The OIE and its Network of Reference Centres

10th OIE Seminar
New Approaches to Diagnosis: Opportunities and Challenges
16th WAVLD Symposium Berlin, 7 June 2013
Outline

- Introduction to the OIE
- OIE Reference Laboratories and Collaborating Centres
  - Reference Centre annual activities
  - Terms of Reference (ToR)
  - World distribution of OIE Reference Centres
- The Pathway to designation of an OIE Reference Centre
  - Twinning, Networking, Specific Projects
Introduction to the OIE
Creation of the Office International des Epizooties (OIE) in 1924 to prevent the spread of animal diseases throughout the world.


2010: the improvement of animal health, veterinary public health and animal welfare world-wide.
178 Members (2013)

Africa 52 – Americas 30 – Asia, the Far East and Oceania 36 – Europe 53 – Middle-East 20

Some countries belong to more than one region
Structure

Headquarters in Paris (France)

Regional Representations

Bamako

Buenos Aires

Tokyo

Sofia

Beirut

Nairobi

Panama

Bangkok

Brussels

Sub-Regional Representations
Improve animal health and welfare worldwide

- Transparency of world animal disease situation (including zoonoses)
- Collect and publish veterinary scientific information, notably animal disease prevention and control methods
- Sanitary safety of international trade in animals and their products under the mandate given by the WTO
Communicate timely and accurate animal disease information, including information on zoonoses, by making the best use of scientific data modelling, modern information technologies, and tracking systems for non-official information.

Provide scientifically based recommendations on measures for the prevention, control and eradication of animal diseases including zoonoses, taking into account the economic, social and environmental impacts of such measures.

Ensure the scientific excellence and timeliness of information and advice available to national Veterinary Services and other interested parties in all areas covered by the Organisation’s mandate.
Founded on:

- Objective criteria
- Scientifically valid evaluations provided by independent experts

It is necessary to continuously update OIE’s expertise and advice to respond effectively to the requirements of its Members and a changing environment.
OIE Reference Laboratories and Collaborating Centres

- More than 280 OIE Reference Centres
  - Reference Laboratories
    - 241 laboratories in 37 Member Countries or Territories
    - 183 Experts covering 116 disease/topics

- Collaborating Centres
  - 43 centres from 24 Member Countries on 38 topics
  - Expertise in a specific designated sphere of competence (epidemiology, risk analysis)
World distribution of the OIE-Reference Laboratories

OIE-Reference laboratories

- 1 or 2 OIE-reference labs
- 3 or 4 OIE-reference labs
- 5 to 10 OIE-reference labs
- more than 10 OIE-reference labs
- no OIE-reference lab

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OIE Reference Laboratory: Terms of Reference

- To use, promote and disseminate **diagnostic methods** validated according to OIE Standards;
- To recommend the prescribed and alternative tests or vaccines as **OIE Standards**;
- To develop **reference material** in accordance with OIE requirements, and implement and promote the application of OIE Standards;
- To store and **distribute to national labs** biological reference products and any other reagents used in the diagnosis and control of the designated pathogens or diseases;
- To develop, standardise and validate according to OIE Standards **new procedures for diagnosis** and control of the designated pathogens or diseases;
To provide diagnostic testing facilities, and, where appropriate, scientific and technical advice on disease control measures to OIE Member Countries;

To carry out or coordinate scientific and technical studies in collaboration with other laboratories, centres etc;

To collect, process, analyse, publish and disseminate epizootiological data relevant to the designated pathogens or diseases;

To provide scientific and technical training for personnel from OIE Member Countries;

To maintain a system of quality assurance, biosafety and biosecurity relevant for the pathogen and the disease concerned;
To organise and participate in scientific meetings on behalf of the OIE;

To establish and maintain a network with other OIE Reference Laboratories designated for the same pathogen or disease and organise regular inter-laboratory proficiency testing to ensure comparability of results;

To organise inter-laboratory proficiency testing with laboratories other than OIE Reference Laboratories for the same pathogens and diseases to ensure equivalence of results;

To place expert consultants at the disposal of the OIE.
### 2012 OIE Reference Laboratory Activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>1. Tests in use</td>
<td>98%</td>
</tr>
<tr>
<td>2. Production of OIE recognised standard reference reagents</td>
<td>49%</td>
</tr>
<tr>
<td>3. Supply of standard reference reagents</td>
<td>59%</td>
</tr>
<tr>
<td>4. Production of diagnostic reagents other than OIE-approved</td>
<td>68%</td>
</tr>
<tr>
<td>5. Production of vaccines</td>
<td>8%</td>
</tr>
<tr>
<td>6. Supply of vaccines</td>
<td>6%</td>
</tr>
<tr>
<td>7. Development of new diagnostic methods</td>
<td>34%</td>
</tr>
<tr>
<td>8. Development of new vaccines</td>
<td>10%</td>
</tr>
<tr>
<td>9. Provision of diagnostic testing</td>
<td>64%</td>
</tr>
<tr>
<td>10. Provision of expert advice in technical consultancy</td>
<td>76%</td>
</tr>
<tr>
<td>11. Participation in international scientific collaborative studies</td>
<td>62%</td>
</tr>
<tr>
<td>12. Collection of epizootiological data</td>
<td>73%</td>
</tr>
<tr>
<td>13. Dissemination of epizootiological data</td>
<td>66%</td>
</tr>
<tr>
<td>14. Method of dissemination of information</td>
<td>96%</td>
</tr>
<tr>
<td>15. Provision of scientific and technical training</td>
<td>93%</td>
</tr>
<tr>
<td>16. Maintenance of quality management system</td>
<td>80%</td>
</tr>
<tr>
<td>17. Accreditation by an international accreditation body</td>
<td>62%</td>
</tr>
<tr>
<td>18. Maintenance of biosafety and biosecurity</td>
<td>39%</td>
</tr>
<tr>
<td>19. Organisation of international scientific meetings</td>
<td>71%</td>
</tr>
<tr>
<td>20. Participation of international scientific meetings</td>
<td>33%</td>
</tr>
<tr>
<td>21. Exchange information with other OIE labs</td>
<td>35%</td>
</tr>
<tr>
<td>22. Proficiency testing with other OIE labs</td>
<td>61%</td>
</tr>
<tr>
<td>23. Participation in international scientific collaborative studies</td>
<td>61%</td>
</tr>
<tr>
<td>24. Proficiency testing labs other than OIE labs</td>
<td>61%</td>
</tr>
<tr>
<td>25. Provision of consultant expertise</td>
<td>61%</td>
</tr>
</tbody>
</table>
New Diagnostic Methods and Vaccines

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production of vaccines</td>
<td>8.0%</td>
</tr>
<tr>
<td>Supply of vaccines</td>
<td>5.7%</td>
</tr>
<tr>
<td>Development of new vaccines</td>
<td>10.0%</td>
</tr>
<tr>
<td>Development of new diagnostic methods</td>
<td>33.5%</td>
</tr>
</tbody>
</table>

Last updated May 2013
Network with other OIE and non-OIE labs

- Exchange information with other OIE labs: 71%
- Proficiency testing with other OIE labs: 33%
- Participation in international scientific collaborative studies: 35%
- Proficiency testing labs other than OIE labs: 61%

Last updated May 2013
World distribution of the OIE-Collaborating Centres

OIE-Collaborating centres
- 1 collaborating centre
- 2 or 3 collaborating centres
- More than 3 collaborating centres
- no OIE-collaborating centre

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OIE Collaborating Centre ToR

- To provide services to the OIE, in particular within the region, in the designated specialty, in support of the implementation of OIE policies and, where required, seek for collaboration with OIE Reference Laboratories;

- To propose or develop methods and procedures that facilitate harmonisation of international standards and guidelines applicable to the designated specialty;

- To carry out and/or coordinate scientific and technical studies in collaboration with other centres, laboratories or organisations;

- To collect, process, analyse, publish and disseminate data and information relevant to the designated specialty;
OIE Collaborating Centre ToR (contd)

- To provide, within the designated specialty, **scientific and technical training to personnel** from OIE Member Countries;
- To organise and participate in **scientific meetings** and other activities on behalf of the OIE;
- To **identify and maintain existing expertise**, in particular within its region;
- To **establish and maintain a network** with other OIE CC designated for the same specialty, and should the need arise, with Collaborating Centres in other disciplines;
- To place expert consultants at the disposal of the OIE.
2012 OIE Collaborating Centre Activities

1. Activities within the sphere of competence
2. International harmonisation of regulations
3. Networking
   a) Maintenance of a network in same specialty
   b) Maintenance of a network in other disciplines
4. Provision of consultant expertise
5. Provision of scientific and technical training
6. Organisation of international scientific meetings
7. Coordination of scientific and technical studies
8. Publications/dissemination of information

% Activities
- Activities within the sphere of competence: 95%
- International harmonisation of regulations: 81%
- Networking - Maintenance of a network in same specialty: 76%
- Networking - Maintenance of a network in other disciplines: 65%
- Provision of consultant expertise: 92%
- Provision of scientific and technical training: 78%
- Organisation of international scientific meetings: 41%
- Coordination of scientific and technical studies: 97%
The Pathway to designation of an OIE Reference Centre
Application for Collaborating Centre status received by DG from Delegate

Dossier number assigned and logged (Scientific and Technical Department oversees the whole process)

Application referred to corresponding Regional Commission (only for Collaborating Centres)*

Opinion Sought from the most relevant Specialist Commission (or Working Group, if needed) (specialty listing below, not exhaustive)

- Terrestrial animal disease diagnosis
- Biotechnology
- Veterinary medicinal products
- Vaccines

Biological Standards Commission

- Aquatic animal disease control
- Aquatic animal disease diagnosis

Aquatic Animal Health Commission

- Food and feed safety
- Animal welfare
- Legislation
- Veterinary education

Terrestrial Animal Health Commission

- Terrestrial animal disease control
- Epidemiology, Surveillance, Risk assessment
- Zoonosis
- Wildlife

Scientific Commission for Animal Diseases

* Order of consultation by Commissions depends on the meeting calendar

OIE Council

World Assembly
Reference Laboratories and Collaborating Centres: new policies
Each OIE Laboratory Twinning Project...

- Is a link between OIE Reference Laboratory or Collaborating Centre (Parent) and national laboratory (Candidate)

- Aims to improve expertise and diagnostic capacity with eventual aim of reaching OIE standards - Optimal goal is to achieve OIE Reference Laboratory designation

- Should be sustainable once the project is over
Extends the network of OIE capacity, expertise and standards

- To provide regional support with better geographical coverage for diseases and topics that are a priority in a given region
- Improved access for more countries to high quality diagnostics and expertise
- Better scientific expertise allows members to:
  - To debate OIE scientific justification for standards on an equal footing with other Members (better representation)
  - To contribute to build a veterinary scientific community world-wide
A Guide to OIE Certified Reference Centre Twinning Projects

The Laboratory Twinning Programme (contd)

Laboratory Twinning

Twinning is not a new concept and has been used extensively to facilitate capacity building and networking, and to bring communities together. The OIE is applying the concept to laboratories to build expertise for the most important animal diseases and zoonoses in priority regions, in direct support of the OIE's strategy to improve global capacity for disease prevention, detection, and control through better veterinary governance. Through twinning, OIE aims to provide a more balanced north-south distribution of advanced expertise, allowing more countries to access high quality diagnostic testing and technical knowledge within their own region, thus facilitating early disease detection and rapid control. A high level of scientific expertise is also essential to allow countries to formulate science-based animal health control strategies and to maintain veterinary scientific communities to support the standard setting process of the OIE.

Each twinning project links an existing OIE Reference Laboratory or Collaborating Centre with a selected candidate laboratory. Knowledge and skills are exchanged through this link over a determined project period. Twinning projects provide mutual benefits for both laboratories including through creating joint research opportunities, and the whole international community will benefit from stronger global disease surveillance networks.

About
- The OIE concept of twinning between laboratories
- A Guide to OIE Certified Laboratory Twinning Projects
- Laboratory Twinning to improve disease security world-wide
- Twinning in Africa (poster)

Application
- Project proposal template for OIE-funded twinings
- Project proposal template for non OIE-funded twinings

Achievements and ongoing projects
- Map showing recipient approved laboratories
- List of projects completed and underway

Lessons, experiences and outputs

http://www.oie.int/en/support-to-oie-members/laboratory-twinning/
The Laboratory Twinning Programme (contd)

- Projects Completed (12)
- Projects underway (31)
- Common Topics:
  - Avian Influenza and Newcastle Disease (10)
  - Brucellosis (6)
  - Rabies (4)
  - Bluetongue
  - African Swine Fever
  - CBPP, Classical Swine Fever, Equine Influenza, etc.

Twinning to achieve better geographical balance
May 2013
Crucial role for OIE and its Members:

- Worldwide expertise
- Essential role in prevention, detection and control of animal diseases
- Supports OIE in the establishment of standards
- Strengthens OIE capability to respond to the new challenges

→ international solidarity to help developing countries
To enhance the scientific cooperation and to facilitate future interactions and networking OIE organised two meetings:

The first International Conference of OIE Reference Laboratories and Collaborating Centres

Florianopolis (Brazil), 3-5 December 2006
Second Global Conference of OIE Reference Laboratories and Collaborating Centres
OIE Headquarters, Paris, France, 21–23 June 2010

http://www.oie.int/eng/A_VETO_PARIS_2010/Abstract/abstract.htm
http://www.oie.int/eng/A_VETO_PARIS_2010/Abstract/Recommendations.htm
PLANNED

- Third Global Conference of OIE Reference Laboratories and Collaborating Centres
  Seoul, Korea, 14–16 October 2014
Thank you for your attention

Organisation Mondiale de la Santé Animale

Organización Mundial de Sanidad Animal