme from both Delegates of the participant countries and the Deans VEE.

1. Review of draft document: Post-Graduate and Continuing Education for Graduate Veterinarians

The *ad hoc* Group considered this document to be finalised and it was decided to submit it to the Code Commission.

This document can be found at [Annex III](#).

2. Twinning project

Dr Alain Dehove, Coordinator of the OIE's World Animal Health and Welfare Fund, joined the *ad hoc* Group to discussed matters related to the finalisation of the document entitled "A Guide to Veterinary Education Twinning Projects".

Dr Caroline Planté mentioned that the World Bank is very much interested and look for opportunities to develop Twinning projects between VEE but that a framework is needed to ensure the correct development and follow-up of the project. She stated the document on 'Day 1 competencies' is a good starting point but that the World Bank was looking forward for the OIE to provide a guideline on a core curriculum.

As mentioned in the previous meeting of the *ad hoc* Group in January, Dr Dehove recalled the importance and the role of public and private veterinarians working for the Veterinary Services (VS) for improving animal and public health and enhancing compliance with SPS and OIE standards, at the national, regional and international level. Twinning projects between Veterinary Educational Establishments (VEE) would indeed support these goals within the framework of the OIE PVS Pathway which looks for a sustainable improvement of national VS' compliance with OIE standards on the quality of Veterinary Services.

The *ad hoc* Group mentioned and discussed some of the existing regional and national accreditation systems. In response, Dr Dehove clarified that OIE does not have the intention to use VEE Twinning projects as a tool for evaluation, assessment or accreditation of VEE. An assessment tool is not required for the preparation of twinning projects. Indeed, this would create confusion between two distinct concepts, i.e. twinning as a means to build capacity; and the evaluation/assessment/accreditation of VEEs.

The document was review and finalised and can be found at [Annex IV](#).

3. Model Core Curriculum Guidelines

Dr DeHaven acknowledged the assistance provided by Dr Elizabeth Sabin, from AVMA, in drafting the document. He reminded the guidance of Dr Vallat during the previous meeting of the *ad hoc* Group, when he stated that the Model would need to leave space for VEE to customise the Core Curriculum in accordance to their local needs and specificities (e.g. relevant importance of aquatic animals).

Dr Mariela Varas reminded the Members of the need to find all the “Day 1 Competencies” in the Model and to link each one of them with a course or content.

Dr DeHaven indicated the need to add a comprehensive introduction that clearly states the objective of the document which actively avoids dictating or implementing a particular system (e.g. European, American).

After discussion, it was agreed neither to include basic sciences courses (or content) in the Model nor to specify an exact year of the curriculum when specific courses should be taken. Part of the introduction would refer to this discussion, its outcome and rationale.

It was agreed to finalise the document in time to submit a first draft to the Code Commission for its meeting in September.

Dr DeHaven congratulated the Group for its accomplishments over the course of five meetings. The Day 1 Competencies document represents an important step in establishing a global minimum standard for veterinary education. The Model Core Curriculum provides a sample framework for including all of the competencies in a basic curriculum, and the twinning document provides a mechanism to assist in actually implementing the basic curriculum at VEE in developing countries. And finally, the Post-Graduate and Continuing Education for Graduate Veterinarians documents promote lifelong learning and continuous improvement in the delivery of national veterinary services. The members of the Group have worked very collaboratively and have been able to reach consensus in almost all situations. Dr DeHaven said it has been an honour and pleasure to chair this Group.

4. Future work

The *ad hoc* Group, along with this report, will submit the Model Core Curriculum Guidelines to the Terrestrial Animal Health Standards Commission, with a view to obtaining the views of the Commission and the input of OIE Members on this important area of work.

5. Dates for next meeting

It was agreed that the next meeting would take place at OIE Headquarters in Paris on January 2013 in order to address Members comments on the Model Core Curriculum Guidelines and to finalise the document. Members agreed to inform the OIE International Trade Department of their availability.

.../ Annexes

MEETING OF THE OIE AD HOC GROUP ON VETERINARY EDUCATION

Paris, 24-25 July 2012

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Adopted agenda

Day 1 (24 July, 2012) Morning

- Welcome, adoption of the agenda, and introductory remarks
- Discussion with the Dr Alex Thiermann
 - Summary of actions at the 80th General Session with regards to the final *Minimum Competencies* document
- Review the March 26, 2012 draft document titled *A Guide to Veterinary Education Twinning Projects*
 - Review any comments received in response to the March 26, 2012 Twinning draft
- Finalize *A Guide to Veterinary Education Twinning Projects*
 - Discuss next steps toward OIE approval/acceptance of this document

Day 1 (24 July, 2012) Afternoon

- Review and revise July 2012 draft document with working title: Model Core Curriculum Guideline
- Background to include initial comments submitted to Dr DeHaven regarding development of the model core curriculum

Day 2 (25 July 2012) Morning

- Continue review and revision of July 2012 draft *Model Core Curriculum Guideline*

Day 2 (25 July 2012) Afternoon

- Finalise *Model Core Curriculum Guideline*
 - Develop any recommendations to move forward through the Code Commission for OIE approval/acceptance of the Model Core Curriculum document
 - Summary of actions of the *ad hoc* Group over its five meetings
 - Concluding remarks
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POST-GRADUATE AND CONTINUING EDUCATION FOR GRADUATE VETERINARIANS TO ASSURE ONGOING DELIVERY OF HIGH-QUALITY NATIONAL VETERINARY SERVICES

Background

Only some veterinarians will focus their careers on the delivery of National Veterinary Services that is, services provided under the legislative framework and the auspices of the governmental authority of a given country to implement animal health programmes to assure the health and wellbeing of animals, people and ecosystems. For those veterinarians that do choose National Veterinary Services as a career direction, considerably greater expertise will be needed than that described in the *Minimum Competencies Expected of Day 1 Veterinary Graduates to Assure Delivery of High-Quality National Veterinary Services* document developed by the OIE *ad hoc* Group on Veterinary Education. In addition, private practice veterinarians who may act as sub-contractors for National Veterinary Services will need ongoing continuing education to ensure their relevant knowledge and skills are up-to-date.

This guidance document provides a broad overview of methods of delivering higher-level educational modules or continuing education and training programmes focused on delivery of national veterinary services for both veterinarians in the veterinary authority as well as private practice veterinarians working under the auspices of the veterinary authority. In addition, essential knowledge and skills for veterinarians in the veterinary authority are outlined, as are topics for continuing education relevant to ensuring currency of knowledge and skills of private practice veterinarians delivering national veterinary services.

After Day 1 competencies have been assured through a rigorous educational program leading to the awarding of the first veterinary professional degree, those veterinarians who wish to focus their careers on the delivery of National Veterinary Services through a path leading to a senior veterinarian position in the Veterinary Authority will need to gain additional expertise in topics specific to the National Veterinary Services. This may be best done either through additional degree programmes or/and continuing education including on-the-job training. Assuring currency of knowledge of both private veterinarians and those working for the veterinary authority is best done through continuing education, which may be required for ongoing employment, promotion, or, in the case of private veterinarians, certification to allow ongoing subcontracting with the veterinary authority.

Definitions

- The term “Veterinary Services” refers to the OIE *Terrestrial Animal Health Code (Terrestrial Code)* definition, which includes both public and private components of the veterinary profession involved in the promotion of animal and public health as well as animal welfare.
- Also from the *Terrestrial Code*, Veterinary Authority means the Governmental Authority of an OIE Member, comprising veterinarians, other professionals and para-professionals, having the responsibility and competence for ensuring or supervising the implementation of animal health and welfare measures, international veterinary certification and other standards and recommendations in the *Terrestrial Code* in the whole territory.
- For the purpose of this document “Senior-Level Veterinarian in the Veterinary Authority” means a veterinarian who has responsibility for staff and resources and has regulatory authority to implement regulatory programmes.

Annexe III (contd)

Post-graduate education programmes

- Research oriented
 - Masters of Sciences (MSc) or equivalent programmes
 - Combination of the first professional veterinary degree with either a MSc or a PhD
- Specialisation oriented
 - Masters in Preventive Veterinary Medicine
 - Masters in Veterinary Public Health
 - Other specialised degree programmes or certification programmes, in addition to the first professional veterinary degree and supporting the National Veterinary Services in:
 - technical areas such as aquatic animals, wildlife, human and animal epidemiology and ecological systems
 - non-technical areas such as legislation, foreign language, communication and economics.

Continuing education

Education that is relevant to the National Veterinary Services activities comes from an approved source and includes certification for attendance or completion.

- Employer directed training
Employer directed training is of particular relevance to those veterinarians who focus their careers on National Veterinary Service; in other words, those veterinarians on track to become a “senior-level veterinarian” in the veterinary authority. The veterinary authority should have in place plans for training employees so that they are fully competent in the regulations and programmes overseen by that authority.
- Conferences
Examples include the conventions offered by international, national, or regional veterinary professional organisation, which often provide various continuing education tracks; specialty organisations, such as the American College of Veterinary Preventive Medicine or the International Aquatic Veterinary Medical Association which provide continuing education sessions focused on the organisations specific area of expertise; meetings sponsored by one or more organisations focusing on a specific topic; such as the June 2011 OIE Global Conference on Aquatic Animal Health Programmes.
- Distance learning
Distance learning encompasses any type of learning done via electronic means, to include webinars; online, self-directed courses; virtual meetings (either via teleconference or video conference); collaborative spaces
- Other sources
Notwithstanding the above, there are other valuable sources of continuing education including peer reviewed scientific journals, peer to peer professional interactions, both in person and virtual, and On-the-Job experience.

Continuing education topics for private veterinarians delivering national veterinary services for terrestrial and aquatic animals:

- Emerging and re-emerging animal diseases
- Regulatory programmes for animal diseases, such as brucellosis, tuberculosis, bluetongue, infectious salmon anaemia and other diseases important to the region, to include detection, control, and eradication programmes.
- Food safety programmes at the primary production (farm) level

- Slaughter inspection procedures
- Certification requirements and procedures
- Surveillance methods and programmes for transboundary diseases, including contingency plans
- Notifiable diseases: reporting procedures
- Animal welfare
- One Health issues including the collaboration between veterinarians and physicians, wildlife disease surveillance and control programmes and zoonotic disease prevention.
- Legislative regulatory and ethical framework of the functions delegated to private veterinarians
- Familiarisation with new diagnostic tools and laboratory methodologies, including sample collection, handling and submission
- Prudent use of veterinary products, both medicines (eg, antibiotics) and biologics (eg, vaccines).
- On-premise (eg, farms) biosecurity programmes
- Preparedness and response to emergencies (both natural [eg, earthquakes] and man-made [eg, nuclear plant accidents] events)
- Where to find up-to-date and reliable information
- Other topics relevant to the country or region

Continuing education topics for veterinarians working within the Veterinary Authority

Additional details for these topics can be found in the “Day 1 competencies” document, Section 2, Introduction to advanced competencies (insert link to Day 1 Document).

- Organisation of veterinary services
- Inspection and certification procedures
- Management of contagious diseases including quarantine and movement restriction, compensation, vaccination and surveillance plans, etc.
- International trade framework
- Public law and regulation including administrative law, regulatory enforcement of health policy and justice
- Effective written and verbal communication in the primary language of Member Country to a variety of audiences (ie, public, legislative, professional audiences)
- Promoting the welfare and protection of animals requires a working knowledge of the relevant national legislation and means to implement these. This implies knowledge of the activities of relevant national organisations including NGOs.
- Animal food production systems and economics
- Knowledge of when risk assessment is indicated
- Audit, checks and certification
- Food safety and hygiene including HACCP, antimicrobial resistance, residues and food processing techniques

Annexe III (contd)

Additional continuing education topics for Senior Level Veterinarians working within the Veterinary Authority

- Language training appropriate to the needs of the National Veterinary Services and taking into account the three official languages of the OIE (English, French, Spanish)
- Best practices in administration and management.
- Human resources management including being able to effectively and efficiently utilise employees and others to accomplish the mission and goals of the organisation.
- Obtaining and management of financial resources, including effectively securing financial resources and efficiently utilising these resources.
- Effective written and verbal communication in the primary language of Member Country to the media.
- Project management including project design, evaluation of feasibility, obtaining of funding, implementation including measuring progress against established milestones, evaluation and reporting of results.
- Welfare and protection of animals including working knowledge of the relevant international standards, the means to implement these, and the activities of relevant regional and international organisations including NGOs.
- Advocating for science-based policies in a given political and sociological context.
- Application of risk analysis: drafting of appropriate questions for risk assessment and proposing risk management measures.
- Risk communication to the public and other relevant audiences.
- International trade regulations and procedures.
- Role and activities of International organisations, and their relevant standards and applications i.e. WTO, OIE, FAO, Codex Alimentarius Commission (CAC) and WHO.
- Audit the efficiency and effectiveness of veterinary services, their organisation, programmes and activities.
- Knowledge and management of databases and other sources of information relevant to the veterinary services.
- Broad knowledge of ongoing research in the areas relevant to delivery of National Veterinary Services.

A Guide to Veterinary Education Twinning Projects

Rev OIE - July 25, 2012

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Introduction to Veterinary Education Twinning

The rapid cross continental spread and wide occurrence of major animal diseases, such as highly pathogenic avian influenza (HPAI), H1N1, bluetongue and foot and mouth disease has highlighted the need for a global approach to the diagnosis, surveillance and control of Transboundary Animal Diseases (TAD), including zoonoses, diseases impacting food security, and food safety issues. It is clear that, with the current levels of global movement and trade, an outbreak of a TAD in any one country can be a threat to the international community. Successful containment and control of TADs and widely disseminated diseases will only be achieved through an early detection and a rapid global response. It therefore becomes essential that, through accurate diagnosis, disease is detected early, promptly reported to the international community, and that standardised, internationally approved control measures are applied appropriately with minimum delay. Accurate and early disease detection allows measures to be implemented at a time when the disease situation is more amenable to control, ensuring that resources are used more efficiently and that direct losses are kept to a minimum. Early warning of a possible threat allows neighbouring regions to be vigilant and ultimately reduces the risk of further disease spread. On a national and regional level, early detection and effective control depends on access to expertise and support by well-educated and technically capable Veterinary Services, including both public and private veterinarians.

The global spread of avian influenza, the H1N1 pandemic and even SARS have served to emphasise the relationship amongst animals-humans-ecosystems in the “One Health” paradigm and the global impact of veterinarians delivering “local” animal health services. The situation is particularly critical in the developing and transitional countries that have become the focus for emerging and re-emerging zoonotic and transboundary diseases. The repercussions of insufficient disease surveillance and non-compliant regulatory Veterinary Services are exacerbated by poorly trained public and private veterinarians who lack the modern skills, knowledge and resources to prevent and control infectious diseases at their animal origin. The sustainability of donor-driven investments in the livestock sector and the livelihoods of producers are compromised by poorly skilled animal health workers. There is a pressing need to develop a clear strategy for modernising and harmonising veterinary training in accordance with international standards that articulates the country-specific needs and addresses them with significant investments in facilities, curriculum and human resources to produce better qualified veterinarians in the public and private sector that can ensure international standards for the control of animal diseases, including zoonoses. In this regard, both initial and continuing professional education need to be considered.

Livestock are integral to the livelihood strategies of hundreds of millions of resource-poor farmers and pastoralists; they support many millions of the rural and urban landless throughout the developing world and typically have multiple roles or value for poor households (Perry et al. 2003, Thornton et al. 2003, Holden et al. 1997, Winrock 1992, Livestock in Development 1999). With a growing population and accelerating urbanisation, demand for livestock products is increasing quickly. Different livestock production and marketing systems present unique sets of disease prevention and control challenges in which limited human and financial resources, information and skills must tackle increasingly complex problems. Veterinarians have an important role to play to address the food security challenge.

The proximity and concentration of livestock and people, particularly in peri-urban areas in developing countries, pose great public health challenges from contaminated food, pollution and zoonotic diseases. The lack of appropriate animal health surveillance networks in both peri-urban and rural areas, including remote places, is also a concern. In many developing countries inadequate infrastructure and weak institutional arrangements for delivery of animal health and production services increase transaction costs and, in this context, impedes the delivery of multi-disciplinary animal health services as both a public and private good.

Animal agriculture accounts for up to 50 percent of agricultural GDP in some countries and significant rural employment opportunities. An estimated 1.3 billion people depend partially or entirely on livestock for their livelihoods, and livestock keeping is often a last resort for people without alternatives. On a global scale, producers in developing countries are now producing more meat than their counterparts in the developed countries and the gap is similarly narrowing for dairy products. This marks a substantial shift in the “centre of gravity” for livestock production from the more temperate zones to tropical and sub-tropical environments and similarly contrasting critical needs in terms of animal health, disease risks and veterinary education.

Annexe IV (contd)

This growth of demand for animal-source foods in developing countries has accentuated the multitude of related threats from increasing dependence on livestock including poverty and livelihood risks, food security, food safety, and trade-related transboundary diseases. The future of smallholder producers and their access to the evolving supply chains in the developing world should be considered in the unprecedented context of global trade and fundamental structural changes in production and processing of livestock commodities. The Veterinary Services, comprising the complementary roles of veterinarians in the public and private sector, play a fundamental role in these developments and their education and training must keep pace. The credibility of animal health services begins with the quality of veterinarians, and this implies both initial and continuing education, as well as systems for ensuring ethical and other standards in veterinary practice.

The effective delivery of services is confronted by a myriad of challenges related to poor (or the absence of required) infrastructure, geographic obstacles, limited financial and physical resources, unskilled veterinarians and possible resistance to change, which may originate in the veterinary faculties.

The establishment of effective animal health services, comprising complementary public and private sectors, is further restricted by illiteracy, non-professional semi-intensive or backyard production systems, severe resource limitations, competing regional and national vested interests and corruption. The delivery of multi-disciplinary animal health services in this environment is particularly difficult.

Disease epidemics often result in catastrophic losses. Epidemics marginalise farmers, destabilise rural economies, increase the potential for famine and conflicts, and often present a direct threat to public health. Many of these animal diseases are endemic in poor countries because of the weaknesses of national Veterinary Services; the lack of institutional capability for early detection and rapid response to animal disease outbreaks, to prevent isolated cases from spreading beyond national borders; and, most importantly, the lack of delivery of veterinary services (private veterinarians) at the farm level. A further significant concern relates to the arrangements for production, control and use of veterinary products such as medicines and vaccines. In the absence of effective veterinary controls, the use of poor quality, ineffective or dangerous medicines and vaccines can actually exacerbate risks associated with animal diseases, rather than helping to prevent or manage them.

Awareness that climate change places traditional livestock production systems in jeopardy has evolved into a tetrahedral discussion of animal-human-ecosystem health within the overriding complexity and influence of the climate change umbrella. Considering the geographic risks associated with endemic, re-emerging and emerging diseases, developing country veterinarians are at the front lines and a renewed investment in their education and training is paramount to ensure the effectiveness of any prevention and control program and to prepare this key profession to support the farming sector in the management of future risks and challenges.

The evolution of animal health services in developing countries is often restricted by a resistance to change in the government public service, slow acceptance of the relevant role and responsibilities of the private sector and a lack of fundamental reform in the educational institutions. Established curricula and commitment to traditional and historical approaches and methodologies make it difficult to introduce more modern, science-based approaches to training and education that can be adapted to the local need. There is a gradual erosion of veterinary resources driven by deteriorating reputation of the profession, attrition with insufficient replacement plans, technical over-emphasis, inadequate salaries and incomes and very poor advocacy nationally, regionally and internationally, especially with donors. Poorly paid veterinary professionals may derive the major part of their remuneration from the sale of veterinary products. If there are not appropriate controls on quality, this can result in a very poor reputation of the veterinary profession. There is very little public or political appreciation of the role of Veterinary Services in mitigating the disease risks associated with public health and food safety and their ultimate impacts on poverty alleviation, food security, trade, tourism and GDP.

In many countries, qualified field veterinarians are aging and the lack of opportunities for young people in the private veterinary sector, given minimal government salaries, has encouraged them to opt for other career choices. Recent surveys in Eastern European and Central Asian countries, for example, indicate that the majority of field veterinarians are over 50 years of age with less than 12% under 40 years of age. Encouraging anecdotal evidence, however, indicates that donor supported programs which provide contracted vaccination fee-for-service to increase private veterinarians' incomes may be acting as a catalyst to increase the number of young people interested in the profession and applying to the veterinary schools.

Annexe IV (contd)

An educated veterinary workforce would support countries' efforts to meet the requirements of the World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) which requests that sanitary measures are based on scientific principles. All Members of the OIE are expected to comply or move towards compliance with these international guidelines and standards that are prescribed in the OIE *Codes* and *Manuals* for terrestrial and aquatic animals. The standards for veterinary and aquatic animal health services are respectively laid down in the OIE *Terrestrial Animal Health Code* and in the *Aquatic Animal Health Code*. The OIE PVS Pathway provides clear guidance for alignment of national Veterinary Services with international standards and veterinary education is a fundamental resource to achieve this goal. Through effective Veterinary Services, Members of the OIE should have scientific competence and capacity to contribute, using scientific justification, to the development of trade standards on an equal footing with other Members and, where appropriate, conduct risk analyses as a basis for establishing and justifying national policies. A well-educated veterinary workforce is necessary to provide for scientifically based risk assessment, understanding of OIE standards and guidelines, credible reporting of disease and effective delivery of services to producers and consumers.

It is essential that veterinary scientific communities in developing countries are strengthened so that they are able to contribute fully to discussions leading to the adoption of OIE standards. At present the modern academic expertise, innovative research resources and progressive training capacity are provided through institutions in developed countries. This tendency leads to a geographical distribution favouring the northern hemisphere. There is a need for a more even spread both in terms of geography and countries. Capacity and expertise needs to be extended to developing and in-transition countries so that they can become self-sufficient in effective surveillance, prophylaxis, and control of animal diseases, and that, when justified, reliable evidence and scientific justification can be provided to certify animals and animal products as safe for trade.

One of the main objectives of the OIE Veterinary Education Twinning Programme is to ensure a more fair distribution of veterinary education resources in developed and developing countries while also contributing to the "One Health" agenda.

The OIE established the *ad hoc* Group on veterinary education (AHGVE) to support the development of essential standards for veterinary education with the fundamental skills to meet the needs of the public and private components of the national Veterinary Services. The *ad hoc* group has identified 'Day 1 Competencies', which veterinary graduates should have in order for the national Veterinary Services to meet the OIE international standards for effective performance: the "OIE recommendations on the Competencies of graduating veterinarians ("Day 1 graduates") to assure high-quality of National Veterinary Services". In effect, the Day 1 competencies provide a template for the development of the Model Core Curriculum Guidelines. The application of this template by the Veterinary Education Establishments (VEE) of developing countries would provide the catalyst for upgrading veterinary training and address a key capacity building need of many developing countries.

The insertion of courses concentrating on "Day 1 Competencies" in the curriculum should not prevent the need to include aspects linked to local circumstances and local demand.

The OIE Veterinary Education Twinning Programme

The veterinary education twinning program has evolved from the ongoing work of the OIE to develop the OIE PVS Pathway, drawing on the AHGVE recommendations on Day 1 Competencies and on the Model Core Curriculum Guidelines, on the OIE recommendations on the Competencies of graduating veterinarians ("Day 1 graduates") to assure high-quality of National Veterinary Services, and on the lessons learned with the OIE Veterinary Laboratory Twinning Initiative. It essentially involves creating and supporting a link that facilitates the exchange of knowledge, ideas and experience between two veterinary education establishments (VEE). "Twinning" has been followed by the OIE as a method for improving institution capacity and expertise in developing and in-transition countries. A recent example of the successful application of twinning on a large scale was the European Union (EU) enlargement (pre-accession) programmes. Over 1000 twinning projects were implemented to assist accession countries in meeting and maintaining the standards required for entry into the EU. The OIE has also gained experience on this concept with its ongoing Laboratory Twinning Programme. The OIE Veterinary Education Twinning Programme is therefore expected to create opportunities for developing and in-transition countries to develop modern educational facilities and methods based on accepted international standards. This will be achieved through individual twinning projects. The eventual aim is to create more centres of excellence for veterinary education in geographic areas that are currently underrepresented and to achieve a better balance in the global distribution of well-educated veterinarians.

Each twinning project is a partnership between one or more recognised and preferably accredited veterinary education establishment(s) and a Candidate veterinary education establishment. The Candidate establishment may wish at a later stage to eventually achieve accreditation under an existing well established accreditation body, and/or any other possible current or future well established international accreditation or recognition mechanism. The accredited veterinary establishment(s) could provide technical assistance, guidance and training.

Objectives for each Twinning project are jointly agreed by the OIE and the Directors/Deans of the participants (i.e. Parent and Candidate Establishments) and endorsed by the National Delegates to the OIE of the countries concerned. The guiding or Parent Establishment(s) and their designated expert(s) will be teamed with counterparts in the Candidate Establishment and would be the driving force, ensuring the success of the project. A strong relationship will ensure a flow of expertise that will benefit the Candidate Establishment. Links should be formed between staff (teachers) and students at all levels. The concept should be flexible and adaptable to a range of situations. For example, possible steps might include helping to implement a self-assessment to develop a comprehensive strategic plan for the development of the faculty; this plan could then provide the basis for a long-term collaborative Memorandum of Understanding (MOU) and commitment amongst the Parent and Candidate Establishments and provide for more specific interventions and activities related to curriculum development; facilities design, including capital fundraising; faculty upgrading programs (MSc/PhD); faculty; teacher and student exchanges; graduate programs; and collaborative research. The signing of the MOU could trigger possible additional funding through donor and other organizations to support the eventual long-term objective(s) and could allow the Candidate Establishment to achieve its goal of improving the quality of veterinary education it delivers. Twinning aims to upgrade veterinary education, especially in relation to the needs of the national Veterinary Services, to meet satisfactory international standards as established by the OIE, which at the request of countries can be evaluated in the framework of the PVS Pathway. The benefits from the Twinning project should be sustainable, remain long after the project has closed and lead to the maintenance and further development of veterinary and educational expertise in the region. Ideally the relationship amongst the collaborating institutions should be a long and lasting one, building on the collaborative and mutually beneficial programs.

Adherence to “Day 1 Competencies” provisions and the Model Core Curriculum Guidelines published by the OIE should be clearly mentioned in the Memorandum of Understanding and the twinning programme.

To increase the chances of success, the project should focus on well-defined, achievable and measurable outputs from the Candidate Establishment’s strategic plan. Clear-set benefits are realised throughout the project, allowing it to be divided into stages with set outputs from each stage. Progress can be monitored through achievement of these goals. The World Animal Health and Welfare Fund, managed by the OIE and supported by donors, will provide financial support for the Veterinary Education Twinning projects and will ensure implementation of relevant audits regarding the use of the funds. This is to support and sustain the link between the participating institutes for the duration of an approved project and to ensure the effective transfer of expertise and capacity to the Candidate veterinary establishment. It is not an objective of Twinning to support civil works or the procurement of equipment or of hardware for e-learning platforms.

The Twinning project may, however, include an assessment of the needs and of the costs (civil engineering, buildings) for such hardware as part of the strategic plan, so that other necessary resources beyond those provided for Twinning can be allocated appropriately. The Twinning partners would be expected to advocate the strategic plan with Government and donors to identify potential sources of financing for capital projects, facilities upgrades and equipment or research grants which would contribute to this effort.

Twinning is part of the wider OIE initiative to improve the capacity of Veterinary Services in developing countries; it therefore has synergy with the OIE Evaluation of Performance of Veterinary Services (PVS) Pathway and the sister OIE Laboratory Twinning Programme.

OIE Standards

OIE Standards are recognised by the World Trade Organization as reference international sanitary rules and are mainly laid down in the following four reference documents: the *Terrestrial Animal Health Code*, the *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals*, the *Aquatic Animal Health Code* and the *Manual of Diagnostic Tests for Aquatic Animals*. The *Codes* relate to rules that member countries can use to protect themselves from the introduction of diseases and pathogens via trade, while fully respecting their obligations as WTO Members. The OIE standards for testing and vaccination of terrestrial and aquatic animals are laid out in the *Manuals*. Early, rapid and accurate detection of disease followed by rapid response to animal disease outbreaks and immediate reporting to the international community are primary and essential steps for effective control of animal diseases. The OIE and the international community recognises the critical role of veterinarians in OIE Reference Laboratories and Collaborating Centres and throughout the national animal health systems/Veterinary Services and also recognises the need to ensure an optimal level of fundamental skills to overcome problems relating to surveillance and control of OIE listed diseases.

The OIE has adopted international standards on quality of Veterinary and Aquatic Animal Health Services, respectively in the Sections 3 (“Quality of Veterinary Services” and “Quality of Aquatic Animal Health Services”) of the *Terrestrial Animal Health Code* and of the *Aquatic Animal Health Code*. The *Terrestrial Code* makes reference to the ‘Day 1 Competencies’ document.

Scope of Veterinary Education Twinning projects

The scope of subjects covered by Twinning is wide; objectives of individual projects may adopt specific elements of the initial strategic plan for the Candidate Establishment and range from the implementation of the Model Core Curriculum Guidelines in one or more disciplines to include faculty upgrading, staff and student exchanges, collaborative research and preparation of capital projects for facilities upgrading. The project should always be relevant to the needs and local circumstances of the area/region in which the Candidate Establishment is situated.

The length of the project will depend on the scope of the project; OIE Twinning projects have a minimum duration of 2 years and a maximum of 3 years (extensions may be envisaged).

Project proposals may be drafted with reference to a self-assessment and strategic plan for the Candidate Establishment. The project should be linked to the use of the country PVS evaluation report (when available). The PVS Gap Analysis report of the beneficiary country and Veterinary Services Strategic Plan can also be used (when relevant) to create opportunities for additional co-financing.

To maximise the benefits of the project, it is important to select realistic, achievable objectives where significant improvements can be made. Choosing objectives that are too ambitious will introduce a risk of project failure. It is important to focus on improving specific areas of education and training that will provide demonstrable and practicable benefits to the country needs.

To this end, the strategic plan for the Candidate Establishment should reflect country needs in terms of the national Veterinary Services and all related institutions as well as the priorities for national animal health and food safety programs (e.g. disease surveillance and reporting; epidemiology; health and pathology in food producing animals; regulation of veterinary medicines and vaccines). This will form a solid platform on which to build and demonstrate benefits to the government, deans and teachers at veterinary faculties, veterinary students and other stakeholders.

Candidate veterinary education establishments may be already benefiting from other bilateral or multilateral projects aimed at increasing their capacity or expertise. In this case, a Twinning project should be designed to ensure coordination between related projects and to avoid duplication, thereby maximising synergies among the current and future projects. In cases where there are other donor-funded programs related to the project (livestock development, food safety, agricultural competitiveness, One Health, etc.) efforts should be made to link the project in a supporting role and seek co-financing through other donors (World Bank, EU TEMPUS Program, bilateral programs, etc.). The Twinning project should also provide a mechanism for partnering institutions to access related development projects to provide technical assistance, training and consulting services with appropriate remuneration. Dual funding for the same activities should be avoided; co-financing of complementary activities should be encouraged. Although some Twinning projects will result in wide-spread and significant improvement in the quality and capacity of the Candidate Establishment, in other cases, Candidate Establishments may achieve upgrading only in specific areas of work, for example, a limited range curriculum development focused on national service needs.

Principles for selecting Parent and Candidate Institutions

The success of a Twinning project depends on the selection of appropriately matched institutions and well-defined achievable objectives. The project relies on the support and governance of national Veterinary Services.

It is essential that the National Delegates to the OIE (nominated by their Government) in the countries involved and the respective University Management (Executive Directors/Deans) agree and support the Twinning arrangement.

The Twinning should preferably take place in a country where the PVS has been completed (or where the OIE PVS Tool is used for self-evaluations), and subsequent PVS Gap Analysis and national Veterinary Services Strategic Plans are underway, when relevant. Twinning aims to extend the OIE network of expertise to areas where there is a need. The need may be influenced by the disease situation, features of animal production systems in that area, food safety policies, or it may be based on a risk assessment. Candidate Establishments should be in a region where expertise and capacity is currently deemed to be deficient as reflected in the PVS or other reputable assessment/project appraisal tool (e.g. World Bank review). In terms of capacity and access to expertise, Twinning should provide national and regional benefits.

A tried and tested relationship has a good chance of being sustainable and successful. Twinning between establishments that already have a good relationship should be encouraged. A Parent faculty should be accredited or approved by a respected national or regional veterinary educational accrediting or assessment entity and have the required level of expertise and capacity relevant for the Twinning project including significant experience in working with developing countries. Candidate Establishments should have the real potential to make significant improvements in terms of capacity and expertise. They will need adequate facilities and infrastructure, and demonstrate that they have the will and resources to improve. Preference would be given to those Candidate Establishments already receiving or planned to receive concurrent Government or donor investment projects. The resources for administering the project and for training must be considered at both the Parent and Candidate veterinary education establishments. The partnership will require effective and reliable communication links between the participating institutions and experts.

If the project is to succeed, goals that are set at the outset must be realistic and attainable. The selection of Twinning partnerships should be transparent and open. The Twinning project is principally between the institutions, and the formal agreement is between the OIE, the lead Parent Establishment and the lead Candidate Establishment, with the official agreement of the two Governments concerned. However, there is scope to involve more than these two institutes in some or all of the activities. For example, to broaden the scope of the twinning project, the Parent Establishment may wish to partner with (an)other Parent Establishment(s) for some of the specific capacity building activities in the Candidate Establishment or to access additional potential funding sources or co-financing for the project.

Annexe IV (contd)

There may also be advantages to involving permanent staff from more than one Parent/ Candidate establishment in activities such as training. These additional staff may belong to other Universities from within the country of respectively the Parent/Candidate establishments. The intention to do this should be clearly stated in the project plan and any additional budgetary needs should be clearly identified. The formal agreement will still remain between the OIE, the lead Parent Establishment and the lead Candidate Establishment. Partners may choose to engage other national institutions as a way of sharing resources for training and for strengthening links between more than two faculties.

Multiple twinning projects in the same institute

To manage resources effectively and to maintain an even geographical balance, it is not recommended that a Parent Establishment be involved in more than two twinning projects at the same time. Any restrictions on the number of projects that an Establishment or Organisation is involved in may be considered on a case by case basis.

Roles

The Parent(s) Institution

The Parent Establishment is the driving force, ensuring the success of the Twinning agreement and project. The project manager at the Parent Establishment is responsible but may decide to nominate a project leader who will be responsible for the activities of the Parent Establishment. The Parent Establishment finalises the project proposal and work plan with the Candidate Establishment and submits this to the OIE Headquarters in Paris. The Parent Establishment is accountable and responsible for the implementation and use of the financial resources supporting the Twinning project. The Parent Establishment will prepare and transmit the interim and final technical/financial reports to the OIE.

Candidate Institution

The Candidate Establishment should be fully committed to improving its capacity and expertise with the eventual aim of achieving the goals established in the Twinning project. Although the Parent Establishment is the driver of the project, the Candidate Establishment, being the beneficiary, owns the end result that has been achieved through the partnership. The project manager (or someone he/she nominates) at the Candidate Establishment is project leader for activities of the Candidate Establishment.

The OIE

The OIE Headquarters receives project proposal for examination and further approval. It provides support and coordination for the overall Twinning programme. The OIE will ensure that technical and financial controls, outlined in the mutual agreement between the participating institutions, are applied and comply with the requirement of the donors involved. The OIE will initiate and facilitate negotiations between the OIE and potential financial donors to further assist Twinning projects. The OIE Headquarters is responsible for reviewing and providing advice on the technical components of the Twinning projects.

The OIE World Animal Health and Welfare Fund provides financial support for the OIE Veterinary Education Twinning Programme, depending on resources available.

Submission of proposals for OIE-supported Twinning

Initial approach and project brief

A Candidate or Parent Establishment may express interest in taking part in a Twinning project. This may be a joint or individual expression of interest. The initial approach should be accompanied by a project brief, which may be in the form of an email or letter to the OIE Headquarters. This is a brief description of the reasons for the project and the benefits that the project will provide. It should summarise the justification or mandate for the project. This should also be sent or copied to the national Delegate(s) to the OIE corresponding to the establishment(s) concerned. It should be clearly stated when the Parent or Candidate Establishment submitting the expression of interest has chosen an Establishment with which it wishes to twin. The Parent Establishment should preferably be an accredited or approved establishment (as described above) with relevant expertise. There must also be a demonstrated commitment to international development and institutional expression of interest in carrying on the long-term collaboration between the institutions long after the project has been completed.

In the context of this Manual accreditation refers to accreditation or approval of veterinary education establishments under a respected national or regional veterinary educational accrediting or assessment entity and/or any other current or future well-established national or regional accreditation or recognition mechanism.

In other cases, where a Parent Establishment has not been indicated by the Candidate Establishment and the initial interest is supported, the OIE may suggest a suitable partner, depending on the specific request, location, and disease situation. The OIE may also receive an expression of interest from a Parent Establishment and propose a Candidate Establishment to the Parent Establishment. Following receipt of the project brief, the OIE will advise on further action.

The written agreement of the National Delegate(s) to the OIE of the countries of the Parent Establishment and of the Candidate Establishment will be sought. This is the responsibility of the two Delegates to carry out appropriate consultations at country level and to seek appropriate support from line authority of the faculties concerned if appropriate.

Project proposal

Any Candidate or Parent Establishment that has the agreement of the Delegate to the OIE can submit a project proposal to the OIE following submission of a project brief. The OIE 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. The potential Parent Establishment should submit the project proposal to the Director General of the OIE. The Twinning proposal should include:

- (An) official letter(s) signed by the Directors/Deans of both establishments. This must indicate that the Directors of both institutes support the Twinning Project and are committed to a long-term collaboration beyond the life of the project.
- (An) official letter(s) signed by National Delegates to the OIE of the two lead countries concerned (Parent and Candidate Establishments).¹
- The details of the Establishments and the responsible experts at the Parent and Candidate Establishments. If the responsible expert leaves or is replaced, the OIE needs to be informed of this and to agree to the change.
- The Curriculum Vitae of the teachers/experts at the Parent and Candidate Establishments.
- A project plan with objectives, component activities, including timetable and all the points covered in Annex 1.
- A budget proposal: it should be drafted in accordance with the template in Annex 2. Wherever possible, there should be justification for costs. There will not be scope for funding expenditures outside of the agreed final budget.

¹ The(se) letter(s) can be provided later in the process but in any case a letter confirming the agreement of both National Delegates to the OIE must be received by the OIE before funds can be transferred to the Parent Establishment.

Annexe IV (contd)

The application dossier has to be submitted in one of the official languages of the OIE (English, French or Spanish). On the basis of experience, documents in English would facilitate communication and validation of the applications. A hard copy and an electronic copy should be sent to the Director General of the OIE. Consideration of selection criteria and a statement of clear, measurable and achievable objectives will improve the chances of a successful application.

A letter confirming the agreement of both National Delegates to the OIE must be received by the OIE before funds can be transferred to the Parent Establishment.

The OIE provides a template for the project plan, budget and Twinning contract; this is available on request. If the proposed procedure is not in accordance with some of the institutional procedures of the Parent/Candidate Establishments concerned, the OIE will seek a commonly agreeable solution.

Evaluation of proposal

Advice on technical components of the Twinning proposal will be provided by the OIE Headquarters. In certain circumstances where the OIE agrees that there is an urgent need to approve a Twinning project, the procedure may be fast-tracked, by seeking the advice of veterinary education experts nominated by the Director General of the OIE within the Ad Hoc Group on Veterinary Education by means of electronic communication. The final decision will be made by the Director General of OIE. To cater to the variable nature of Twinning projects, the evaluation process will consider each application on a case-by-case basis.

Preferential consideration would be given to those proposals which: (i) reflect a commitment to curriculum development and implementation of the Day 1 Competencies and Model Core Curriculum Guidelines for veterinary education establishments developed by the OIE, (ii) reflect a long-term mutual commitment between institutions well beyond the life of the project and supported by an MoU in this regard, (iii) are linked to the OIE PVS Pathway, and (iv) are supported by current or potential complementary funding or co-financing through Governments or donor organisations. .

Feedback following evaluation

The OIE will consider each proposal and respond by accepting the proposal, seeking further clarification or rejecting the proposal. In the case of the latter, the OIE will give a reason for the failed application.

Signature of contract following project approval

Following technical review by the OIE, a financial contract must be signed by the Directors/Deans of the Parent Institute, and the OIE. The Directors/Deans will indicate in the contract a lead contact person responsible for the financial management of the project. Annexed to this is the project plan, which should be signed by the Directors of the Candidate and Parent Establishments; each page should also be initialled by the signees.

If the proposed procedure is not in accordance with some of the institutional procedures of the Parent/Candidate Establishments concerned, the OIE will seek a commonly agreeable solution.

The project should be initiated without undue delay.

Project plan

The project plan describes thoroughly the project objectives, as well as how they will be met, at what cost, by when and by whom. It houses the details of the project and will be a reference point throughout the project. The plan should emphasise the key areas of work where improvements will have a significant impact on the overall benefits of the project.

The project should be divided into stages with defined measurable outputs from each stage. Examples may include the completion of a workshop, curriculum upgrading, or the attainment of a certain level of competence in an institutional procedure. At the end of each stage, it is important to hold a review to assess project progress and address any outstanding issues. This would include checking that targets have been met, assessing budgetary expenditure, considering project risks and planning for the next stage. Any lessons that have been learned should be used to improve the project. For future reference, it is important to summarise the review in a brief written report.

In some cases, changes will need to be made to the plan as priorities shift or as project issues arise. Examples may include the new study methods or unique curriculum approach or reforms not accounted for in the project plan, developments in the disease situation, or changes to the political, commercial or legislative environment. The project plan is a dynamic document and needs to be updated when necessary. Any changes to the project plan should not increase expenditure beyond the project budget. Significant changes to the project plan, affecting the overall project or budget, should be submitted to the OIE for approval before being adopted.

To ensure optimal benefits and avoid duplication, the project plan should account for the activities of any other ongoing OIE Twinning projects in the Candidate Establishment, and where possible, other institution capacity building initiatives. An outline of what the project plan might include is shown in Annex 1.

Budget request

A budget for the project is agreed between the OIE and the Twinning participants. An initial draft budget is jointly submitted by the Parent Establishment and Candidate Establishment as part of the project proposal. It must reflect the subjects and activities outlined in the project plan.

As a guide, the budget should fit the template in Annex 2 and should be subdivided into **subjects, activities, and nature of expenses** (travel, daily allowances, etc.). A subject is a general item (e.g. training) whereas an activity is more specific (e.g. a workshop); each activity forms a budget line. An activity should be an isolated cost, i.e. separate and not linked to any other costs in the budget plan. Justification for costs should be provided wherever possible.

The budget should be expressed preferably in Euros (EUR), or otherwise in US Dollars (USD). Following review of the draft budget by the OIE, it will be accepted, returned with comments or rejected. If it is accepted, the draft becomes the final version. If it is returned with comments, the Parent Establishment has the opportunity to consider and submit a revised version in consultation with the Candidate Establishment. A budget will only be allocated to activities for which financing is requested and where those activities are eligible for funding.

The following are examples of eligible costs (The maximum duration of each individual mission is three consecutive months (corresponding to no more than 90 sequential calendar days)):

- Travel costs (economy class) and per diem for experts visiting the Parent or Candidate Establishment to participate in activities directly related to the Twinning project. Travel costs, including per diem, must be in line with current OIE rules (contact OIE for guidance and current rates).
- Travel (economy class) and accommodation including reasonable daily living allowance for faculty sabbaticals and long-term student exchanges between institutions;
- Tuition fees, travel and reasonable per diem for MSc programs and, on an exceptional basis, for PhD programs for teachers (mainly junior) from the Candidate Establishment to train at the Parent Establishment during the term of the project. The Parent Establishment would be expected to provide discounted tuition fees or domestic rates where there is a higher foreign student rate in place.
- The costs of educational and training materials and publications that are directly linked to the Twinning project, including translation costs.
- Curriculum development including expertise and new teaching and audio-visual materials.
- Shipment of educational and training materials.

Annexe IV (contd)

- Training activities and material such as stationery specifically for seminars, excluding certain items such as printers, Information Technology (IT) equipment, photocopiers. Details of the training activity and specific costs must be submitted.
- Communication costs for telephone conferences (with sufficient justification). The use of cost-effective communication means is encouraged (e.g. Internet-based phone calls).
- Civil engineering surveys/studies (cost estimates for buildings and hardware).

Funding is **not available** for:

- General overheads, administrative costs, and contingencies².
- Institution hardware (such as equipment, clothing, IT equipment, including for e-learning platforms).
- Capital projects (constructions, etc.).

The use of external consultants, or inclusion of training fees, shall be limited to certain restricted specific consultant activities, or trainings where external expertise is essential, such as use of private veterinarians for certain training sessions, preparation of a call for tender for infrastructure and equipment, or external training on a relevant specific topic. Justification must be provided and the outcome should be made available to the OIE. Approval of any consultancy fees will be decided on a case by case basis, and must be approved before the project has started; claims cannot be submitted without prior approval for these costs.

It is not an objective of Twinning projects to directly provide funds to equip institutions with hardware or civil works. However, a Twinning project may include an expert assessment of the institutions' needs for additional hardware and facilities upgrading.

Funding for complementary needs that are not within the scope of twinning

Resources for needs that are not within the scope of institution twinning and are available from other sources may complement or enhance the capacity building objectives of twinning. This may include funds for capital construction, institution hardware, faculty and staff upgrading, or other activities, such as research. When such funds are available, the OIE may assist the Parent or Candidate Establishment in accessing them. In this situation, the Parent and Candidate Establishments should submit a joint one-page proposal, separate to the twinning project proposal, to the OIE summarising the approximate needs, with a short explanation of how this will complement the twinning project. The OIE can use this document, on request, to try to assist the institution to obtain resources from specific donors. Preferential consideration would be given to those proposals which can verify complementary funding of co-financing through their Government programs of donors.

OIE Institution Twinning without OIE financial support

Some institutions may wish to apply for OIE Institution Twinning without making a request for financial support from the OIE; for example, they may receive funds from their own country or from other donors (bilateral projects). In such cases, a budget does not need to be submitted. However, the project should comply with all other aspects of OIE Institution Twinning, in particular monitoring of outputs and performance. A Letter of Agreement (LoA) or a Memorandum of Understanding (MoU) may need to be signed with the OIE.

Assessment of institution material needs

During the Twinning project, the Parent Establishment may arrange, in the framework of the Twinning, for an assessment of the material and capacity building needs of the Candidate Establishment. This will take into account the expertise at the Candidate Establishment, the level of expertise required to train and upgrade staff and faculty, to implement new curricula, or to use the equipment and/or improve the capability to maintain and run the equipment. Funding for purchase of institution hardware will not be provided by the OIE Twinning budget. However, an assessment of material needs by external consultants may help the Candidate Establishment to source other external funding or use existing funds to maximum benefit.

² Specific local legal administrative constraints can be addressed on a case by case approach.

Guidance for training and curriculum development

Training will be an inherent part of the Twinning project and must contribute to the overall objectives of the project. The nature of training activities may include day-to-day communication on specific issues, sharing of scientific communications, comments on draft papers, short secondments between institutions and student exchanges including sabbatical assignments, participation in technical meetings and conferences, joint seminars and structured workshops for staff from both institutions. Training should focus on developing self-reliance in the Candidate Institution leading towards achievement of goals established in the proposal and long-term improvement in the quality and capacity of veterinary education and hence, national veterinary services.

Training and curriculum development activities should be part of the overall strategy for upgrading to provide a full complement in the targeted disciplines and throughout the faculty and in accordance with a Gender strategy.

The faculty upgrading and training should be regularly evaluated to assess that the objectives are being met so that improvements can be made, when necessary. When planning a workshop or seminar, it is important that participants are chosen for their experience and expertise or are chosen from a specific related area of work. Learning material must be relevant. The objectives of the training activity should be clearly defined at the outset so that suitable participants can be selected. In deciding on suitability of participants, it may help to review applicants' CVs or brief biographies. All participants in training must be staff of the Candidate Establishment and preference should be given to upgrading junior staff as part of the faculty development program.

Links between staff

To maximise the benefits and to avoid the risk of knowledge gaps, it is important that strong links are formed between staff of the Parent and Candidate Establishment at every level. Whilst the experts are involved with high level expertise and management, other institution staff, teachers, researchers and technicians have hands-on, day-to-day experience in essential technical and practical activities. Knowledge will be shared more effectively through direct links between people.

Flexibility

The approach to training and the training material should take into account factors such as the language spoken in the institution, cultural issues, technological capability and budget. Some of these will be limiting factors and will need to be considered in the early planning stages of the project.

Training trainers

It is important that people at Candidate Establishments are trained in a way that allows them to disseminate expertise to their Colleagues and students and farmers to contribute to the overall institutional upgrading. This involves selecting participants with good communication and evaluated teaching skills who are in a position to pass on their knowledge. The training activities should take this into consideration, when relevant, by incorporating teaching skills into the work programme and using training material that is suitable for teaching and for wider dissemination.

Assessment

It is essential to assess that training, curriculum and faculty upgrading are meeting the expectations of the participants – for example, for training, this may be achieved through a pre- and post-training questionnaire that allows suggestions about how training could be improved. Accurate and useful feedback is more likely when questions are carefully considered, and when participants have the opportunity for anonymity and are given a convenient time to complete the questionnaire. This should be done as close to the training as possible or during the training period. To assess whether the training is having the desired effect, it may be helpful to evaluate the level of competence of those being trained. This assessment may be informal.

Secondments

During a secondment or sabbatical assignment, a member of staff at either institution spends time at the other institution on detached duty. Good examples include hands-on training of the staff or for the assessment of material needs and working practices in the Candidate Establishment. Secondments or assignments that are part of the Twinning project must have direct benefits for the Twinning project. Establishment from Candidate Establishments should have teaching and research assignments in the Parent Establishments and vice versa. Secondments should be well-planned. Specific needs should be discussed in advance of the secondment period to allow a plan to be constructed and, if necessary, appropriate materials to be sourced. The maximum length of a secondment supported by OIE is usually 3 months.

Monitoring

Monitoring is essential to ensure that the project remains within its scope, meets its objectives and uses its financial resources effectively.

Monitoring performance

To ensure that the project achieves its objectives within the set period it is important to regularly monitor progress and take corrective action when necessary. Underperformance needs to be identified as early as possible in order to minimise the impact on the project. Performance should be monitored by the achievement of predefined set goals within the project timeframe.

To facilitate monitoring, the project plan can be divided into stages; at the end of each stage, a result is delivered. Examples of a product or output may include completion of a workshop, publication of a training manual, or attainment of certain objectives such as veterinary curriculum update. These should be set to a timetable. At the end of each stage, a review should take place led by the expert (or someone he/she nominates) at the Parent Establishment; this can be brief and informal. The review provides the opportunity to take stock, summarise the achievements of the previous stage, and, if targets have not been met, to understand why, in order for action to be taken. It is important to document this and to reflect any necessary changes in the project plan.

Monitoring expenditure

Actual spending should be documented regularly throughout the project (see 'Verification of expenditure').

Project risks

An awareness of factors that may hamper project progress and increase project costs is needed. These risks may be present from the beginning of the project or arise after it has started.

Every Twinning project is likely to encounter project risks. An awareness of potential project risks is the first step to avoiding them. Before starting and during the project it is advisable to:

- Identify project risks;
- Consider the impact that they may have on the project if they occur;
- Consider how likely they are to occur;
- Consider what action can be taken to minimise their impact.
- Document tentative plans to be used should an identified risk occur.

Risks that need to be considered may include political factors, such as the frequent replacement of the Director/Dean of the institution concerned. Many, 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 then the OIE must be notified immediately (see 'Exception report').

Reporting requirements

As a minimum, after agreement with the Candidate Establishment, the Parent Establishment should submit the following reports to the OIE Headquarters, Paris. In addition to these reports and when relevant, it is recommended that end-stage reports are documented. The reports should be typed in one of the official languages of the OIE (English, French or Spanish).

- An **interim report**, within the first year, but at least 6 months after the project has started (date of transfer of funds to the Parent Establishment).
- **Annual reports**, within 1 month of the end of each year from the project start date.
- A **final report**, as soon as possible upon completion of the project. The final reports should be jointly prepared by the Parent and Candidate Establishments, co-signed and submitted to the OIE Headquarters.

The reports should include the items listed in Annex 3. Annual and final reports must include details of actual expenditure and a summary of the technical activities carried out within the project (e.g. training courses or seminars – including dates, venue, and number of participants –, preparation for an accreditation procedure, etc.), as well as specific information on the implementation of the Model Core Curriculum Guidelines. Financial reports shall correspond to actual expenditures directly related to the project and supported by corresponding evidences (price estimates, invoices, receipts, ledgers, etc.). Unjustified round figures, lump sums, or copies of the budget will not be accepted as financial reports.

Exception report

If a serious exceptional issue is encountered that affects the overall project or budget, the OIE should be notified immediately by way of a report. The report should provide a full description of the problem and identify recommended actions. The OIE will consider the report and communicate on further action.

Financing arrangements and payments

Funds will be transferred by the OIE to and managed by the Parent Establishment; payments will be made when the project is initiated, following an interim report/request, and after receipt of each report. The size of the payments, as a proportion of the total budget, will be calculated on a case-by-case basis. As a general rule approximately 30% of the total budget will be transferred to the Parent Establishment when the project is initiated. The remaining budget will be transferred to the Parent Establishment over the course of the project, following receipt of interim, annual and final reports as per provision of the contract for each twinning project.

Any budget that remains unspent (or non-eligible expenditures) at the close of the project must be refunded to the OIE (or will be deducted from the final payment, as appropriate).

Verification of expenditure

It is important that financial expenditure complies with the project plan, budget and eligibility rules. In certain circumstances, the OIE, or a Donor, may require that an audit is carried out during or after the project. Therefore, all financial records and detailed accounts, including evidence of expenditure (price estimates, invoices, receipts, ledgers, etc.) must be kept available for at least 5 years after the project has closed.

The OIE may request verification of expenditure at any point during the project. It is very important that financial records are kept up to date and that justification and receipts of expenditure are available for a random exceptional audit. Any audit (exceptional or post-project) will be carried out by authorised OIE staff or an independent expert appointed by the OIE or by a Donor in agreement with the OIE.

Annexe IV (contd)

In order to review progress across Twinning projects, compliance with technical and financial principles of twinning, and to identify lessons that can be used to further strengthen the effectiveness of the programme, at the request of the Director General of the OIE, and without prejudice to other audits that may be requested at the request of specific donors or carried out by some donors, a technical and financial Audit can be implemented by the OIE on randomly selected Twinning projects. A technical expert would assess compliance with the principles of twinning and the agreed project plan whilst a financial auditor would verify compliance with the approved budget and financial rules for the twinning project. The audits would involve team visits to both the Parent and Candidate Establishments and interviews with CVOs.

Premature termination of the project

In the unlikely event that the project needs to be terminated prematurely, the OIE, Candidate or Parent Establishment may initiate this by providing 3 months' notice to the other parties, in writing.

In the event of premature termination, payments for duly justified costs actually incurred or indissolubly committed during the project, which have not yet been financed, will be reimbursed by the OIE if appropriate. No payments other than these will be due to the Parent or Candidate Establishment. Any funds that have not yet been spent will be reimbursed to the OIE by the Parent Establishment, as well as non-eligible expenditures.

Project closure

The Parent Establishment should immediately inform the OIE in writing that the project has closed. Within 1 month of this date, the Parent Establishment should submit a final report jointly prepared with the Candidate Establishment. The final project report will be the most comprehensive of all reports submitted over the course of the project and should include all the information listed in Annex 3.

Annex 1: Project Plan

The project plan should include:

- 1.1 Background of the project
- 1.2 Concise summary of the strategic goals and objectives and how they will be met
- 1.3 Work plan with defined stages of the project and tasks description (showing who is involved in which task including administration and budget management)
- 1.4 Timetables and measurable outputs (targets) for each stage
- 1.5 Foreseeable risks to the project and mitigation measures
- 1.6 Coordination plan (where relevant – to avoid duplication and ensure synergy if other projects involve the Candidate Establishment)
- 1.7 Details of Directors of the Institutions and experts involved (including their CVs)
- 1.8 Reporting schedule
- 1.9 Budget

Annex 2: Budget Proposal for a Veterinary Education Twinning Project**OIE Veterinary Education Twinning Project****Budget Proposal**

Parent Establishment:	
Candidate Establishment:	
Project start date (day/month/year):	
Project end date (day/month/year):	
Currency (EUR preferred; USD as 2nd option):	

Budget item	Unit cost (a)	Number of units (b)	Subtotal [(a) * (b) = (c)]
Subject 1: (e.g. Staff exchange program on...) (1)			
Activity 1.1: (e.g. Workshop on ...) (2)			
Travel costs (3), (4), (5)			- €
Visas			- €
Per diem			- €
Venue rental			- €
Training materials (printing, translation, etc.)			- €
Shipment of training materials			- €
Subtotal Activity 1.1			- €
Activity 1.2: (e.g. Faculty sabbatical attachment at ... establishment)			
Travel costs			- €
Per diem			- €
Tuition fees			- €
Educational materials (printing, etc.)			- €
Subtotal Activity 1.2			- €

Activity 1.3:			
[...]			- €
[...]			- €
[...]			- €
[...]			- €
Subtotal Activity 1.3			- €
Subtotal Subject 1			- €

Subject 2:			
Activity 2.1:			
[...]			- €
[...]			- €
[...]			- €
[...]			- €
Subtotal Activity 2.1			- €
Activity 2.2:			
[...]			- €
[...]			- €
[...]			- €
[...]			- €
Subtotal Activity 2.2			- €
Activity 2.3:			
[...]			- €
[...]			- €
[...]			- €
[...]			- €
Subtotal Activity 2.3			- €
Subtotal Subject 2			- €

Annexe IV (contd)

Subject 3:			
Activity 3.1:			
[...]			- €
[...]			- €
[...]			- €
[...]			- €
Subtotal Activity 3.1			- €
Activity 3.2:			
[...]			- €
[...]			- €
[...]			- €
[...]			- €
Subtotal Activity 3.2			- €
Activity 3.3:			
[...]			- €
[...]			- €
[...]			- €
[...]			- €
Subtotal Activity 3.3			- €
Subtotal Subject 3			- €
GRAND TOTAL			- €

- 1) A subject is a general item (e.g. training; alignment with the Model Core Curriculum Guidelines; staff exchange program), whereas an activity is more specific (e.g. a workshop)
- 2) Each activity should form a budget line. An activity should be an isolated cost, i.e. separate and not linked to any other costs in the budget plan.
- 3) Each activity should be subdivided into budget lines detailing the nature of the expenses for said activity (i.e. travel, daily allowances, etc.).
- 4) The following are examples of eligible costs, to be confirmed on a case-by-case basis by the OIE after project budget proposals are submitted:
 - Travel costs (economy class) and per diem, for example, for experts visiting the Parent or Candidate Establishment to participate in activities directly related to the Twinning project; for faculty sabbaticals and long-term student exchanges; etc.
 - Tuition fees, travel and reasonable per diem for MSc programs and, on an exceptional basis, for PhD programs for teachers (mainly junior) from the Candidate establishment to train at the Parent establishment during the term of the project.
 - Educational and training materials and publications, including translation costs.
 - Curriculum development including expertise and new teaching and audio-visual materials.
 - Shipment of educational and training materials.
 - Training activities and material such as stationery specifically for seminars, excluding certain items such as printers, Information Technology (IT) equipment, photocopiers.
 - Communication costs for telephone conferences (with sufficient justification).
- 5) The following are examples of non-eligible costs:
 - General overheads, administrative costs, and contingencies;
 - Institution hardware (such as equipment, construction, clothing, IT equipment, including for e-learning platforms).

Annex 3: Project reports

Interim report

The interim report – to be submitted within the first year, but at least 6 months after the project has started – and the annual report(s) – to be submitted within 1 month of the end of each year from the project start date –, should include at least:

- Summary of the project aims and objectives set out at the start, including the justification for the project.
- Description of situation in the Candidate Establishment at the beginning of the project and the priority areas that were selected for improvement.
- Description of activities conducted including assessments, curriculum revision, trainings, secondments, workshops, sharing of educational material, project reviews for the period covered.
- Situation in Candidate Establishment at the end of the period covered
- Description of activities planned for the next period.
- Report of expenditure.

Final report

The final report must be submitted within 1 month of the project closing. It should be jointly prepared, and signed, by the Parent and Candidate Veterinary Education Establishments, then submitted to the OIE Headquarters.

The final project report should cover the following:

- Summary of the project aims and objectives set out at the start, including the justification for the project.
- Description of situation in Candidate Establishment at the beginning of the project and the priority areas that were selected for improvement.
- Any changes that were made to the initial project plan, such as a change in direction or scope.
- Description of activities including assessments, curriculum revision, trainings, secondments, workshops, sharing of educational material, project reviews.
- Situation in Candidate Establishment at the end of the project including the ability to maintain and sustain the achieved objectives.
- A final report of expenditure.
- Lessons learned and recommendations to improve future projects.
- Mid-term to long-term strategy for the Candidate Establishment and sustaining the link between the two Establishments.

Summary of reporting requirements

As a minimum, after agreement with the Candidate Establishment, the Parent Establishment should submit the following reports to the OIE Headquarters, Paris. In addition to these reports and when relevant, it is recommended that end-stage reports are documented. The reports should be typed in one of the official languages of the OIE (English, French or Spanish).

- An **interim report**, within the first year, but at least 6 months after the project has started (date of transfer of funds to the Parent Establishment).
- **Annual reports**, within 1 month of the end of each year from the project start date.
- A **final report**, as soon as possible upon completion of the project. The final reports should be jointly prepared by the Parent and Candidate Establishment, co-signed and submitted to the OIE Headquarters.

Interim, annual and final reports must include a financial part with details of actual expenditure and a summary of the technical activities carried out within the project (e.g. training courses or seminars – including dates, venue, and number of participants –, preparation for an accreditation procedure, etc.). Financial reports shall correspond to actual expenditures directly related to the project and supported by corresponding evidences (price estimates, invoices, receipts, ledgers, etc.). Unjustified round figures, lump sums, or copies of the budget will not be accepted as financial reports.

Payments

Funds will be transferred by the OIE to and managed by the Parent Establishment; payments will be made when the project is initiated, following an interim report/request, and after receipt of each report. The size of the payments, as a proportion of the total budget, will be calculated on a case-by-case basis. As a general rule approximately 30% of the total budget will be transferred to the Parent Establishment when the project is initiated. The remaining budget will be transferred to the Parent Establishment over the course of the project, following receipt of interim, annual and final reports as per provision of the contract for each twinning project.

Any budget that remains unspent (or non-eligible expenditures) at the close of the project must be refunded to the OIE (or will be deducted from the final payment, as appropriate).

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