OIE initiatives and activities on veterinary education

Hirofumi Kugita
OIE Regional Representative for Asia and the Pacific

International Conference on Veterinary Eligibility and Education
November 21 - 22, 2018
The University of Tokyo, Japan
Introduction to the OIE

Veterinary Education and OIE - Background -

Veterinary Education Establishment (VEE)

Veterinary Statutory Body (VSB)

Veterinary Paraprofessionals (VPP)

Way forward
Introduction to the OIE
An intergovernmental organisation established 20 years before the United Nations.

- **1924**: Creation of the Office International des Epizooties (OIE)
- **1945**: Creation of the United Nations
- **2003**: New Name: World Organisation for Animal Health (OIE)

- Headquarters in Paris (France)
- 5 Regional Representations
- 7 Sub-Regional Representations

- **182 Members** in 2018
- WTO in 1995
In each of the 182 Member Countries:

- OIE National Focal Points
  - Animal disease notification
  - Animal production and food safety
  - Animal welfare
  - Aquatic animals
  - Communication
  - Laboratory
  - Veterinary Products
  - Wildlife

All Delegates worldwide meet once a year (General Session)

WORLD ASSEMBLY OF DELEGATES: The highest authority of the OIE.
Director General
Takeover: 1 January 2016

- Elected in May 2015 by the World Assembly of national Delegates
- 1st woman elected to this position

- Implementation of the 6th Strategic Plan 2016-2020

Dr Monique ELOIT
Regional (RR) and Subregional (SRR) Representations

Under the direct authority of the Director General
Collaborate closely with regional Commissions
The four pillars of the OIE

**TRANSPARENCY**

of the world animal disease situation

**STANDARDS**

for international trade of animals and animal products

**EXPERTISE**

Collection and dissemination of veterinary scientific information

**SOLIDARITY**

between countries to strengthen capacities worldwide

Improving animal health and welfare worldwide

- **WAHIS**
  - World Animal Health Information System
  - Including zoonoses

- **STANDARDS**
  - Under the mandate given by the WTO

- **EXPERTISE**
  - Animal disease prevention and control methods

- **SOLIDARITY**
  - Capacity building tools and programmes
Early warning system

Monitoring system

Information from the Annual reports

WAHIS/WAHID

182 countries on line

Immediate notification

Follow-up & Final report

Annual report

Six monthly report

- Alert messages for specific epidemiological events & for emerging diseases
- Follow-up of outbreaks notified
  - Information for 118 OIE-listed diseases twice a year
- Veterinary Services’ capabilities
- Vaccine production
- National laboratories’ capabilities
- Animal population figures
- Human cases for zoonoses

And non official information tracking system
WAHIS PORTAL: Animal Health Data
The four pillars of the OIE

**TRANSPARENCY**
- of the world animal disease situation

**STANDARDS**
- for international trade of animals and animal products
  - under the mandate given by the WTO

**EXPERTISE**
- Collection and dissemination of veterinary scientific information
  - animal disease prevention and control methods

**SOLIDARITY**
- between countries to strengthen capacities worldwide
  - Capacity building tools and programmes

**Improving animal health and welfare worldwide**

- including zoonoses
WTO SPS Agreement
Sanitary and Phytosanitary Measures

Entered into force with the establishment of the WTO on 1 January, 1995

Objective of the SPS Agreement?

Recognises the right to protect human, animal, plant life or health

Avoiding unnecessary barriers to trade

- Importing country has the right to choose its **appropriate level of protection**.
- Member countries are encouraged to base their sanitary measures on the **OIE standards**, if they exist.
- Where more stringent conditions applied, they should be based on **scientific risk assessment**, taking into account the OIE standards.
THE “3 SISTERS”

Standard-setting organisations

- **food safety**
  - CODEX

- **animal health and zoonoses**
  - OIE

- **plant health**
  - IPPC

Codex = Joint FAO/WHO Codex Alimentarius Commission
OIE = World Organisation for Animal Health
IPPC = International Plant Protection Convention (FAO)

WTO SPS Agreement recognises OIE as a reference organisation for international standards on animal health including zoonoses
OIE International Standards

**CODES**
Standards for disease control and safe international trade

**MANUALS**
Standards for laboratory diagnostic methods (and requirements for vaccines)

Standards to improve health and animal welfare, and veterinary public health
Standards in the OIE Codes

- Zoning & compartmentalisation
- Guidelines for risk analysis
- Quality of VS
- Conditions for trade
- Model export certificates
- Welfare during transport, killing and slaughter
- Disease specific chapters (e.g. FMD, AI, PPR)

OIE Listed Diseases: terrestrial animals 88 + aquatic animals 29 = 117
The four pillars of the OIE

Improving animal health and welfare worldwide

**TRANSPARENCY**

of the world animal disease situation

**STANDARDS**

for international trade of animals and animal products

**EXPERTISE**

Collection and dissemination of veterinary scientific information

**SOLIDARITY**

between countries to strengthen capacities worldwide

- **WAHIS**
- **Territorial Animal Health Code**
- **Aquatic Animal Health Code**
- **Capacity building tools and programmes**

including zoonoses

under the mandate given by the WTO

animal disease prevention and control methods
OIE Reference Centres

Collaborating Centre
World centre of research, expertise, standardization of techniques and dissemination of knowledge on a specialty

Reference Laboratory
World reference centre of expertise on designated pathogens or diseases

<table>
<thead>
<tr>
<th></th>
<th>World</th>
<th>Asia</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC</td>
<td>51</td>
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<tr>
<td>Topic</td>
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<th></th>
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<th>Japan</th>
</tr>
</thead>
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<td>48</td>
<td>12</td>
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<tr>
<td>Disease</td>
<td>119</td>
<td>38</td>
<td>12</td>
</tr>
<tr>
<td>Country</td>
<td>39</td>
<td>8</td>
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</tr>
</tbody>
</table>
OIE Laboratory Twinning

Sustainable enhancement of capacity and expertise by supporting a link between an OIE RC (parent) and a national laboratory (candidate)

**Scope**
- Project length is 1-3 years
- For OIE listed diseases or topics
- All include essential generic topics such as bioethics, biosafety, biosecurity, and quality assurance
- Funding to support the link, but not to buy equipment or pay salaries (“non OIE-funded” also possible)

**Monitoring and evaluation**
- Annual report from parents

**Steps after twinning**
- Engaging with the international scientific community
- Applying for OIE Reference Laboratory status

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<table>
<thead>
<tr>
<th>Region</th>
<th>Projects completed</th>
<th>Projects underway</th>
<th>Projects approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>28</td>
<td>35</td>
<td>12</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Parent/Candidate)</td>
<td>7 (2/7)</td>
<td>14 (4/13)</td>
<td>2 (0/2)</td>
</tr>
</tbody>
</table>

Candidate
A national lab needs to be improved

Parent
An existing OIE Reference Centres

Application should be submitted to and evaluated by OIE
Final approval be made by the OIE DG
The four pillars of the OIE

- **TRANSPARENCY**
  - of the world animal disease situation

- **STANDARDS**
  - for international trade of animals and animal products

- **EXPERTISE**
  - Collection and dissemination of veterinary scientific information

- **SOLIDARITY**
  - between countries to strengthen capacities worldwide

Improving animal health and welfare worldwide

- **WAHIS**
  - World Animal Health Information System

- **Terrestrial Animal Health Code**

- **Aquatic Animal Health Code**

- **Animal disease prevention and control methods**
  - including zoonoses

- **Capacity building tools and programmes**
Performance of Veterinary Services (PVS)
PVS Principles and Tool

- The OIE PVS Pathway is a continuous process to sustainably improve national Veterinary Services.

- Missions are voluntary (Official request from OIE National Delegate).

- Purpose:
  - Assess compliance with OIE standards.
  - Identify strengths / weaknesses and areas for improvements.

- Report = country property (confidentiality of results, unless agreed).

- Supportive not directive, strong platform for planning & advocacy.

- Tool: Four fundamental components (6–13 critical competencies elaborated for each component):
  - Human, physical and financial resources.
  - Technical authority and capacity.
  - Interaction with interested parties.
  - Access to markets.
The task

- Complex

- Develop categories and assessment criteria for the ‘Veterinary Domain’
  - 47 ‘Critical Competencies’
  - 4 ‘Fundamental Components’
### OIE PVS Tool (Example)

<table>
<thead>
<tr>
<th>III-5 Veterinary Statutory Body (VSB)</th>
<th>Levels of advancement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. VSB authority</strong></td>
<td></td>
</tr>
<tr>
<td>The VSB is an autonomous regulatory body for veterinarians and veterinary para-professionals.</td>
<td></td>
</tr>
<tr>
<td><strong>1.</strong> There is no legislation establishing a VSB.</td>
<td></td>
</tr>
<tr>
<td><strong>2.</strong> The VSB regulates veterinarians only within certain sectors of the veterinary profession and/or does not systematically apply disciplinary measures.</td>
<td></td>
</tr>
<tr>
<td><strong>3.</strong> The VSB regulates veterinarians in all relevant sectors of the veterinary profession and applies disciplinary measures.</td>
<td></td>
</tr>
<tr>
<td><strong>4.</strong> The VSB regulates functions and competencies of veterinarians in all relevant sectors and veterinary para-professionals according to needs.</td>
<td></td>
</tr>
<tr>
<td><strong>5.</strong> The VSB regulates and applies disciplinary measures to veterinarians and veterinary para-professionals in all sectors throughout the country.</td>
<td></td>
</tr>
</tbody>
</table>
PVS Evaluation Missions

- Working in collaboration with major international donors
- The number of PVS missions is increasing

State of play – as of 4 September 2018

<table>
<thead>
<tr>
<th>OIE Region</th>
<th>Request received</th>
<th>Missions implemented</th>
<th>Reports available for restricted distribution to donors and partners</th>
<th>Report available on the OIE website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>53</td>
<td>51</td>
<td>33</td>
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<tr>
<td>Americas</td>
<td>27</td>
<td>26</td>
<td>10</td>
<td>9</td>
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<tr>
<td>Asia / Pacific</td>
<td>28</td>
<td>27</td>
<td>11</td>
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<td>Europe</td>
<td>20</td>
<td>20</td>
<td>10</td>
<td>2</td>
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<tr>
<td>Middle East</td>
<td>13</td>
<td>11</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>141</strong></td>
<td><strong>135</strong></td>
<td><strong>69</strong></td>
<td><strong>27</strong></td>
</tr>
</tbody>
</table>
OIE PVS Evaluation Reports

A number of countries have waived the confidentiality of evaluation reports and the majority have authorised the OIE to send these reports to OIE partner organisations and to international donors working jointly with the OIE in the global programme to strengthen Veterinary Services. In addition, some countries have authorised the OIE to make the reports of PVS evaluation missions fully public. So far, the list includes:

- Argentina
- Australia
- Bolivia
- Botswana
- Brazil
- Brazil (AAHS)
- Canada (Eng)
- Central African Republic
- Chile
- Côte d’Ivoire
- Guinea
- Guinea-Bissau
- Haiti
- Iceland
- Israel
- Japan
- Korea
- Namibia
- New Caledonia
- Nigeria
Veterinary Legislation Support Programme (VLSP)

- Component of the PVS Pathway
- Established in 2008
- Assist Member Countries to recognise and address their needs for modern, comprehensive veterinary legislation

- Stage 1: Veterinary Legislation Identification Mission
  - To obtain a detailed picture of the current state of veterinary legislation in a country

- Stage 2: Veterinary Legislation Agreement
  - Supporting the country in correcting its deficiencies in veterinary legislation
## Status of Legislation Missions

State of play – as of 4 September 2018

<table>
<thead>
<tr>
<th>OIE Region</th>
<th>Request received</th>
<th>Missions implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>42</td>
<td>36</td>
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<tr>
<td>Americas</td>
<td>9</td>
<td>9</td>
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<td>Asia / Pacific</td>
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<td>9</td>
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<tr>
<td>Europe</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Middle East</td>
<td>5</td>
<td>4</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>71</strong></td>
<td><strong>62</strong></td>
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</table>
Veterinary Education and OIE

- Background -
A well-educated veterinary workforce is key in providing:
- Scientifically sound risk assessments
- Credible reporting of disease
- Effective delivery of services to producers and consumers

High quality veterinary education is instrumental in forming a workforce, capable of leading good governance practices.

In numerous countries, however, the quality of veterinary education is failing to meet the requirements for delivering highly competent Veterinary Services.
Global Public Good

High quality veterinary education and efficient VSBs will preserve the good governance and function of Veterinary Services.
EVOLUTION OF THE WORK OF THE OIE ON VETERINARY EDUCATION

1st Global Conference (Paris, 2009)
- Day 1 Competencies (published in 2012)
- Ad hoc Group (established in 2010)

2nd Global Conference (Lyon, 2011)
- Model Core Curriculum (published in 2013)

3rd Global Conference (Brazil, 2013)
- 1st Twinning Project (started in 2013)
- OIE VEEs list (published in 2015)

4th Global Conference (Bangkok, 2016)
- Competency Guidelines for VPP (published in May 2018)

1st Sub-Regional Workshop on Vet Education in SEA (Philippines, 2011)
- 4th Sub-Regional Workshop on Vet Education in SEA (Vietnam, 2014)

2nd Sub-Regional Workshop on Vet Education in SEA (Malaysia, 2012)
- 3rd Sub-Regional Workshop on Vet Education in SEA (Indonesia, 2013)

3rd Sub-Regional Workshop on VSBs in SEA (Thailand, 2015)

4th Sub-Regional Workshop for VEEs and VSBs (R.O. Korea, 2017)

5th Sub-Regional Workshop on VSBs in SEA (Thailand, 2015)

Regional Conference on Veterinary Paraprofessionals in Asia (Thailand, 2017)

2nd Regional Workshop for VEEs and VSBs (Tokyo, 2018)
Veterinary Education Establishment (VEE)
OIE Day 1 Competencies

- Provides recommendations on specific and advanced competencies for the delivery of veterinary services of quality
- The OIE encourages that they be included in the veterinary curricula of all OIE Member Countries.

- 11 Specific Competencies
- 8 Advanced Competencies
OIE Day 1 Competencies

- Recommendation (NOT compulsory)
- Applicable to all (NOT prescriptive)
- Countries may add competencies of their own importance
- Competencies cover both terrestrial and aquatic animals
OIE Day 1 Competencies

**Basic Competencies**

- Epidemiology
- Transboundary animal diseases
- Zoonoses (incl. food-borne diseases)
- Emerging and re-emerging diseases
- Disease prevention and control programmes
- Food hygiene
- Animal welfare
- Veterinary products
- Veterinary legislation and ethics
- General certification procedures
- Communication skills

**Advanced Competencies**

- Organisation of Veterinary Services
- Inspection and certification procedures
- Management of contagious disease
- Food hygiene
- Application of risk analysis
- Research
- International trade framework
- Administration and management

required for a veterinarian to be licensed by a Veterinary Statutory Body and directly relate to the OIE mandate

required for a veterinarian to work within the Veterinary Authority
Veterinary Education Core Curriculum

- The Model Core Veterinary Curriculum describes various courses and cross-references them with the Day 1 Competencies that a course should address.

- These Guidelines assist the development of curricula to educate veterinary students to the expected level of competency.
"a companion to Day 1 Competencies as a tool for VEE when developing curricula"

Competencies are translated into

**Model Core Curriculum**

21 courses are identified with
- Sequence in Curriculum;
- Day 1 Competencies addressed;
- Description
21 courses in the Core Curriculum

Early
- Biochemistry
- Genetics
- Anatomy
- Physiology
- Immunology
- Biomathematics

Early - mid
- Animal welfare and ethology
- Parasitology
- Pharmacology/toxicology
- Pathology
- Transmissible diseases
- Microbiology
- Epidemiology

Early - mid
- Rural economics, business management, and animal production
- Clinical and diagnostic sciences
- National and international veterinary legislation
- Herd health management and nutrition
- Public health
- Food safety/hygiene
- Professional jurisprudence and ethics

Mid
- Communication
OIE Twinning Projects for Veterinary Schools

✓ Based on the success of the OIE laboratory twinning
✓ Based on the “Day 1 Competencies” and “Core Curriculum”
OIE Twinning Projects for Veterinary Schools in the Region

OIE Funded
- University of Minnesota (USA) and Chiang Mai University (Thailand) - completed
- Tufts University (USA) – Chittagong Veterinary and Animal Science University (Bangladesh)
- University of Queensland (Australia) – Nong Lam University (Vietnam)
- University of Tokyo (Japan) – Royal University of Agriculture (Cambodia) – upcoming

OIE Endorsed (without OIE funding support)
- Massey University (New Zealand) – University of Peradeniya (Sri Lanka) – completed
- Hokkaido University (Japan) – Mongolian University of Life Sciences (Mongolia)
OIE Global list of VEEs

- Established based on a recommendation of the 3rd Global Conference
- Based on the reports of 157 Member Countries (21 from Asia and the Pacific), the OIE Global List incorporates information on 553 VEEs worldwide (152 from Asia and the Pacific)
Veterinary Education Establishments in the Region

In response to the recommendations adopted at the 2013 OIE Global Conference, the OIE conducted a survey to establish the OIE global list of Veterinary Education Establishments (VEEs)

Updated information provided in questionnaire for this workshop

<table>
<thead>
<tr>
<th>Sub-region</th>
<th>No. of members</th>
<th>No. of VEEs</th>
<th>No. of VEEs in per member</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Asia</td>
<td>6</td>
<td>110</td>
<td>China 76 (31) (excluding Hong Kong 1), Japan 17 (16), Korea DPRK -, Korea RO 10, Mongolia 1, Chinese Taipei 5 (4)</td>
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<tr>
<td>South Asia</td>
<td>9</td>
<td>88</td>
<td>Afghanistan 1 (0), Bangladesh 12 (2), Bhutan 1, India 46 (36), Iran 23 (11), Maldives 0, Nepal 4, Pakistan -, Sri Lanka 1</td>
</tr>
<tr>
<td>Southeast Asia</td>
<td>11</td>
<td>52</td>
<td>Brunei 0, Cambodia 1, Indonesia 11 (10), Laos 1, Malaysia 2, Myanmar 1, Philippines 21 (15), Singapore 0, Thailand 9 (6), Timor Leste 0, Vietnam 6 (1)</td>
</tr>
<tr>
<td>Oceania</td>
<td>7</td>
<td>8</td>
<td>Australia 7, Fiji 0, Micronesia (Fed. States of) 0, New Caledonia 0, New Zealand 1, Papua New Guinea 0, Vanuatu 0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
<td><strong>258</strong></td>
<td></td>
</tr>
</tbody>
</table>

Purple shown updates in November 2018

( ) shown the origin number currently on the OIE Global VEE List
Veterinary Statutory Body (VSB)
Veterinary Statutory Body (VSB)

- Oversee the quality and competence of veterinarians and veterinary para-professionals in a country
  - Licensing or registration to perform the activities
  - Providing minimum standards of education (initial & continuing) and standards of professional conduct

- “Autonomous from undue political or commercial interests”

- Article 3.2.12 “Evaluation of the VSB”
  - Authority & capacity; Objectives and functions

http://www.oie.int/standard-setting/terrestrial-code/access-online/
Veterinary statutory body (VSB)

an autonomous regulatory body for veterinarians and veterinary para-professionals

Veterinary Para-professional (VPP)

a person who, for the purposes of the Terrestrial Code, is authorised by the veterinary statutory body to carry out certain designated tasks (dependent upon the category of veterinary para-professional) in a territory, and delegated to them under the responsibility and direction of a veterinarian.

The tasks for each category of veterinary para-professional should be defined by the veterinary statutory body depending on qualifications and training, and in accordance with need.
Article 3.2.12: Evaluation of the veterinary statutory body

a. objectives and functions;

b. legislative basis for the veterinary statutory body, including autonomy and functional capacity;

c. the composition of the veterinary statutory body, including the organisation represented in it;

d. accountability and transparency of decision-making;

e. sources and management of funding;

f. administration of training programmes and continuing professional development for veterinarians and veterinary para-professionals.
A) OBJECTIVES AND FUNCTIONS

- The policy and the objectives of VSB should be defined with regard to:
  - the licensing or registration of veterinarians and veterinary para-professionals
  - the minimum standards of education (initial and continuing)
  - the standards of professional conduct and competencies of VET and VPP

B) LEGISLATIVE BASIS, AUTONOMY AND FUNCTIONAL CAPACITY

- The VSB should be able to demonstrate that it has the capacity, supported by appropriate legislation, to exercise and enforce control over VET and VPP subject to its authorities.
- These control should include, compulsory licensing or registration, participation in the definition of minimum standards of education, setting standards of professional conduct and competence, investigating complaints and the application of disciplinary procedures.
- The VSB should be able to demonstrate autonomy from undue political and commercial interests.
- The implementation of regional agreements for the recognition of degrees, diplomas and certificates for VET and VPP should be demonstrated.
C) COMPOSITION OF THE VSB

- Detailed description of the composition, rules and conditions for membership, including duration of appointment and representation of interested third parties, public and private, should be available.

D) ACCOUNTABILITY AND TRANSPARENCY OF DECISION-MAKING

- Detailed information should be available on disciplinary procedures.
- Additional information regarding the publication at regular intervals of activity reports, .... should also be taken into consideration.

E) FINANCIAL RESOURCES AND FINANCIAL MANAGEMENT

- Information regarding income and expenditure, including fee structures for the licensing or registration of persons should be available.

F) TRAINING AND CONTINUING PROFESSIONAL DEVELOPMENT

- Documentary evidence should be available to demonstrate compliance with initial and continuing education requirements, including with OIE recommendations.
OIE Support for Developing/Strengthening of VSBs

- VSB Twinning project (limited number)
  - Assist in establishment of VSB or improve VSB’s compliance with international standards
  - Assist VSB in becoming self-sufficient and supervise professional practice
  - Provide opportunity for both the Parent and Candidate to garner and develop expertise
  - Projects: Tanzania-South Africa (on-going); Thailand-Australia-New Zealand (planned)

- VLSP program

- Exploring alternative mechanisms
  - E.g., Experts team to assess and support
Veterinary Paraprofessionals (VPP)
Follow up Actions on Veterinary para-professionals since the 4th global conference

Ad hoc Group on VPP with the support of ILAD

- Three VPP tracks considered - animal health, veterinary public health and laboratory
- Project on VPPs funded by US DTRA started in June 2016
  - “minimum competencies” and “core training curricula”
- Initial work presented to Specialist Commissions in Feb 2017
- Document 85 SG/12/CS1 B Annex 40
- Subgroups examined details to address the needs of three tracks
Published in May 2018 in three tracks:
1. Animal health,
2. Veterinary public health
3. Laboratory diagnosis

- To identify likely range of activities that VPPs might be involved
- To establish the required competencies necessary
- To ensure that the activities would be carried out properly
## OIE Competency Guidelines for VPPs

### Table 1: Spheres of Activity by VPP track

<table>
<thead>
<tr>
<th>Sphere of Activity</th>
<th>Tracks of Veterinary Paraprofessionals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lab</td>
</tr>
<tr>
<td>1. Animal and Veterinary Science</td>
<td></td>
</tr>
<tr>
<td>2. Laboratory Science</td>
<td>●</td>
</tr>
<tr>
<td>3. Biosafety, Biosecurity and Occupational Health &amp; Safety</td>
<td>●</td>
</tr>
<tr>
<td>4. Communication</td>
<td>●</td>
</tr>
<tr>
<td>5. Veterinary Legislation, Policies, Ethics and Professionalism</td>
<td>●</td>
</tr>
<tr>
<td>6. Use and Management of Equipment and Facilities</td>
<td>●</td>
</tr>
<tr>
<td>7. Animal Handling and Animal Welfare</td>
<td>●</td>
</tr>
<tr>
<td>8. Animal Production and Agricultural Economics</td>
<td></td>
</tr>
<tr>
<td>9. Specimen Collection and Sampling</td>
<td>●</td>
</tr>
<tr>
<td>10. Laboratory and Field Testing</td>
<td></td>
</tr>
<tr>
<td>11. Laboratory Quality Management</td>
<td>●</td>
</tr>
<tr>
<td>12. Workflow Management</td>
<td></td>
</tr>
<tr>
<td>13. Record Keeping, Data Collection and Management</td>
<td>●</td>
</tr>
<tr>
<td>14. Disease Prevention and Control Programmes</td>
<td>●</td>
</tr>
<tr>
<td>15. Veterinary Products</td>
<td></td>
</tr>
<tr>
<td>16. Food Hygiene</td>
<td>●</td>
</tr>
</tbody>
</table>
Way forward
Ongoing and future activities of OIE RRAP

- Organise (Sub-)Regional Workshops for VEE and VSB
- Encourage members to conduct the PVS Pathway, including the OIE Twinning projects
- Enhance the regional network of VEEs and VSBs consistent with OIE Policies, through organizing relevant meetings.
- Collaborate with relevant organisations in the region (AAVS, SEAVSA, FAVA, ...).
- Engage VEEs and VSBs for AMR control and other priority issues for awareness raising
  - AMR Awareness week, World Rabies Day ...
- Support the activities of the International Veterinary Students’ Association (IVSA) and accept interns at the Regional Office.
Engagement of VEEs and VSBs for control of AMR

- The OIE Strategy on Antimicrobial Resistance and the Prudent Use of Antimicrobials (2016)
  
  “Promote awareness of AMR more especially through Veterinary Statutory Bodies and Veterinary Education Establishments to encourage a professional culture that supports the responsible and ethical use of antimicrobial products in animals.”

- OIE Communication Materials
  - Include materials targeting veterinarians and veterinary students

- OIE supported seminars on AMR for VEEs and VSBs
  - Vietnam, Cambodia, Lao PDR …
Thank you for your attention